Purnendu Mandal *Editor*

Proceedings of the International Conference on Managing the Asian Century

ICMAC 2013

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② Springer

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Printed on acid-free paper

Preface

Recent developments on economic, social, cultural and political fronts among Asian countries give us an impression that perhaps this century, the 21st century, belongs to Asia. I used the words "impression" and "perhaps" to emphasise that we are not sure that the Asian Century is, indeed, happening or about to happen. As per the 2011 Asian Development Bank report, Asian countries do possess the capacity necessary for economic supremacy. According to the 2012 Australian government white paper, 'Australia in the Asian Century', "the transformation of the Asian region into the economic powerhouse of the world is not only unstoppable, it is gathering pace".

Great Britain dominated the 19th century; known as the British Century. Then, we saw the advent of the American Century in the 20th century. Many of us now believe that the influences of USA in the world arena are in decline, and the Asian countries are coming to prominence. There is optimism that in the 21st century, the Asian countries will show greater political and cultural influence in the world. We are now talking about a Chinese century, an Indian century or even a Pacific century. But could this really happen? What are the signs?

The British century was the result of the industrial revolution and Britain's colonial endeavours. The American century was largely due to exploitation of intellectual capital matched with entrepreneurial behaviour. Sometimes I wonder, what force could create a "wave" in Asian countries similar to the waves which gave rise to the British and American centuries. Perhaps it is not only one force, but a combination of forces that would generate make this wave in Asian countries. Population for sure is one such factor. A huge young population in Asian countries is an advantage. Education is another factor; Asian countries are producing a well educated and qualified workforce. Furthermore, cultural and social developments have exposed Asian citizens to outside world. Last but not least, we have seen industries becoming more competitive and innovative.

All these forces lead me to believe that we need a holistic framework to understand the Asian century phenomena. We need to bring to bear many dimensions in explaining this trend. This is exactly what the 2013 international conference, Managing the Asian Century, aimed to achieve. In this conference, we put together several tracks covering areas such as economics, production, marketing, finance, entrepreneurship, education, culture, and psychology. The conference offered both

academics and practitioners the opportunity to share knowledge and experience relevant to Asian countries. The overarching question was how we together can facilitate further development in emerging Asia. The book represents selected papers from the conference.

The conference attracted huge interest from academics and practitioners around the world because of importance of the theme areas and the conference's timeliness in addressing the needs of Asian countries. For instance, the Asian nations must address weaknesses in education investment, women's rights technology, climate change, wage inequality, poor governance and corruption. This means there are huge challenges for businesses to establish world class practices; societies to change attitudes and embrace non-indigenous cultural influences; governments and leaders to find new ways of leading their nations.

The conference received papers from 21 different countries. However, the main contributions were from authors in Asia-Pacific region given the proximity of Singapore to the countries in this region.

Each full paper was put to the review process and was reviewed by at least two experts. This proceedings includes only the accepted papers and is organized in 9 (nine) parts, confirming with major tracks as per the call for papers:

Part 1: Global Education (global education hubs, offshore campuses, spaces for innovative learning, development and education, life-long learning)

Part 2: Antecedents of Asia's Competitiveness (Innovation, productivity, clusters, emerging economies)

Part 3: Emerging Trends in Banking, Finance and Accounting (IFRS convergence in Asia, alternative models of banking)

Part 4: Psychological Issues in Asia (tropical psychology, societal attitudes)

Part 5: Emerging Retail and Service Industries (retailing, leisure industries, e-commerce, marketing, supply chain)

Part 6: Entrepreneurship, Creativity and Innovation (entrepreneurial skill development, models of innovation, Asia's potential, investment in creativity and innovation)

Part 7: Systems Thinking and Systems Practices (systemic thinking models, system dynamics, qualitative modeling, case applications)

Part 8: Tourism Initiatives, Relationships and Issues in Asia-Pacific (Eco-tourism, sustainable tourism, tourist behaviour, sports and event management, destination management, tourism policy and planning)

Part 9: General Topics (not covered in a specific track)

July 2013   Purnendu Mandal, PhD

Acknowledgements

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Part I
Global Education

Chapter 1
Exporting Work-Integrated Learning to Asian Environment

Helga Nagy, Christine Bilsland and Philip Smith

Abstract This paper discusses the work-integrated learning (WIL) program of a fully foreign owned and operated university in Vietnam (FUV). It explores the elements of reflection, coaching and mentoring that are implemented to help students ease the transition from higher education into graduate-level jobs. The paper examines the above elements in their review of the extant literature and hypothesizes that they positively contribute to the transition process. This exploratory study suggests that the elements of the WIL program support interns in feeling more comfortable in their first real job, and more adaptable to new work environments.

1.1 Introduction

In Vietnam, in recent times a demand for a workforce with a different skill-set has been noted; this demand is mainly driven by large multi-national corporations and has changed the graduate labor market. According to a report by the Ministry of Labor, Invalids and Social Affairs (MoLISA) [1], Vietnam's labor market is moving away from relatively low productivity, labor-intensive agricultural sector towards higher value-added, technology and capital intensive industries and a sophisticated service sector. Better qualified and more highly skilled workers are now required to fuel Vietnam's growth [1].

Today's challenging environment demands the continuous acquiring and developing of new skills and knowledge including the critical generic skills, also known as employability skills required by all employees to succeed in adapting to a workplace. According to Down [2], tertiary institutions play a vital role in ensuring that students develop the appropriate learning and research skills and other generic capabilities

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to equip them for workplace learning. Van Rooijen [3] argues that the successful universities of the future will enjoy their interaction with society focusing no longer primarily on the next generation academics, but rather on effective graduates that have real added value to employers and society. Candy states that universities have to be more attentive to the demands of employment, which subdivide into two elements: the technical knowledge and skills required to function effectively in the workplace, and a set of generic attributes or personal transferable skills such as communication, teamwork, computer skills, and personal organization.

As pointed out by Hager and Holland growing demand from business and employer organizations calls for graduates to possess attributes different in addition to discipline-specific knowledge that is taught at higher education institutions. Industry is seeking attributes to be developed in students by educators that include: the ability to work independently as well as in teams; adaptability to rapid changes in the nature of work; self-management; and, the ability to work creatively.

The practices of one such tertiary institution in developing employability skills among its students form the basis of this paper. Work-integrated learning (WIL), also referred to as experiential learning or internship exposes interns to significant direct consequences for their immediate decisions and actions. It is through work-integrated learning that practice and its effects can be appreciated, examined and explored in ways not available to units delivered solely on-campus. A learning model applied at one foreign university in Vietnam (FUV) illustrates how the experiential learning of an internship combined with self-reflection and additional support in the form of coaching and mentoring aims to equip business undergraduates with work-ready skills.

The paper begins by describing some of the drivers which have prompted the FUV to incorporate WIL into the curriculum of business undergraduates. From there, it examines the literature informing our understanding of reflection, coaching and mentoring as crucial development tools in the WIL program. Next, we discuss how the elements of the program strive to improve the personal and professional skills of interns. Examples of feedback from both interns and work supervisors are provided to illustrate the perception of the program. Finally, the paper establishes the program's benefits with regard to adaptability and work-readiness, and proposes further research.

1.2 Skill Shortages in Vietnam

The following discussion explores and expands upon the critical importance of employability or work-ready skills for the development of Vietnam's economy.

In addition to technical skills there is a universal requirement for more generic soft skills variously known as employability skills or work-ready skills. Numerous organizations in the country have undertaken research and conducted surveys related to work-ready skills. The Manpower Group identifies problems with poor communications skills, and a lack of knowledge of law, finance, foreign languages and computers. A report by NESO Vietnam (Netherlands Education Support Office) and

Vietnam's Ministry of Education and Training (MoET) highlights that 60 % of young laborers who graduate from training establishments need to be retrained for at least 6–12 months after being recruited.

On the occasion of the 2nd International Human Resource Management (HRM) Conference in Ho Chi Minh City in July 2011, Ms Nguyen, the Deputy General Director of the Vietnam Chamber of Commerce and Industry, addressed several drawbacks for the country's economy. Specifically Ms Nguyen stressed that only 30 % of the country's workforce are trained and that graduates lack the ability to apply theory into practice.

Financial institutions in the country for example, complain that many fresh graduates in economics and banking-finance cannot immediately fill positions because their English and 'soft' skills are far from what banks require. This skill shortage has prompted some banks to become involved in education themselves building their own banking schools and training graduates for the banking sector. Other sectors are also very active in providing employability skills training to new employees. Unilever for example, attracts graduates with their unique 'Unilever Future Leaders Program', and Ernst and Young offer students tailored programs ranging from a two-week work experience, to leadership programs and 12 months industry placements.

Having established the importance of employability skills for business and hence Vietnam's economy, we now review the extant literature supporting the learning tools of reflection, coaching and mentoring applied in the WIL program.

1.3 Literature Review

1.3.1 Reflection

Self-reflection has long been recognized as a technique to reinforce learning and is leveraged to assist students adapt to the new processes and environment of the workplace.

According to Fade reflection involves describing, analyzing and evaluating our thoughts, assumptions, beliefs, theory base and actions. Daudelin argues that reflection is the process of stepping back from an experience to ponder, carefully and persistently, its meaning to the self through the development of inferences. Goldsmith suggests that reflection should be continuous, a habitual activity, an ongoing conversation with the self that moves hand in hand with the experience. In contrast, Sweitzer and King note that reflections are structured activities that give the person a chance to pause and think about their work experience and reactions to that experience.

Reflective learning in assisting interns adapt to the workplace is consistent with the approaches of Griffin, Lorenz and Mitchell. They present the act of reflection during internship as outcomes-based, with students not only considering the outcomes required, but also reflecting on the experience itself. Similarly, Black and Plowright present reflective learning by a four dimension model. Their model embraces the

professional practice experience, reflection on learning, purposive reflection to develop learning and to improve professional practice and finally, a realization that a reflective 'dialogue with self' is transformational. This last element supports the development of habitual reflection throughout life as argued by Goldsmith.

The FUV's WIL program leverages structured activities requiring regular reflections following each workshop as noted by Sweitzer and King, and for reflection to become "habitual" as encouraged by Goldsmith. WIL workshop conveners encourage students to "step back" and "ponder" the workplace experience, to analyze and contemplate that experience, and consider approaches to be taken.

According to Smith, a recommended method of reflection and learning is that of Action Learning. A form of learning by doing; and through experience, both the individual and the organization gain added skills. Thus, Smith claims that the organization is used as a relatively safe learning laboratory in which the individual may reflect upon their own performance after practicing with real issues. This view is supported by Trede who sees reflective practice as becoming aware of one self and others in order to explore and understand how different communities view the world, and thereby yielding appropriate choices.

The element of reflection is added when re-experiencing the events and interactions in the safe and supportive environment of a WIL workshop at the FUV. Another important element—coaching and mentoring is examined in the following section.

1.3.2 Coaching and Mentoring

Coaching and mentoring have been adopted by numerous education institutions all over the world. Coaching delivers results in large measure because of the supportive relationship between the coach and coachee. This relationship is also evident in Crane's three phases of the transformational coaching approach: the 'Foundation Phase' (establishment of trust and shared expectations; setting organizational context), the 'Learning Loop' (create mutual learning, deepen insight and respect) and the 'Forwarding-the Action-Phase' (make things happen).

Bates sees supervisors of work-integrated programs performing a gatekeeper role, assessing the students' maturity, values and ability to join the profession. Parsons et al. recommend that university advisors and workplace supervisors or mentors should work together to promote a nurturing environment for the student intern. This runs contrary to the 'sink or swim' philosophy of some organizations in which each newcomer is expected to navigate their own path. Daud et al. argue that through feedback given by the host organizations concerning interns, corrective actions can be identified by business schools in order to better prepare interns for the employment market. According to Liu et al., a mentoring attitude from the supervisor provides timely assistance and protection when needed throughout the interns' learning experience.

In a study undertaken by Lazovsky and Shimoni to analyze the ideal mentor traits, interns identified professional knowledge, availability and approachability as the most desired traits of the mentor. This view is further supported by Hillman who

states that a mentor's impact depends in large part on the mentor's skills, commitment and availability.

As pointed out by Parsons et al. academic advisors of the FUV's WIL program meet with each student and their work supervisor in the workplace to discuss the program, and remain available for support and consultation over the course of the internship semester. The benefit of having a coach and/or mentor available throughout the 12 weeks of the internship eases tensions and uncertainties especially in the first few weeks in a new environment.

In the following section we examine the elements of the WIL program, to reveal how those elements may prove beneficial to an intern's adaptability and learning in a workplace.

1.4 Elements of the WIL Program

To keep up with Vietnam's growth and an increasing demand from the FUV's industry partners, employability skills have been integrated into all undergraduate programs. The soft skills of leadership, creativity, and the ability to teach and learn are really the essence of what an employer is looking for in a job applicant. For example: leadership is practiced during numerous team assignments where students take on various team roles; creativity is a core element in entrepreneurial programs; and, the ability to teach and learn is reinforced by in-class presentations and student-led tutorials. It is specifically the development of these competencies in graduates, together with self-reflection, while receiving active coaching and mentoring support that distinguishes this FUV's WIL program.

1.4.1 Reflection

Reflections form one important assessment element in the WIL program at the FUV. As illustrated in Black and Plowright's multi dimensional model of reflective learning for professional development, the core element of the WIL program at the FUV is of multi-dimensional nature as well. The first three dimensions are reflected in the FUV's WIL program as the intern's workplace (the source), reflective practice throughout the program (the target) and development of new knowledge by building on current and prior knowledge (the purpose). Reflective blog entries written by interns are practiced bi-weekly; these entries form part of the WIL program's assignments and are used to capture emotions and thoughts as they occur during the internship and to help interns develop greater self-awareness.

The model's fourth dimension—'dialogue with self' emerges in WIL as an internship reflection paper that forms the final assignment in week 12 of the program. Interns are requested to reflect on the whole experience of the internship by demonstrating a depth of insight into their own personal development, achievement of

goals, own strengths and weaknesses, career planning and the overall learning from the experience of the internship.

1.4.2   Coaching and Mentoring

When recruited, interns often rotate within departments to experience different situations, eager to implement prior academic knowledge to work and develop practical skills. At the same time, interns also have to learn to adapt to new environments, and communicate and work with diverse groups of people.

Coaching and mentoring form a critical part of the WIL program at the FUV. Similar to Crane's three phases of transformational coaching the WIL program also consists of three stages. In the first stage, trust and shared expectations are established and discussed when academic advisors meet interns and their work supervisors at the workplace, in order to gain a mutual understanding of the WIL program's objectives as per Crane's 'Foundation Phase'. The second stage aligns with Crane's 'Learning Loop', and consists of work supervisors performing a coaching role. In which they help interns achieve mutually agreed goals by engaging them in active dialogue to: draw their attention to issues that may not have surfaced previously; acknowledge progress achieved; deliver constructive feedback; and, assist them to re-frame critical experiences.

The third stage as referred to by Crane as the 'Forwarding-the-Action-Phase' includes mentoring support by an academic advisor and/or work supervisor to facilitate and guide the intern's learning. During this stage, academic supervisors mentor interns by sharing their own life experience and knowledge, and engaging interns in discussions and dialogue during the workshops. Depending on the professional background and experience of the work supervisor, they may take on the role of mentor as well: providing support and guidance at the workplace; showing interest in the intern; making themselves available; encouraging the growth of mutual trust; thereby enabling enhancing the intern's development.

The FUV has since its establishment in the country focused on forming partnerships with both local and international companies. The FUV's career center actively engages with potential employers and provides a number of services to support a mutually successful internship: communicating placement criteria; clarifying the host company's responsibilities; communicating the FUV's expectations; and, reviewing position descriptions of those to be made available to students. Since the start of the program in February 2010, over 400 industry partners have accepted over 1,200 business undergraduates to undertake internship programs in their organizations, providing hands-on experience and preparing them for the job market. The entire WIL program is designed to provide the intern with the opportunity to receive industry feedback and guidance to raise awareness of own level of 'employability' or work-readiness, thus enabling the intern to enter the workplace easier.

1.5   Methods

This paper relies on selected samples of individual's comments collected from informal discussions in the WIL workshops. The individuals included 936 business undergraduates enrolled in the one semester WIL program at the FUV from February 2010 to June 2012 along with approximately 300 work supervisors at the FUV's hosting organizations. Students secured internships in a wide variety of organizations and locations, with more than 60 % placed in companies in the South of the country and 40 % in the North. Hosting organizations included a mix of local, international and joint-venture companies, in industries ranging from finance to hospitality, market research to apparel, logistics to consultancy, and event management to FMCG. All students were required to work 40 h per week and attend five bi-weekly supplementary workshops.

A mixed method case study methodology was applied. The qualitative data were collected from interns' comments throughout our discussions of shared experience during the five WIL Workshops and also in coaching sessions. While one part of the qualitative analysis relied on anecdotal evidence gained from the interns, written comments from work supervisors were taken from the performance appraisal of interns that they completed at the end of the intern's work placement. We consider this type of analysis important for our research to support our findings, especially as the emphasis is on the intern's own experience and feelings during the placement.

The supervisors were asked to provide written comments on the intern's performance in the performance appraisal. Content analysis was then applied to categorize these comments by subject, and identifying a need for improvement or demonstration of commendable performance. The subject categories are reported in the charts below as Fig. 1.1—Comments by Work Supervisors on Intern's Commendable Performance, and Fig. 1.2—Comments by Work Supervisors on Intern's Areas for Improvement. Each chart records only the number of times a subject was mentioned, but not the intensity of the comment as it could be graded descriptively for example: excellent, very good, good, well, great etc.

1.6   Findings

We found indications that the elements of reflection, coaching and mentoring have a significant impact on the overall outcome of the WIL program and the intern's work-readiness. Our findings are supported by the comments from both interns and work supervisors:

Comments from interns were taken during discussions at the fortnightly workshops between the intern and the academic advisor. Although most interns were familiar with the process of writing reflective papers using formal language during their studies, we noted that during these discussions the interns used informal language perhaps indicating greater spontaneity in sharing candidly their feelings and experiences.
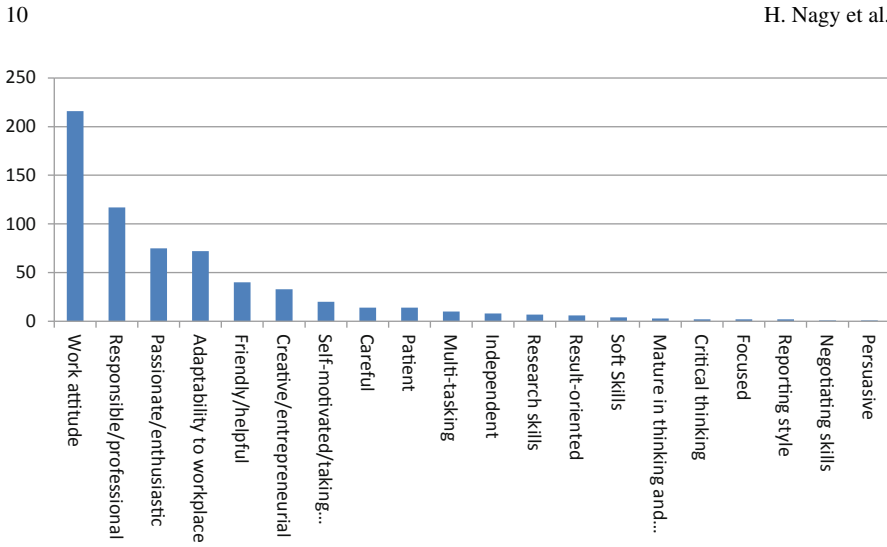
Fig. 1.1 Comments by Work Supervisors on Interns' Commendable Performance
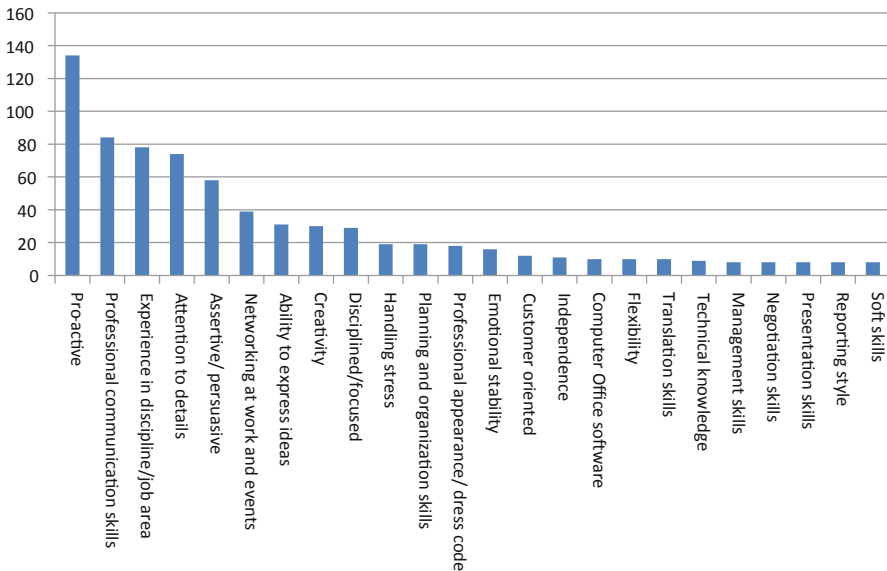
Fig. 1.2 Comments by Work Supervisors on Interns' Areas for Improvement

Written comments from work supervisors were taken from the performance appraisal provided at the end of each semester. Both work supervisors and interns were informed of the purpose of the performance appraisal as per the participant information sheet, and were invited to participate in the research. Taking the busy work schedules of work supervisors into account, we requested them to briefly point to some strengths and also areas for improvement of interns. These comments were

also disclosed to the intern during a de-brief on their overall performance at the end of the internship.

1.6.1 Comments From Interns

We have learned from discussions with interns that once they started the habit of regularly reflecting on their own performance together with observations, they become better aware of one 'self'. What is particularly interesting is how interns value reflective exercises during their internship: "... after reflecting on the workshops, I have a feeling of more deeply realizing things in reality, especially at work ..."; "... after reflecting on my experience, I know what I should develop and improve to mature myself in the near future".

In addition, most students realize that work-ready skills can best be obtained during exposure to real-life challenges and situations. Recognizing the value of a grassroots learning experience has surfaced in numerous discussions with students: "I have learned that it is more important to overcome the unexpected circumstances by myself and learn other valuable experiences"; "... doing internship has brought me many benefits such as recognizing my strengths and weaknesses, and improving my drawbacks through supervisors' feedbacks".

Feedback and support from work supervisors who take on the role as coach and/or mentor are considered to be very beneficial in encouraging and inspiring interns to achieving goals and moving forward: "Feedback from my working supervisor is like a motivation for me to try my best for the next time"; "... the attitude of my supervisor strongly inspires and encourages me to duel with difficulties".

1.6.2 Comments From Work Supervisors

The perception of the WIL program is further supported by written comments from work supervisors on the interns' commendable performance, providing valuable information not only on their strengths but also pointing to areas for improvement.

Figure 1.1 illustrates the work supervisors' perception of the intern's performance during the placement: Whereas the term 'work attitude' was recorded more than 210 times associated with a positive adjective indicating that interns demonstrated a positive approach towards work, the terms 'responsible/professional' was only recorded somewhat over 110 times, followed by the terms 'passionate/enthusiastic' and 'adaptability to workplace'. With most students lacking work experience during their studies, we assume that especially when entering a new environment for the very first time interns want to leave a good impression, for example: arriving on time; complying with company rules and regulations; and, demonstrating a drive to learn.

Figure 1.2 shows work supervisors' comments on areas in which interns may need improvement. The term 'pro-active' was recorded over 130 times as a descriptor of the most important subject to be improved by interns. This was followed by 'professional

communication skills', recorded over 80 times, and 'experience in discipline/job area' and 'attention to detail' among the third and fourth most important area for improvement. We assume that the reason for this could be attributed to: the students' lack of exposure to real-life situations and scenarios at a workplace; acting outside their comfort zone; shyness and anxiety; or their own perception of how an intern should behave.

1.7   Conclusion and Recommendations

The WIL program at the FUV is more complex for lecturer/coordinators to facilitate than standard university academic subjects because it involves multiple relationships and the interpersonal skills to support all stakeholders, namely the career centre, the individual student, the direct work supervisor and in many cases a representative of the HR department of the host company. While coordinating the WIL program since its start in February 2010 we conducted scores of coaching sessions, examined several hundred internship reflections and supervisor feedback reports, and personally witnessed the maturing process of several hundred interns.

This research provided exploratory evidence suggesting that significant positive benefits for students may be derived from the WIL program at the FUV. Many students consider an internship a crucial element of their higher education experience, especially for easing the transition from university to work. Furthermore, feedback from both the interns and work supervisors suggest that the distinguishing features of the program—the core elements of reflection, coaching and mentoring add to its efficacy. However, more academically rigorous research is needed to support our contention that these elements are critical to enhancing the process of interns' adaptation.

It is hoped that the suggestions presented in this paper could be considered by education institutions in Vietnam when aiming to embed WIL throughout their course curriculum, and by organizations in the country in understanding the value of an internship process when recruiting tomorrow's employees.

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Chapter 2
Asian-Australian Nexus: An Educational Challenge

Robbie Robertson and Anita Lundberg

Abstract The Asian century raises a number of challenges that derive from convergence, global multicentredness, and the emergence of a more engaged diverse world. Some nations use multiculturalism as a tool to address these challenges. However, in a diverse and globalizing world, it is appreciating what we share in common rather than notions of difference that will become more important in enabling harmonious and evolving relationships to prosper and feed creativity.

At James Cook University, the School of Arts & Social Sciences has pondered these issues while planning for a new interdisciplinary major. The purpose of the Asian Nexus major is not to introduce notions of difference or exoticisms; rather, it is to contextualize the Asian century within the human story, to prioritize intertwined histories and cultures, and to focus on common goals that confront shared social, economic, environmental, demographic and educational issues.

2.1 White Paper

In October 2012 the Australian Government released a *White Paper* on *Australia in the Asian century*. It begins with the following words:

> Asia's rise is changing the world. This is a defining feature of the twenty first century—the Asian century. These developments have profound implications for people everywhere. . . . Within only a few years, Asia will not only be the world's largest producer of goods and services, it will also be the world's largest consumer of them. It is already the most populous region in the world. In the future, it will also be home to the majority of the world's middle class [1].

It describes the Asian century as an 'Australian opportunity'; the tyranny of distance that North America and Europe once presented has been replaced by the 'prospects of proximity'[1].

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The *White Paper* set out five broad policy directions for Australia 'to make the most of opportunities presented by the Asian Century'. These included building capabilities (understanding Asian cultures and languages), operating in and connecting to growing Asian markets (growing Asia-capable leaders), and deeper and broader relationships (involving two-way movements of people, especially students). It envisaged that 'By 2025, Australia will be a more prosperous and resilient nation, fully part of the region and open to the world' [1]. Its people will be more literate in Asian languages; indeed many will have studied in Asian countries.

Refocusing Australia to profit from the shift in economic and political power to Asia makes national sense given the region's importance to Australia's economy and the rise of new world powers such as China and India. However, none of this is entirely novel. Japan began its postwar recovery in the 1950s. Its resultant trading partnership with Australia helped end the country's discriminatory 'white Australia policy'. Likewise, so did education. The Colombo Plan, the famous scholarship aid program, operated between 1951 and the mid 1980s bringing Asian students to Australia to study. Successive governments have deepened and extended diplomatic, cultural, and economic linkages with Asian states and regional institutions. Asia's share of Australia's trade in goods rose from one third in 1980 to two thirds by 2010 [1], transforming Australian businesses in the process. The growth in minerals trade with Asia has had a similar impact on Australia's workforce and industry, and lifted living standards. As Asia's middle classes expand, Australia now sees new opportunities for businesses and services, especially in manufacturing, agriculture, tourism and education. Education is Australia's third largest export.

2.2 Deeper Engagement

However, the *White Paper's* economic opportunism ('cashing in on an emerging Asian middle class') might very well prevent 'Australia's search for deeper engagement with its region' from being realised [2]. In other words, if Australia really wishes to engage with Asia then it may have to do things differently. In Ramesh Thakur's words, Australia's embrace of Asia must be familial, not simply transactional:

> Australian leaders are yet to grasp that the criteria of validity and authority that facilitate the creation of deep and lasting bonds are culturally constructed [3].

By this Thakur means much more than the *White Paper's*—as yet unfunded—focus on languages and cultures, which—under the banner of Asian literacy—has already been tried variously over the past 40 years with only limited success [4], in large measure because there exists little infrastructure outside of migrant communities to sustain language acquisition. Perhaps these communities offer other opportunities for familial engagement that go beyond the current focus on languages and culture.

Nine per cent of Australia's population were born in Asia, with the largest number of arrivals today being from India and China. Over 10 % of Australians speak an Asian language at home [1]. Presumably these people do not require a refocus and could be

further skilled to provide valuable educational and business linkages with Australia's northern neighbours. Moreover, Asians dominate Australia's skilled migrant intake as well as its international student population. Indeed some commentators argue that this Asian presence means that 'Australia already has the human capital necessary to prosper in the Asian century', and that the real barrier to engagement lies not in any lack of Asia-relevant capabilities but in regional and, importantly, local Australian obstacles [5].

For example, while Australia claims to be a successful multicultural country, it has done little to transform its national identity or symbols of nationhood to accommodate diversity. Asians may be part of the demographic mix, Thakur notes, but they are scarcely visible in Australian public or corporate life. Indeed no Asian formed part of the *White Paper's* taskforce—perhaps one reason why the paper tends to view Asia as something only to be experienced (consumed) or learned about; the quintessential 'other' [3]. Nothing short of a 'fundamental change in [Australia's] national psyche is required for the Asian century', argues Australia's former UN Security Council representative, Richard Woolcott [6]. Asian engagement can only happen once the 'otherness' of Asia is minimized through 'cultural learning' and the evolution of an all-encompassing national identity [2].

Much of the criticism of the White Paper has focused on its mercantilist tenor [2], on the Government's failure to envisage Australia's future as anything other than a primary producer fortunately located alongside the world's new growth centre [7], and on Australia's reluctance to change familiar European and American allegiances [8]. However, some commentators, like Adelaide University's Professor Kanishka Jayasuriya, see the White Paper's emphasis on engagement through literacy as an instance of rent seeking by vested language interests that will ultimately make more difficult the symbiotic generation and application of critical knowledge about Asia's new social and political dynamics that Australia seeks [9]. He is not alone. Others have argued that 'Encouraging students to grasp Asian history, without necessarily requiring the commitment to learn a language, is more likely to be the seed of a lifetime interest.' Language is a perishable skill, 'subject to market demands'; hence businesses will always judge the option of buying skills according to need a cheaper option than financing state-mandated mass language acquisition. Journalist Daniel Flitton argues that 'rich Australian miners haven't been stymied by any language barriers in helping turn China into Australia's largest market' [10].

2.3 Transnational Education-Engagement

That the White Paper views educational engagement as a central component of its Asian century strategy is not in itself at bad thing, particularly if it encourages greater educational mobility and transforms Australia's self image. But, says Jayasuriya, a focus solely on languages and culture—the platform for Australian engagement since 1945—misses the whole significance of changes in Asia over the past two decades. It imposes a form of "'methodological nationalism" that seeks to understand

"countries" as a whole in terms of their distinctive cultural characteristics'. He argues instead that 'We need to focus much more on confronting and dealing with... sets of issues that are often transnational rather than national in origin'[9].

Jayasuriya does not suggest that the detail of countries and their cultures be neglected, but that academics must develop 'an approach that combines an understanding of the specific political and social contexts that characterise the region with one of larger global and regional processes.' This approach avoids 'the particular set of assumptions about the mainsprings of social and political change' inherent in Asian language and culture strategies and enables collaboration with researchers in the region to be institutionalized. The focus is on 'real world problems [such as inequality, urbanization, environmental issues, health, governance] and notions of transdisciplinarity'[9]. These problems are not country-based; they have transnational roots and consequences. Herein lies the challenge that the Asian century poses for academics, and not just Australian ones. The challenge comes in several forms.

2.4   Convergences

First, the Asian century heralds the possibility of eventual global economic convergence, no matter how unevenly. Asia contributed over 60 % of world GDP in the late eighteenth century but 150 years later its proportion had fallen to one quarter. It is often said that victors write history; certainly among the beneficiaries of what has been termed the Great Divergence [11] were people who used their new fortunes as evidence of their genetic superiority. Such comfortable Spencerian notions lingered painfully throughout the last century and proved detrimental to international relations and development. However, behind them lay other less directed assumptions that have proven much more difficult to overcome. These relate specifically to the role of 'Western' civilization in driving development and change.

In Australia today such misunderstandings of the complex shared nature of human development and change, often results in dichotomous notions of development—the West versus the rest. Accordingly Asia's resurgence is often viewed as a threat to an otherwise indispuTable (Western) heritage; hence former Australian Prime Minister John Howard's recent attack on a proposed new national school curriculum for failing to prioritize Australia's 'British heritage' [12]. However, such attacks are not always welcomed. NSW Supreme Court Chief Justice Tom Bathurst believes that such attempts to impose a uniform national identity ignore 'the great social, cultural and economic benefits that Australia has reaped from... diversity' [13]. Indeed, creating a national identity inclusive of diversity and relating it to a common human story might seem sensible in an age of visible, albeit uneven, economic convergence. After all Asia now contains 60 % of the world's middle classes, its proportion of world output is set to rise to at least 50 % by 2030, and its consumption to 60 % [1]. Yet, in the face of this remarkable transformation, Australia's national conversations seem unconnected to the diverse contours of this emerging Asian century.

2.5 Multicentres

Second, the Asian century promises a much more multicentred world. After nearly two centuries of American, European and Japanese dominance, Brazil, Russia, India, China and Korea (variously configured as BRIC and BRICK nations) now figure prominently alongside the former imperial centres. This transformation requires a considerable change in popular perceptions, but such change, as we know from past experience, does not come easily. The parallel to this multicentred change is the decline in the one people-one nation foundations of many countries. Many states now promulgate forms of multiculturalism to realise adjustment to very different societies from those originally conceived.

However, multiculturalism—if understood as a mix of disparate cultures—is limited as a definitional and imaginary tool. Multiculturalism exists principally to accommodate cultural differences within increasingly multicentred countries. In this scenario national transformations mirror international changes and require similar changes in perceptions. Wherever imperial or contemporary policies have brought once disparate peoples together, multiculturalism has become an important initial means to build harmony and trust. But multiculturalism also draws attention to differences that in the longer term need to be deemphasized if cultural stereotypes are to be overcome and societies transition to something new.

In our view, it is appreciating what people share, or face, in common—while acknowledging differences—that will be more important in growing enduring harmonious and evolving relationships that promote creativity for a sustainable and increasingly urban middle class world. Indeed it is this 'commonsense image of society' that Judith Brett believes most Australians hold, 'of a society composed of individuals and families [rather than distinct ethnic or religious blocs] mixing in the day-to-day world', learning from and mutually respecting each other [14]. This approach needs also to be applied to relations outside national boundaries, especially given that the Asian century is occurring within the context of growing global interconnectedness.

2.6 Connectivity

Herein lies the third challenge for academics. Connectivity is not the same as economic convergence and, contrary to popular thinking, difference—often impacted on by distance—remains a crucial feature of contemporary globalization [15]. Difference still affects the movement of people, goods and services across borders; it reflects self-interest, and often correlates with geography. In an age of globalization, we continue to live very differentiated localized lives. Economist Pankaj Ghemawat, in his seminal *World 3.0*, argues that the market recognizes the importance of difference. McDonalds—the archetypal globalizer and bê te noir of antiglobalizers—deliberately blends standardization and localization to satisfy the tastes of its different markets [15]. This was famously introduced in the hamburger

scene of *Pulp Fiction* [16]. At a recent Parliamentary Inquiry into IT pricing in Australia, Microsoft's managing director, Pip Marlow, argued that

> At Microsoft, while we operate in over 100 countries around the world, we don't operate on a single, global model. In fact the countries that we operate in are very different and therefore the way that we compete and... deliver products and services every day in these countries can be very unique. [17]

Such fragmentation has political as well as economic objectives, as recent concerns about the future of the Internet suggest [18]. Globalisation, whether digital or physical, does not create a flat earth of smooth homogeneity. The landscape remains differentiated, rough with clusters and gaps, hills and troughs. Indeed we recognise difference in the way we function as individuals; it shapes our emotions and personal relationships [15]. Yet we have also to learn what we share in common if difference is not to strangle growth.

Ghemawat argues that today's challenge is to find 'a new way to look at the world', not past ways of viewing the world such as nationalism or notions of global citizenship. Certainly there can be no gain from a return to localization or the restoration of national exclusivity. That lesson was learned painfully during the 1930s and 1940s when interconnectivity was denied and national agendas ruled supreme, producing both depression and wars. That is a past with no sustainable future. And yet despite everything that we know of that past, we stand in a very uncertain position, having glimpsed the beginnings of a radically different future for humankind, yet knowing that much of what we have conjured as globalized remains unrealized and mired in the politics of nations, ethnicities and religions. To move forward we need to ground ourselves in a shared reality still foreign to us, one that recognises the importance of building bridges that span distances and fostering multiple contacts and engagement over time [15].

2.7 Asian-Australian Nexus

At James Cook University—an Australian international university with campuses in North Queensland and Singapore—our School of Arts and Social Sciences has been pondering these issues while planning for a new interdisciplinary major addressing this Asian Nexus. The purpose of this major is to introduce our students—Asian, Australian, Eurasian, Indigenous, European—to a suite of subjects that contextualize the Asian-Australian nexus within the greater human story. Rather than reinforcing an imaginary exoticism of Asia or Australia by emphasising difference, the major will prioritize entwined histories and cultures, focusing on common goals that confront shared social, cultural, economic, environmental, urban, demographic and educational issues. This is no easy task, not least because it incorporates a substantial challenge to how we organize ourselves to think about others and ourselves.

There are institutional constraints as well. Universities recreate the world according to specialisms—in part because specialisms enable very specific skills to be developed, and in part also because they create structures that can be managed

and programs that can be marketed. These are all sound educational-managerial principles. However, within the 'universe' of the university discipline specialisms can encourage the creation of 'sacred turf' that requires special protection. Such protection strategies can take many forms. Historians, for example, might prioritize national histories or promote histories deemed relevant by tradition, by victors, by the location of their institution, or by perceived continuities of history—thereby sanctifying certain histories and placing them beyond revision.

We have no issue with students learning the specific techniques of disciplines, this is desirable; but rarely are disciplines as unique or self contained as we imagine. For instance, geography might incorporate a variety of strands: physical, economic, human, urban, development, cartography and so on. In other words, most disciplines recognise that diversity is required in order to understand the world and that specialisms can in effect stretch into infinity. Nor do we actually live as geographers, historians, anthropologists, archaeologists, political scientists, literary theorists, language experts etc. Society is not constructed according to disciplines.

The time has come (in fact, has been here for some time; the notion having been well articulated since the 1960s) to recognize the value of bridging disciplines to produce interdisciplinary academic practitioners able to understand the value of different specialisms and able to put them to work for common objectives. At one time, in its own narrow way, development studies promised this outcome. [A more broadly conceived program was similarly envisaged through the history and philosophy of science.] Certainly for people who worked in such fields sharing projects with economists, sociologists, demographers, historians, economists and political scientists [or with scientists, anthropologists, philosophers, literary theorists, historians and sociologists as well as writers, poets and artists], the results were always more exciting and rewarding than if pursued through the solitary lens of one discipline. And this to some extent is the rub. Disciplines provide valuable perspectives and skills, but the goal of tertiary education should not be to lock people into an academic strait jacket; rather it is send them forth on a lifetime of exploration, collaboration and innovation.

2.8 Networked University

As a University with campuses in northern Australia and Singapore, and with an explicit tropical agenda, we need to prepare our students for the changes and consequences that will derive from the Asian century. Evidence from our School's departments suggests that no one major or stream of subjects specifically addresses these changes or their consequences. Accordingly we have determined that each of our Bachelor of Arts disciplines should have at least one subject specifically on an Asian topic. These subjects will be grouped to form a new secondary major addressing the Asian Nexus. In keeping with Jayasuriya's strategy for problem-oriented study, the Asian Nexus will generate in-depth knowledge of a common set of problems pertaining to the wider region. It will be interdisciplinary in form and transnational in

scope; its aspiration—to provide students with the necessary background knowledge to understand the regional and global contexts of the issues it raises.

Although the major is not intended to begin until 2015, we have attracted eight possible subjects: a historical background to the making of the Asian century, an examination of Asian urban development within a global context, an analysis of leadership for the Asian century, an investigation of intercultural psychology, Asia's archaeological and anthropological diversity, and studies of Asian cinema and cross-cultural literature. We are hopeful that other schools in our University will provide us with subjects on health, demography, economic development and environmental issues.

In addition, we are planning a new subject on intercultural learning, designed to expose students to an understanding of their cultural selves through cross-cultural experiences. This subject will embed students for up to a month in universities in Thailand and India where we have already established teaching, research and placement relationships that we hope eventually will form the basis for networked mobility. A variety of activities will be arranged for these students; for example work with museums, international offices, welfare and community-based organizations, as well as special projects. Students in Australia would have access to national Asia-Bound grants. In effect, these grants are part of a 'reverse Colombo Plan'. Rather than students from Asia studying in Australia—which played a crucial role in the demise of the notions of difference that promoted the 'white Australia policy'; students from Australia are encouraged to study in Asia—and we would hope with similar positive intercultural effects.

Because we intend to teach some of these subjects in Singapore or offer them from Singapore, the opportunity also arises for Australian students to study four of the major's subjects during a semester at JCU's Singapore campus. Singapore's trimester organization could make it possible for such study to occur over the Australian summer vacation period. Alternatively, single subjects might be offered in block mode in Singapore to attract students between Australian semesters. Additionally we anticipate that our Singapore campus will enable us to expand the range of language majors that we currently offer; thus for language students the Asian Nexus major might complement an extended study in Singapore. And, of course, we hope to encourage students on our Singapore campus to study for a semester on our Australian campuses.

2.9   Conclusion—Asian Century to Asian Nexus

The major addressing the Asian Nexus, seeks—within normal academic constraints—to transform our students into practitioners able to engage with the University's location in the tropical world, the University's location at a cross-roads of Asia, and further to the global world—with all its promises and dilemmas. We want to offer our students authentic opportunities to become problem-solvers and partnership builders. Above all, our students must grasp how Asia is transforming our common human story into something that will be both challengingly foreign, yet

unmistakably familiar (for all the world). But this will not be a unique shift in the human story; indeed before this century is over we will be talking about the African century.

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Chapter 3
Using Eportfolios in Transnational Asian Campuses

Christine Bilsland

Abstract Research indicates that using ePortfolio assessment can result in high levels of motivation, critical thinking, and engagement. This paper suggests that benefits of ePortfolio assessments are especially valuable for Asian higher education students from Non-English Speaking Backgrounds (NESBs). More specifically, the paper proposes that transnational universities provide explicit guidance, coordinated feedback and develop offshore staff commitment when implementing ePortfolios in their Asian campuses.

3.1 Introduction

Electronic portfolios (hereafter called ePortfolios) in higher education are fundamentally collections of students' work [1]. Work samples can include anything that can be digitally stored—not only text, but images, video and sound files. Interest in ePortfolios as assessment tools has increased significantly in the twenty-first century, not only due to technology advances but also thanks to social, economic, political and demographic shifts [2]. Higher education practitioners value not only the assessment evidence but also the student-centred learning and engagement that ePortfolios appear to nurture [3].

An ePortfolio can be assessed as one summative online collection, offering convenience for both learner and assessor. However, the value of ePortfolios as transnational assessment vehicles is not limited to online convenience. Due to the flexibility of evidence that ePortfolio technology enables, this paper proposes that ePortfolios give transnational universities the ability to offer offshore students locally and culturally relevant assessment opportunities. In addition, carefully planned ePortfolio assessment strategies effectively support development of process skills and critical thinking through formative assessment that incorporates early and regular feedback. The paper also addresses relevant cross-campus assessment moderation issues.

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3.1.1   Definitions and Scope of Paper

This paper will use the term transnational university to refer to a university (the home campus) that delivers its programme to students in an offshore location (the host campus). Online degrees are related to "transnational higher education" as their activities are conducted across borders; however, online degrees are not incorporated into this paper's scope. The paper's focus is on higher education institutions that deliver their "product" in a face-to-face delivery mode overseas.

Technology issues are outside this paper's scope. Although technology considerations are clearly fundamental to any successful ePortfolio implementation, this paper will limit its discussion to the value that ePorfolios can bring to a transnational environment from a learning perspective.

The paper sets a foundation by reviewing the impact of Asian campus enrolments on Australian universities in terms of meeting offshore student needs. Then, ePortfolio assessment approaches linked to meeting offshore learning needs are outlined, followed by a discussion of challenges faced by transnational students relevant to assessment and how ePortfolio assessment can provide support in these areas. The paper reviews implications for assessment moderation, and highlights the need for organisational alignment and communication with offshore staff. It identifies three key focal areas especially relevant to effective transnational ePortfolio assessment: explicit guidance, co-ordinated feedback, and staff commitment.

3.2   Literature Review

The expansion of higher education across national boundaries has become an established global phenomenon. Students travel overseas in order to obtain either all or part of their degree in a foreign country. However, a potentially more risky facet of this global phenomenon is illustrated when universities deliver their programmes locally in a foreign 'offshore' location. According to Ziguras, offshore student enrolment in Australian universities stood at 20,000 in 1998. According to Australian Education International, this figure increased to over 76,000 in 2010. The Australian Learning and Teaching Council's (ALTC) two year project of 2010 reported that more than 70 % of Australian Universities' offshore projects were located in four Asian countries – Singapore, Malaysia, the People's Republic of China (PRC) and Hong Kong.

The Australian Vice Chancellors' Code (AVCC) directs universities to ensure that the education they provide relates to the student's context. This point is especially relevant to Australian universities delivering courses in Asia. The Code requires that institutions

> ensure that international students not only gain an understanding of their discipline and associated studies in an Australian context but also, where possible, be given the opportunity to relate these studies to their home environment (AVCC 2002, p. 8).

A critical challenge for transnational universities is to effectively equip international students with appropriate guidance and support to achieve university-standard

outcomes. The International and Global Engagement section of the Australian Government-commissioned Bradley Review identified the need for universities to improve student support mechanisms, to provide all students with an education experience that enables them to get the most out of their courses, and to fulfil employer work-readiness requirements on a global level. O'Keeffe and Donnelly report that ePortfolio use can encourage greater participation from "non-traditional" learners, including international students. Therefore, ePortfolios enable transnational universities to help their offshore students make the most of their degree experience through greater participation.

According to O'Keeffe and Donnelly ePortfolios encourage learning beyond the classroom. It makes sense for transnational universities to explore how ePortfolio assessment approaches can be used to support offshore students to apply their learning to their own local environment, in ways they find relevant.

3.3 EPortfolio Assessment Approaches: "Product" and "Process"

Barrett [3] describes two approaches to using ePortfolios; the process or "workspace" element and the product or "showcase" element; furthermore, she emphasises the importance of the "learning" or process element, which often incorporates reflection.

Portfolios have evolved somewhat organically from their original use in artistic, creative, and engineering fields to wider applications in higher education. This evolution has moved in conjunction with shifts from teacher-centred to student-centred learning approaches, for example those proposed by Biggs and Tang. Authors such as Harvey et al. reported increased emphasis on graduate attributes, employability skills, and the need for graduates to be "job ready". A corresponding call to document "authentic learning" by Hallam and Creagh advises universities to adopt ePortfolios to demonstrate evidence of students' work readiness as well as to develop their communicative and process abilities. Constantly improving technology provides transnational students and higher education providers with increasing accessibility to ePortfolio tools. Batson claims that these tools enable students to take control of their own learning.

Using ePortfolios as assessment evidence that demonstrates student achievement appeals to transnational educators who work with Non English Speaking Background (NESB) students because they can assess students on their ability to perform the related task at hand, rather than assessing their English ability. However, James et al. and Sullivan et al. conclude that assessing reflective "process" elements can be problematic due to the subjective nature of reflections, which can compromise assessment reliability. Both the process and the showcase elements of ePortfolio assessment pose challenges for transnational educators. Challenges relate to assessment relevance; alignment of both staff and students to the purpose of ePortfolio assessment projects, and provision of effective guidelines. A major challenge is dealing with marking and moderation concerns. The next section of the paper discusses these challenges.

3.4 Challenges Faced by Transnational Students/Universities in Learning and Assessment

Biggs and Tang point out the importance of applying effective teaching principles to all students instead of focusing on differences. However this section will identify issues that apply in particular to transnational students that are relevant to ePortfolio assessment. In addition to the obvious challenges that NESB students face with doing university-level work in a non-native language, Asian students often come from different primary/secondary education backgrounds (teacher centred), and different cultural backgrounds. Offshore teaching and moderation of ePortfolio assessments also represent a challenge faced by the university itself.

3.4.1 Lack of Familiarity with a Teacher Centred Learning Environments

Because many Asian students come from a more "teacher-centred" scholastic environment they may be used to doing what the teacher wants rather than directing their own learning, a feature of ePortfolios. Adapting to a change in education style, as well as a major change in how assessments are done (ePortfolios instead of an exam, for example) requires quite a significant adaptation on the part of the transnational student. Janosik and Frank interviewed ten second-year Master degree home campus students who participated in an ePortfolio-assessed project. An emerging theme from their study was the difficulty students experienced adapting to change.

Presumably offshore undergraduate students face similar or even greater difficulty than Janosik and Frank's subjects when introduced to ePortfolio assignments. They already face challenges adapting to a different educational system delivered in a foreign language. Therefore, the commitment of the teacher to the ePortfolio assessment is even more crucial in the Asian offshore campus than it is in the transnational university's home campus.

3.4.2 Lack of Familiarity with Assessment Environment

Arkoudis outlined several challenges regarding assessment that international students face when studying in a foreign university context. The notions of "cultural capital" and "hidden curriculum" articulated by Devlin illustrate difficulties that students from a non-traditional background may encounter with ePortfolio assessments in transnational universities. Cultural capital incorporates tacit assumptions about how things are done, while the hidden curriculum includes values and beliefs represented by the "official discourse".

Transnational universities can't assume that their Asian offshore students will possess this cultural capital of the university, or that they will readily recognise all that the hidden curriculum incorporates. For example, the "hidden curriculum" of

reflective writing that ePortfolio assessments often encompass requires students to write in a personal style. However students from Asian sociocultural backgrounds may find writing about themselves, their emotions, difficulties, hopes and future dreams inappropriate in an academic setting. They need additional guidance and support to write assessments in this style. Janosik and Frank's previously mentioned research on Masters students introduction to portfolio assessment found that although students learn much about themselves through the use of reflection, they need a great deal of regular reassurance and support throughout the process.

3.4.3 Possible Cultural Differences

Research on cultural differences in education has been well documented, as well as criticised. However, research of cultural differences could be usefully applied to gain better understanding of challenges that offshore students experience when presented with unfamiliar ePortfolio process assessment elements. For example, according to the Hofstede index of "uncertainty avoidance", Australia scores a mid-range 51 indicating a pragmatic approach that focuses on planning and rules. Vietnam scores 30, indicating less emphasis on planning and rules but more on actual practice. An ePortfolio task that emphasises a process element such as project planning may generate fundamental miscommunication between local Vietnamese students, local teaching staff, and the Australian host campus staff. Therefore university course developers will need to incorporate assessment criteria and possibly marking allocations to raise offshore student awareness of the importance of demonstrating planning and process in ePortfolio assignments.

3.4.4 Teaching and Moderation Challenges Faced by the Transnational University

Universities with high numbers of offshore students such as RMIT, Curtin, Monash and the University of South Australia (reported by Australian Education International) have produced reports to gain insight into challenges of transnational assessment and moderation. Thuraisingam et al. discuss how moderation in the transnational education environment is constantly dynamic and subject to systemic tension. This tension is enhanced by sociocultural factors inherent in the use of 'mediating tools'—defined as "means with which the subjects perform the activity" incorporating "policies, practices, rubrics, exemplars, types and standards of assessment and processes, assessment protocols, communication language and culture and other resources".

In terms of ePortfolio assessment this is an interesting finding, as Thurasingam et al. also indicate that these tools carry cultural and historical meaning with them. It is relevant to ePortfolio assessment—a relatively new assessment technique, possibly at risk for subjective grading. When combined with goals to use ePortfolio

assessment as a tool to provide offshore students with the benefits of flexibility and fairness to demonstrate their real subject achievements, this study supports the need for further collaborative research on dealing with systemic tensions inherent in moderating transnational ePortfolios, and work on establishing tools that use ePortfolio assessment to achieve valuable outcomes for both the students, prospective employers and the university itself.

3.5 Recommendations to Deal with Challenges Through ePortfolio Assessment

3.5.1 Explicit Guidelines

Although provision of clear assessment guidelines is an assessment fundamental, according to James et al. "the process for arriving at a grade is a mystery for many international students". When unfamiliar assessment elements are embedded into ePortfolio assessment tasks, transnational students require explicit guidance and instruction that highlight these particular elements. Arkoudis reported that having all assessment expectations explained is a key area of international students' concern. Therefore, universities must systematically provide clear, specific and complete guidance on what needs to be done (assessment evidence) and how it needs to be done (assessment process) when introducing ePortfolio assessments to transnational students.

Providing exemplars of ePortfolio assessments provides clear, valuable guidance. The Centre for the Study of Higher Education's 2002 publication on assessing students unfamiliar with assessment practices in Australian higher education recommends provision of exemplars—a memorable comment from the report was "without these (exemplars) it's the equivalent of trying to write a PhD without ever having seen one". The desirability of providing ePortfolio exemplars for students is supported by various researchers.

Additional time to explain ePortfolio elements in class may be required in order to support students to effectively develop process skills.

3.5.2 Coordinated Feedback

Giving early, timely, frequent and appropriately useful formative feedback is crucial in the offshore environment, particularly at the start of the ePortfolio introduction. Harris et al. and Smyth et al. noted the importance of formative feedback in ePortfolio implementation. Snider and McCarthy studied international student ePortfolio users, and reported that students valued this formative feedback support. Providing feedback helps students feel recognised, and can usefully improve their assessment results as well as their perceived skill.

Students need to be guided early, not only to make sure they are on the right track but also to develop and maintain motivation and enthusiasm for ePortfolio assessment. Additionally, obtaining early and continuous feedback is an effective strategy for staff to monitor student progress (both on "evidence" and on the 'process" reflective elements of the ePortfolio) and to identify "at risk" students early enough to intervene. Additionally staff should gain improved insight into their students personally (from reading reflective entries). Regular, planned communication of the resulting student feedback from offshore teaching staff to the home campus course management and administration can be used as a research source to enable the organisation to become more aware and responsive to the offshore environment.

3.5.3 Develop Offshore Staff Commitment

Offshore teachers may also require additional support due to the lack of implicit cultural capital and understanding of the "hidden curriculum" when presented with ePortfolio assignments with different expectations than the methods of assessment they are accustomed to. According to Johnson and DiBiase, supported by Harris et al. it is critical to instil perceived value into ePortfolios. Staff buy-in is crucial from the start of an ePortfolio project. Without commitment of staff to the inherent value of the ePortfolio, students lose motivation and aren't likely to productively participate in ePortfolio activities. This may be especially true in countries where the primary/secondary education environment has, until now, reflected a teacher-centred approach. Therefore, it is important to establish offshore and onshore staff buy-in from the start of the ePortfolio implementation. To ensure this, offshore staff should be part of the ePortfolio assessment development process. Selection of content to reflect local requirements, incorporating learning outcomes relevant to both local students and their prospective local employers, establishing marking and moderation procedures need the contributions of offshore staff. The offshore staffing environment, for example offshore staff members are often sessional and hold other jobs, also needs to be considered when scheduling workload.

Thuraisingam et al. in their report on assessment moderation in transnational education also recommended that ePortfolio marked exemplars be shared with all teaching and marking staff in all campuses. These should be made available early in the semester, so that teachers clearly know what standards are expected of the ePortfolio assessment and can feed back appropriately to help their students during the process.

3.6 Conclusion

The body of research on ePortfolios in higher education is growing. However, there is a gap in research on ePortfolio application to learning and assessment issues specific to offshore transnational campuses Applying a standard "template" ePortfolio

strategy to a university's home and host locations, rather than an adaptation strategy, is too risky to implement without first researching the offshore market situation and needs.

This paper identifies three elements of ePortfolio assessment with particular relevance for transnational universities that warrant further research. These elements encompass appropriate guidance, effective formative feedback provision, and collaboration with staff to develop commitment to ePortfolio implementations offshore.

The responsive communication and personal attention that is inherent to timely, valuable formative feedback on ePortfolio projects could also provide the transnational university with incidental benefits; more highly motivated students who demonstrated higher affiliation with the transnational university. Collaborative research between universities on ePortfolios should investigate ePortfolio assessment practices in offshore Asian campuses, especially for Australian universities that espouse ePortfolio projects as well as offshore delivery of these projects in Asia.

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Chapter 4
International Higher Education: Reasons Students Choose Singapore

Robyn Anderson

Abstract A gap exists in the research literature on why international students choose to study at offshore, higher education, Australian campuses in Singapore. The paper presents findings from a focus group interview, which shows that higher education institutions in Singapore have become a viable alternative to the traditional study destinations of the United States, the United Kingdom or Australia for many students in Asia. Factors influencing students' choice of study destination and choice of higher education institution are discussed, and based on these observations and Australia's connection to Asia, suggestions are offered to strengthen this growing area.

4.1 Introduction

International students are defined as "students who have moved from their country of origin for the purpose of studying". International students from Asian have traditionally sought to study in the United States, the United Kingdom or Australia because of the quality and reputation of universities in these countries. Australia, in particular, has developed international education into an industry generating Australian $ 16.3 billion in export income per year [1]. One aspect of this growth industry has been the development of offshore higher education campuses, particularly in the Asian region. Despite this growth in offshore campuses, there have been no known studies on why international students might choose to study at an Australian offshore campus, and particularly a campus located in Singapore. The study thus seeks to understand why one group of international higher education students chose to study at an Australian, offshore, higher education campus in Singapore rather than study in Australia or elsewhere in the world. The paper first considers some of the literature on international education. A methods section outlines how the study was conducted, followed by the findings and discussion of the study. Finally, recommendations are offered with the conclusion.

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4.2 The Literature

The literature focuses on three areas for consideration in the study and includes: the globalization of higher education; Australian higher education and offshore campuses; and factors that may influence international students' choice of study destination. Each area will be discussed in turn.

4.2.1 The Globalisation of Higher Education

As economies and societies have become more globalised, so has higher education. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the number of students who enrolled in a higher education course outside their country of citizenship increased from 0.8 million students worldwide in 1975 to 4.1 million students in 2010, representing more than a fivefold increase. The Organization for Economic Cooperation and Development (OECD) argue that, as the world becomes more globally oriented, students too are increasingly seeking overseas study destinations to gain a more global perspective in their professional fields, possibly to improve their employment prospects upon graduation. While traditional study destinations such as the United States (US) received the largest share of international students in 2010 with "17 % of all foreign students worldwide, followed by the United Kingdom (UK) (13 %), (and) Australia (7 %)", new forms of international higher education are emerging in the form of offshore campuses, and particularly in Asia. Asian students currently represent 52 % of international students enrolled worldwide and characterise one of the major growth areas of international higher education with Asia becoming one of the world's fastest growing study destinations. Such changes may reflect the differences in countries' internationalisation approaches, such as proactive marketing in the Asia- Pacific region and the consequent setting up of offshore campuses.

4.2.2 Australian Higher Education and Offshore Campuses

Offshore campuses are operations where higher education institutions expand, sometimes through franchised agreements, and from where they are based, such as in Australia, to beyond their borders to countries such as Singapore. Whilst offshore campuses are not a recent phenomenon, "they are becoming more prolific and worldwide, their numbers have increased eightfold between 2002 and 2009". Offshore campuses are becoming a more common feature of international higher education, and as Norris notes, in 2009 there were 162 offshore campuses worldwide. Matchett states that many "international students at Australian universities" did not step ashore last year . . . choosing instead to "study at branch campuses overseas". Of the 308,234 overseas students enrolled at Australian universities in 2011, 79,826 (26 %) of these students were enrolled as offshore students [2]. The Royal Melbourne Institute of

Technology (RMIT), Murdoch University, Monash University, Swinburne University and James Cook University were among the top five universities that experienced strong growth in offshore enrolments from 2004 to 2011. The next section considers factors, which may influence international students' choice of study destination.

4.2.3   Factors Influencing International Students' Choice of Study Destination

A number of important factors determine international student's choice of study destination choice. Mazzarol and Soutar suggest that international students more often choose their study destination according to the relative costs of education and living expenses. The deterioration of international enrolments in the United States and the United Kingdom may account for this choice and may be one reason why Asia, including Singapore, has been one of the fastest growing regions for international higher education. Sidhu, Ho, and Yeoh, similarly noted in their study of international students at the National University of Singapore that Singapore's lower cost of living compared to that of North America, Europe or Australia was significant in attracting students to study in Singapore. A country's immigration policies may allow or disallow international students to migrate for the purposes of study. As such, "several OECD countries have eased their immigration policies to encourage the temporary or permanent immigration of international students". The OECD argue that students' choices are more often "based on the quality of education offered, as perceived from a wide array of information on, and rankings of, higher education programmes now available, both in print and online". The emergence of university rankings and the relative importance given to them by many Australian universities reflects the perception that the quality of the institution is important for international students. Mazzarol and Soutar and Sidhu, Ho, and Yeoh, similarly found that for international higher education students, quality of education is an important factor. A range of other factors may also influence international students' choice of study destination such as "the flexibility of programmes in counting time spent abroad towards degree requirements; recognition of foreign degrees; the limitations of tertiary education in the home country; restrictive university admission policies at home; geographical, trade or historical links between countries; future job opportunities; (and) cultural aspirations". The next section considers how the research was conducted to answer the research question: Why one group of international students chose to study at an offshore Australian higher education campus in Singapore rather than in Australia or elsewhere in the world. The research method looks at the research approach, data collection tools and method of analysis.

4.3   The Research Method

To understand why one group of international students chose to study at an offshore Australian higher education campus in Singapore rather than study in Australia or elsewhere in the world, a qualitative approach was employed. Grounded theory was

the chosen paradigm of inquiry and as a tool for analysis "for examining established concepts afresh". While various studies have offered reasons for students' choice of study destination, reasons for students' choice of an Australian higher education campus in Singapore may be different, particularly as context may influence outcomes [3]. To answer the 'why' of any research endeavour, McNaughton and Hughes suggest that a focus group interview is an appropriate data collection tool to discover the views of a specific group of people regarding a specific topic. The focus group participants included one group of international students who chose to study at an Australian campus in Singapore. The ten participants included five male students and five female students; eight students were from India and two students were from China. Of this cohort, nine students were aged 22–23 years and one student was aged 30–40 years; eight were masters students and two were bachelor degree students undertaking courses in information technology, business or education. The focus group interview was conducted on 15 November 2012. Following general introductions, the question, "Why did you choose to study at an Australian university in Singapore?" set the course of the interview; in this way, no 'priori categories' limited students' constructions of the topic. The focus group interview was approximately 50 min in length, was recorded and transcribed for later analysis. Pseudonyms were used to preserve anonymity outside the group. The transcript was returned to the researcher and made available to participants to verify its authentication.

Analysis of the transcript data included coding according to themes and categories constructed from the discourses on which the participants drew. The concept of discourse defines ways of thinking within institutions, demarking boundaries of possible truths in language. Within international higher education there are a range of competing and contradictory discourses, which are influenced, by discourses in the wider society. Discourses influence the decisions international students make in choosing a study destination and in the particular institution for study they choose as well as how they are described or positioned within those discourses. There was a constant movement between analysis, reflection, (re)reading and (re)writing until the research was complete. The research essentially involved consolidating, condensing and weaving together of individual student views on study destination choice. Bryman and Burgess suggest that there "is no standard approach to the analysis of qualitative data". The next section considers the findings and analysis of the focus group interview.

4.4   Findings and Discussion

4.4.1   Discourses in International Education

The focus group interview was analysed using the concept of discourse to understand why international students chose to study at an Australian university in Singapore. It revealed that students drew upon a range of discourses available through the media and internet, including discourses of educational quality, cost, international/global

exposure, multicultural environments, visa issues, safety, proximity to one's home country, and Singapore as an educational and financial hub. The three most significant reasons for choosing an Australian university in Singapore, drawn from the discourses used, will be discussed in turn.

4.4.2   Quality of Education

Eight of the ten students interviewed said that the quality of education was one of the main considerations in choosing a study destination:

> I think the main reason I came to Singapore . . . I think the quality of education. (Soo, Focus Group Interviews, November 15, 2012).

The emergence of university rankings and the relative importance given to it by many Australian universities, who advertise rankings on their websites, reflects the perception that the quality of the institution is important for international students. As Mazzarol and Soutar and Sidhu, Ho, and Yeoh, noted, for international higher education students, quality of education is an important factor and their choices may be influenced by the reputation and information about the institution. Similarly, for many, the quality of education available at a chosen study destination was also tied to the quality of the university, and specifically, an Australian university:

> Well firstly it would be the reputation of the university, I mean, I know that the Australian standard was what I was looking for . . . (Win, Focus Group Interviews, November 15, 2012).
> The quality of education that they (the Australian university) could provide in that one year was of a high standard. (Krishna, Focus Group Interviews, November 15, 2012).
> Ok, I actually applied to an Australian university and I got my admission as well. But then, there wasn't enough time for my visa processing. Nevertheless, I didn't want to give up because I like the standard for Australian education so it was a blessing, which came out that you have an Australian university here in Singapore (Bibi, Focus Group Interviews, November 15, 2012).

The OECD states that students' choices are more often "based on the quality of education offered, as perceived from a wide array of information on and rankings of higher education programmes now available, both in print and online". Many of the discourses relating to quality of education were drawn not only from online sources available through the Internet, but also through talk in the community and among friends, as one student revealed her source:

> Through the internet (and) a couple of close friends (Chanda, Focus Group Interviews, November 15, 2012).

Students in the interview believed that studying at a high quality educational institution, no matter where it was located, positioned them well in their future job prospects and career opportunities. "Tuition costs do not necessarily discourage prospective international students, as long as the quality of education provided is high and its likely returns make the investment worthwhile".

4.4.3   Costs

Six of the ten students interviewed stated that relative costs associated with study were a consideration in their choice of study destination, which Mazzarol and Soutar similarly found. In the context of competitive markets for international tertiary education of similar quality, lower educational costs including the cost of living, are more likely to attract international student, which some students in the focus group indicated:

> The expense of everything (in Singapore) is much better compared to other countries . . . (Ravinder, Focus Group Interviews, November 15, 2012).
> Compared to the US and UK, the affordability is quite low in Singapore—that's my first reason (for studying in Singapore). (Krishna, Focus Group Interviews, November 15, 2012)
> Second, I think the cost . . . cost is not as high as Australia or other European countries or the UK (Soo, Focus Group Interviews, November 15, 2012).

For students, the issue with costs was mostly related to the overall cost of education and living expenses during the course of study. For some however, the cost of fees at the chosen institution were also a consideration:

> Actually . . . I came to know about the university because of my friend who just joined the semester before I joined . . . he told me the cost of everything in Singapore and the university, the expense, the fees, everything. Compared to other universities like (the) US and UK, which I applied (to) . . . I feel like the cost, the fee structure and everything is like lesser than that (the US and UK) because I had to take a loan—so I feel that by studying at JCU Singapore it's a good standard of education and less expensive. (Ravinder, Focus Group Interviews, November 15, 2012).

The fast-tracking of courses at particular institutions is a further attraction for students as it reduces the length of time spent overseas, the cost of living in another country and therefore the overall cost of education as Mazzrol and Soutar suggest and as one student indicated.

> For me it (the choice to come to Singapore) was the time period of the course, that is the one-year course that I am doing and considering the cost of the degree, the one-year course (fast-tracked) was also affordable (Kriskna, Focus Group Interviews, November 15, 2012).

As study and living costs are important factors for international students, Australia may see a reduction in international student numbers if the Australian dollar continues to strengthen. However, offshore campuses in low-cost locations may be a viable solution.

4.4.4   International/Global Exposure

Six of the ten students interviewed had taken up the discourse of 'global exposure' and was one of the main reasons they came to Singapore. The OECD suggests that "(o)ne way for students to expand their knowledge of other societies and languages, and thus improve their prospects in globalised sectors of the labour market, such as

multinational corporations or research, is to study in tertiary institutions in countries other than their own". In an increasingly globalised world, students are likely to better position themselves as competitive in the job market if they gain international experience, exposure, and an 'international' perspective during their studies. When asked why they chose to study in Singapore, six of the ten students interviewed revealed that they had clearly taken up this discourse to better position themselves for their future:

> Researcher: So why did you choose to leave (home country)?
> Bibi: For a new perspective . . .

Most of the students' references concerned exposure to other cultures and education systems within Singapore:

> I want exposure and another country's education system . . . (Ravinder, Focus Group Interviews, November 15, 2012).
> I too wanted global exposure so as I studied in my country for the past 20 years, I wanted a global exposure and I came out of my country (Mutha, Focus Group Interviews, November 15, 2012).
> Yeah, it is definitely the global exposure that makes the difference (Chanda, Focus Group Interviews, November 15, 2012).
> I need an international education so I chose this university (Lalit, Focus Group Interviews, November 15, 2012).

The ConfluenceEdu website reinforces this discourse of global/international exposure to prospective international students, particularly students from India, affirming that study in Singapore might ensure from the subject position of 'international exposure', they might positioned as having a "global outlook". As many of the students in the focus group interview were studying business degrees, it may have been even more imperative that they gain a 'global outlook' of overseas business methods to position themselves well in their profession.

4.5   Conclusion and Recommendations

The study sought to understand why one group of international higher education students chose to study in Singapore at an Australian higher education institution. The focus group interview found that students drew on a range of discourses drawn from the Internet, media and wider society relating to educational quality, international/global exposure and cost of living and education. In relation to choosing an Australian university, students took up discourses relating to the university's reputation and quality of education, the fast tracking of courses and relative costs. Thus students in the focus group interview indicated overall that they chose not to study in Australia or elsewhere in the world because a similar quality of education could be offered to them at a lower overall cost. Given that such students chose Australian campuses in Singapore for these reasons, further research into how Australian universities might better cater for and improve the experience of international students in Australian offshore campuses in Singapore or elsewhere in Asia, might better support

Australia's third largest industry, international higher education. As higher education becomes more globalized, international student enrolments worldwide are likely to increase, particularly if the cost of higher education in traditional study locations such as the UK, the US or Australia continues to remain high.

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Chapter 5
TCK Professional Development for International School Teachers in China

Yvonne McNulty and Margaret Carter

Abstract In this paper we draw on a qualitative study of 21 focus groups at two international schools in China, to examine the professional development of international school teachers in response to the needs of third culture kids (TCKs). Comparing the perspectives of 42 teaching staff and 37 parents, this study presents new perspectives and insights in exploring whether teachers at international schools in China have the skills and competencies to be responsive to the needs of TCKs, and where gaps in their professional development may exist.

5.1 Introduction

The purpose of our study is to examine the agenda for professional development for teachers in international schools in China in response to the needs of 'third culture kids' (TCKs). Our fundamental argument is drawn from Grimshaw and Sears, wherein the needs of TCKs differ from those of children from non-expatriate families. We contribute to the literature on international education by extending the very small number of empirical studies that explore international school teachers' professional development and diversity in education. Carter and McNulty, for example, found in their study in Singapore that international school teachers' often require a specialized set of skills and competencies to effectively cater for the specific needs of TCKs. In drawing on data from 21 focus groups of teachers and parents at two international schools in Shanghai, we build on extant literature to provide international school teachers and parents a voice in which to share their 'lived experience' regarding TCKs in the international school setting. We further extend prior studies by gathering data from the parents of TCKs, an under-researched population.

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5.2   Third Culture Kids and International Schools

Third culture kids are the children of parents who live in a foreign country for their work. Such 'work' may include occupations in the military, diplomatic corps, mission field, non-profit sector, education, and international business. TCKs differ from global nomads (people who are living an international lifestyle) because the TCK experience is specific to childhood. The TCK experience is marked by the continual process of living in and among different cultures which Pollock and van Reken argue '*affects the deeper rather than the more superficial parts of* [*TCKs*] *personal or cultural being'.* TCKs' life is therefore impacted by the two interconnected realities of being raised in, and experiencing: (1) a truly cross-cultural world beyond only watching, studying or analyzing other cultures from a distance; and (2) a highly mobile world which continually changes in terms of people, places, and things.

TCKs spend a significant portion of their developmental years outside their parents' culture. Useem defines three cultures that TCKs inhabit. The first is a child's country of origin and/or parental culture, of which they hold a passport but may or may not have been born in. The second culture is the host country in which a child is currently living. The third culture is the community within the second culture that a TCK most identifies with in terms of a shared lifestyle and meaning, e.g. an expatriate compound, or an international school.

We define an international school as one that is '*independent of any national system of education, and that offers a curriculum which is different from that in the host country*'. The international school represents the 'third culture' in which many TCKs are immersed and in which they find comfort, security, and a sense of shared identity. Its significance is therefore critical in helping TCKs thrive in their international environment, largely because it provides them with a sense of belonging in relationship to others of a similar background.

5.3   Professional Development for International School Teachers

Interest in the professional development of teachers in international schools stems from the well documented research linking quality training and quality learning and teaching environments. This research has consistently demonstrated that the professional development of teachers is the cornerstone of excellence, wherein ongoing staff training contributes to the optimal development of children and reflects the quality of the curriculum and pedagogy children are immersed in. Adapting from Evers et al., we define teachers' professional development as authentic participation in professional learning sessions. This includes training, reading, dialoguing, experimenting, reflecting, and collaborative activities formally delivered and informally experienced as on-the-job work integrated learning.

5.4 Research Questions

Building on extant literature (e.g. Alviar-Martin and Ho 2011; Evers et al. 2011), this study is salient in informing the professional development agenda for teachers in the international school context, both in China and further afield. We outline two specific research questions:

RQ1: What is teachers' experience with TCK professional development and learning?

RQ2: (a) What do teachers say they need in terms of ongoing professional development in relation to the TCK issue? (b) What professional learning do parents' perceive teachers of TCKs require?

5.5 Method

In April and October 2012, we conducted 21 focus groups with approximately 80 teaching staff and parents at two international schools in Shanghai. (Given the limited time teachers have available to contribute to outside research, this methodology is seen as most appropriate as data can be collected quickly and efficiently over a short period of time). Participants were recruited via email invitation disseminated by a senior member of staff at each school who facilitated our access. An invitation letter outlining the project details was attached to the email invitation, along with a consent form, with staff and parents volunteering to participate by indicating their interest and availability directly to a member of the research team. Participants were drawn across the infant, junior, middle and senior school. Focus groups were held during or immediately after school hours, in the school grounds, and were recorded, running for between 1 and 3 h each, and being facilitated by a member of the research team. Staff participants ranged from active full-time teaching staff, counselors, subject teachers, learning support, and heads of departments. Parent participants were mothers and fathers of children enrolled at each school.

Data were coded using NVIVO v9.0. Transcripts were content analysed and common themes identified. To facilitate greater reliability and validity of the data, both researchers coded data independently to facilitate a process of inter-rater reliability, coming together post-analysis to discuss discrepancies and agree on common themes.

5.6 Findings

5.6.1 What is Teachers' Experience with TCK Professional Development and Learning?

Our findings show that there is no clear answer as to how international school teachers' receive their learning and training specific to TCKs in the international school context

to then translate this training specific to TCKs in the classroom. Mirroring other findings in relation to general professional development, teachers do not perceive that they are provided with specific and relevant *formal* training to help them acquire expertise on supporting TCKs, relying instead on their own self-education, from the children in their class, and from peers. Professional development as on-the-job training therefore emerged as a critical, albeit informal and reactive, method of training for international school staff. Some teachers' noted their experience was gained through student interaction, with "students' as teachers".

Additionally, the relationship between parents and teachers is seen by many teachers as a form of professional development unique to the international school context, with a greater emphasis on building this relationship than in home-country schools. Teachers therefore prioritized home-school communication, recognizing that a high level of parental involvement in TCKs schooling is common among most schools they had taught in:

> I think parents for TCKs are much more involved in their child's education . . . and I think we do try to involve them in maybe not so much in all areas of the curriculum but particularly things like reading, we give feedback and parents are involved in those kind of things at home and through the homework and the communication that we have. (Staff, School #1)

5.6.2   What do Teachers Say they Need in Terms of Ongoing Professional Development in Relation to the TCK Issue?

Our second research question explores which areas of professional development teachers in the international schools identified as enabling and empowering them to respond to the needs of TCKs. This includes what they would prioritize in terms of being inducted, mentored, and supported in their professional learning specific to TCKs. From participant responses we identified a number of important training needs.

5.6.2.1   Formal Induction Training for Staff and Students

Staff spoke highly about the practical aspects of induction provided by their school, and that the information given was very helpful. But some staff also spoke about superficial attention to TCK issues during induction at all levels of the school organization, for students as well as staff. Many felt that the TCK phenomenon is trivialized and not given the importance it deserves. Ideas to better prepare teachers for the TCK classroom include:

> Something like a bridge, a stepping stone, a little haven. We use to have this back in my school in the UK, a big forum where students could come in and talk about things, not just to the counselor, not like an AA type of thing, but where they are expressing their views and thoughts. But it also factored in their orientation. They are given a period where they are breathing in the school. We are picking up on their experiences and we can talk about that in a friendly environment and explore how they are thinking and feeling. (Staff, School #2)

5.6.2.2   Curriculum Training and Pedagogy

Teachers working with TCKs would like to honour childrens' heritage and life circumstances as part of their curriculum. Professional development here needs to be imbedded in curriculum pedagogy professional development more directly:

> In Year 3, the topic for the first two weeks is 'You and Me'. I always make a big distinction between where you identify with as in a country; it is entirely up to you and it's not determined necessarily by your passport. The reality is, the majority of our children are Chinese, but have a passport of a different nationality. The majority of them probably spend as much time here as anywhere else. It's down to what they identify with, as opposed to a piece of paper. (Staff, School #2)

The relevance of the curriculum to cater for the student population was identified by teachers as a conflict and a challenge. Bridging the curriculum gap is a major challenge, especially when children come from a different national curriculum to that at their school.

5.6.2.3   Identity Development and the Learner Profile

Identity was named by teachers as one of the biggest challenges for TCKs. Creating teaching and learning spaces responsive to building TCKs sense of identity was named as a priority professional development need. Teachers acknowledged that students of certain ages struggle with TCK identity issues, e.g. where am I from? Which location is meaningful to me? In terms of professional development, teachers recognised that this was a significant issue for older students in particular, but there is no formal training or system in place to assist them to respond and address student identity issues. Some addressed it based on personal and private experience (as the parents of TCKs or being an adult TCK), some referred them to the school counsellor, and others relied on prior experience at other international schools:

> I see it from this one student, she says it straight out, she sees herself coasting from one thing to another and she can't truly and internally represent who she is. She is struggling with that so she is always experimenting with different belief systems, different cultural values. What is she meant to do? She is continually struggling with that in her head but she does know that in the paradigm of things there is a western culture that is a dominant running system, and then there's a sub-culture that she may belong to. (Staff, School #2)

5.6.2.4   Mobility and Transitions for Students

A consistent issue for teachers inherent in the international school context is the high mobility and transitioning of students in and out of the school system. Repatriation or re-assignment to another location was found to be a major source of stress for teachers because they often felt ill-equipped to prepare students, the class and themselves for the sadness and grief that accompanies the regularity of students transitioning out of the school. The reality of being an international school teacher is nonetheless that students do have high mobility and will be transitioning in and out of the school

setting. In the absence of formal training to cope with this aspect of their role nor a formal process within the school to draw upon, many teachers implement informal pastoral care based on personal or prior experience. Part of this focus centers on recognition and respect of TCKs and issues surrounding their life journeys:

> I think staff are quite constantly on alert that there are new children. We do have certain periods in the year where there are big influxes but we have new children arriving every week too and it's not uncommon to see a staff member walk down the hallway and stop and speak to a child because they have that look of 'oh my god'. They've got a shiny new uniform and so on. I think in maybe a home UK school it wouldn't occur to you, it wouldn't be on your radar that that child's new—but here, because they're new constantly, we as staff are all aware of that and all try as best we can to help them. (Staff, School #1)

Acknowledging and supporting student transitions was a priority for many teachers. Many devised environmental systems, creating a sense of security and belonging. How this culture was achieved varied between teachers', curriculum areas, and developmental levels:

> I have really clear routines in my classroom, and the clearer the routines, the easier it is for TCK children ... I think it's good for any child but I think it's even more vital for those children who don't have a clear understanding of how this place called 'school' works in this system. So I've always found in my experience that not deviating from those routines, which sounds really inflexible, but then they know exactly where they sit. It gives them a sense of security. (Staff, School #1)

5.6.2.5 Staff Workload

There is a strong sense that parents to not understand the workload of an international school teacher in comparison to their home-country experiences with local teaching staff. Managing this workload is a major concern in order to avoid burnout:

> I have a larger workload here than I did in the UK, but it comes with a lifestyle that I wouldn't have had in the UK. (Staff, School #1)

5.6.3 What Professional Learning Do Parents' Perceive Teachers of TCKs Require?

5.6.3.1 Mid-term Entrants

The time of the year TCKs enter the curriculum program warrants particular attention. Parents identified many problems with mid-term starters in relation to them being embraced into the classroom culture, curriculum gaps, and cracking friendships and social groups:

> You would think because they've got kids slotting in all the different time through the year that there'd be this continuum of "Alright, we've got a new person, this is where we're at"

and have someone focus on that child to say "Right, have you got this? Have you got that? Have you got that?" But there isn't. (Parent, School #1)

5.6.3.2   Curriculum Gaps

Bridging the curriculum gap is a major challenge for children and parents, especially when children come from a different national curriculum. Gaps need to be addressed and clearly communicated to parents to assist in each child's learning and to reduce stress at home which can sometimes be ongoing for a number of months or years until a child has 'caught up':

> This is a [national] school and therefore it is fine to study [its currency] and all of that, but let's also acknowledge that there are renminbi. We don't go to the shop with US dollars or whatever. We go with RMB. (Parent, School #2)

5.6.3.3   Employing High Quality Teachers

While parents perceived that professional development in relation to TCKs is essential for international school teachers, many also felt that 'being a great teacher' is more than simply receiving training. During the focus groups, there was frequent discussion about the motivation for teachers' to commit to an international school career as a profession, either as a deliberate career choice or a fall-back job for those wanting to travel and work overseas:

> Part of getting what the TCK is about is just being a great teacher who can understand each child's needs individually and cater to that. (Staff, School #2)

5.7   Conclusion

Five important stakeholders directly benefit from the findings of the research overall. The most important is international school teachers in terms of informing their overall professional development. A second beneficiary is TCKs themselves, in terms of having teachers who are more responsive to their needs, i.e., by building the capacity of teachers to respond to the needs of TCKs enrolled in their schools/in their classroom. Schools also benefit in terms of enhancing their profile as an institution that intentionally addresses the 'TCK' child, to then (1) improve their standing in the international community as a school that cares, and (2) building the attractiveness of their school to potential enrollees/parents. Local governments also benefit from the enhanced learning and training of international school teachers, particularly for nations (1) seeking to fulfill their broader national strategies at the geo-political level (e.g. to attract high level foreign talent to, for example, Singapore, Hong Kong and China), and (2) to enhance the credibility of their country as a knowledge hub. Lastly, academia benefits from our study given that this research represents an opportunity to make an original contribution to the literature on an under-researched topic.

Overall, our findings constitute an incremental but important step towards understanding how professional development in the international school context can help teachers acquire a specialised set of skills and competencies to effectively cater for the specific needs of TCKs. In doing so, the TCK phenomenon can be more specifically reflected in the curriculum to become part of the culture of a school community, which will ultimately enhance the overall wellbeing and wholeness of each child in the international school setting in China.

Chapter 6
GlobalNxt University: A New Paradigm in Transnational Education

Kanishka Bedi and Amy Wong

Abstract Transnational education is characterized by diversity in teaching and learning, as the learners are normally located in a host country different from the awarding institution (Machado, Tertiary Education and Management 8(2):97–112, 2002). The transnational educational model requires knowledge and information presented across national boundaries by educators or educational materials through various electronic means (Global Alliance for Transnational Education (GATE) Certification 2003). This paper discusses the academic heritage of GlobalNxt University, a purely online academic institution with a transnational outreach in terms of students and faculty that delivers degree programs through a global classroom pedagogy. The paper also examines the development, aspirations, challenges and the way forward for the university.

6.1 Introduction

Recent advancement in information technology has changed the nature of global educational knowledge and gave rise to a new knowledge economy. The new information and communication technologies facilitate different and more decentralized ways of providing education, and this contributes to the restructuring of teaching, learning, and research in the higher education system. Increasingly, tertiary institutions in Asia are adopting transnational education as a key strategy to diversify and internationalize their higher education systems [1, 2].

As information technology innovation and infrastructure improve, online education gains popularity and acceptance. This paper discusses the academic heritage of GlobalNxt University, a purely online institution with a transnational outreach in terms of students/faculty that delivers degree programs through a global classroom pedagogy. The paper also examines the development, aspirations, challenges, and the way forward for the university.

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6.2   Transnational Education

Following the Code of Good Practice in the Provision of Transnational Education adopted by the Lisbon Recognition Convention Committee, transnational education is defined as "all types of higher education study programs, or sets of courses of study, or educational services in which the learners are located in a country different from the one where the awarding institution is based [3]." These higher education programs may belong to the educational system of a country different from the one in which they are offered, or may be offered independently of the national system.

As such, transnational education, which crosses the borders of higher education systems, is characterized by diversity in teaching and learning, as the learners are normally located in a host country different from the awarding institution [4]. The transnational educational model requires educational knowledge and information presented across national boundaries by educators or educational materials through various electronic means [5].

6.2.1   Types of Transnational Education

There are several types of transnational education, depending on the different institutional arrangements [4]. One common arrangement is the franchising process, where the franchisee provides part of the educational program of the franchiser higher education institution, which can be recognized as partial credit towards a qualification at the franchiser's home country. Another arrangement is via the establishment of a branch campus by a higher education institution to offer its own programs in another location. In addition, two or more institutions can agree on a joint study program in terms of study credits and credit transfers, so that students can articulate into another institution's program. A higher education institution can also offer international or off-shore programs, although such programs are seldom recognized in the host country. Other arrangements include establishing a corporate university or engaging in distance or online learning via remote means.

6.2.2   Pros and Cons of Transnational Education

Transnational education represents an important contribution to improve access to higher education, especially in under developed countries or countries where the demand far exceeds the supply from the country's official higher education system. With transnational education, there is diversification in the way in which educational programs are delivered, and greater opportunities for the emergence and development of new types of transnational education. In addition to generating extra revenues, institutions engage in transnational education to achieve internationalization, build a solid international profile, and promote intercultural cooperation with reputable home institutions.

The growth of transnational education, however, has created some problems of transparency and regulation, especially in the case of dubious degrees or bogus titles. There is also a lack of processes and mechanisms in place to monitor the regulation, quality assurance, and recognition of the increasing diversification of higher education. Moreover, there is a basic need for consumer protection to ensure that students are awarded titles with formal and substantive value that are accepted and recognized by other academic institutions or employers.

6.2.3   Issues and Challenges

Several issues and challenges exist in transnational education, some of which include regulation, quality assurance, and recognition issues as discussed below.

- The regulation of transnational education is a complex issue as it crosses cultural, linguistic, legislative, national and intercontinental borders. The complex nature of regulation gave rise to difficulties in adapting and coordinating the different systems within one regulatory framework. As a result, reputable universities might find it hard to expand their programs outside their home country, while non-recognized institutions might continue to operate in different national contexts simultaneously.
- Quality assurance relates to how students can be guaranteed adequate quality standards of study programs and degrees awarded. Quality assurance in transnational education raises transparency and quality control issues, as it is not subjected to the national mechanisms of quality assurance. In some arrangements of transnational education, the programs offered in the host country are integrated in the official system of the awarding institution's country. The awarding institution is then subject to quality assurance system in its home country, and as a result, the host country programs are most probably recognized in the home country. In this case, the awarding institution is responsible for maintaining the quality of its programs, and this acts as a mechanism to protect its standard in order to prevent its image from being tarnished. In other arrangements of transnational education, the awarding institution might not be part of any official system. In order to legitimize their courses, such institutions may seek international accreditation by private agencies such as the British Accreditation Council and the Council for Higher Education Accreditation, or enter into alliances with reputable universities.
- Recognition of institutions and of programs is a complex subject that relates to the issue of accreditation. In this aspect, [3] provides a framework on the principles of quality assurance and evaluation of programs. This framework aims to contribute to consumer protection for students, employers, and other stakeholders as well as to facilitate the recognition of qualifications. In most cases, recognition is almost always granted for program articulations, while franchised institutions, branch campuses, off–shore institutions, distance learning, and corporate or online universities receive much less recognition.

6.3 GlobalNxt University

According to the estimates of the Global Alliance for Transnational Education in the late 1990s, the demand for transnational education in Asian countries will increase to more than 480,000 students by 2020 [5]. Many of these higher education learning opportunities will be delivered through offshore branch campuses, twinning arrangements, international distance education, while students enrolling in transnational education will inevitably rely more heavily on information and communication technology.

6.3.1 History and Background

GlobalNxt University achieved university status in 2012; a decade after U21Global Graduate School was established as a global online graduate school. Founded in 2001, U21Global began as a pioneering academic partnership that originally involved up to 21 prestigious universities internationally renowned for their teaching and research. Through a cutting-edge online learning model, U21Global was able to offer its students the same standard of high-quality programmes found at traditional world-class brick-and-mortar universities, but packaged and delivered in an innovative, technology-enhanced format. U21Global enrolled over 9,000 students across 72 countries and developed a distinguished reputation for high-quality, academically-rigorous, online programmes.

At the invitation of the Ministry of Higher Education, Malaysia, to build a world-class, technology-enabled university, a new full-fledged university was established. The new university was named GlobalNxt University and adopted Malaysia as a hub for its global academic operations. As a full, autonomous university in its own right, GlobalNxt University was accorded the rights to apply its pioneering online learning model to a much broader range of programmes and schools where it continues to raise the benchmark for online education with its emphasis on interactive pedagogy, advanced learning technology and use of PhD-qualified global faculty. Clearly, GlobalNxt University is well placed to take forward U21Global's original vision of global, borderless education to the next level.

6.3.2 Development and Aspirations

GlobalNxt University is a part of Manipal Global Education (MaGE), an international higher education group providing education and training services to over 300,000 students, from 6 universities and 9 campuses across 5 countries. GlobalNxt University is a pioneering academic institution that delivers degree programs through a unique online global classroom pedagogy. Through a state-of-the-art online learning platform, the university offers students highly interactive learning at any time, and from anywhere. GlobalNxt University is fully committed to providing student-centric lifelong learning that delivers meaningful and relevant educational outcomes.

The university's globally diverse student population is represented by over 72 different countries. In addition, through close industry partnerships, the university has talent development programmes with over 100 multinational companies. Courses currently offered by GlobalNxt University include Masters of Business Administration (MBA), Postgraduate Diploma of Business Administration and Master of Science in Information Technology Management. The university also develops customised programmes for organisations to meet their specific talent and skill development requirements. Plans are in the pipeline to offer a suite of undergraduate, graduate research and doctoral programmes, as well as establish new schools in education, media and health sciences over the next 3 years.

6.3.3 Constructivist Pedagogy

The pedagogy at GlobalNxt University is inspired heavily by the constructivist paradigm of learning, which focuses on knowledge construction rather than knowledge reproduction. A large majority of students at GlobalNxt University are mature adults having several years of work experience. It is likely that they would have gained rare insights in certain specific domains of expertize. The asynchronous discussion boards in the Learning Management System (LMS) allow for sharing of such tacit knowledge with peers and faculty. The 24×7 availability of the LMS is conducive as the students are scattered across different time zones. A dedicated program executive in every course acts as the first point of contact for the students, in case they face any problem related to technology, textbook, content, or due to any other reason. Every student has to undergo a mandatory orientation program before undertaking a course so as to achieve a level of comfort with the LMS tools and online pedagogy.

The online content created by GlobalNxt University includes a mix of text, animations, multimedia, interactive exercises and hyperlinks. It helps to engage the learner, while allowing ample flexibility for content access even with a weak Internet connection. The illustrations used in the content are taken from different continents in order to address the needs of the transnational student population. The e-library is another useful resource consisting of research databases such as journals, industry reports, case studies, e-books, podcasts and videos. Students are expected to refer to these resources while working on their assignments, action learning projects, and the final examination.

Another distinguishing feature of the GlobalNxt pedagogy is the presence of a PhD-qualified faculty. The faculty actively guides the asynchronous discussions, by sharing anecdotes, experiences, and providing additional information. Discussion boards and assignments such as the Action Learning Projects (ALPs), Work-Integrated Projects (WIPs), and Final Reflective Projects are facilitated and evaluated by the faculty on pre-determined evaluation criteria. All faculty members have to undergo a three-week purely online faculty training program (FTP) before commencement of their first class.

6.3.4 Mode of Examination

GlobalNxt University adopts the Open Book and Open Web (OBOW) examination system for final assessment in a course. Students are allowed to refer to books, online content, Internet resources, and other academic resources in the e-library during the 24 h of time available for exam completion. Keeping in view the global student base, a window of 72 h from Friday morning of the East (Malaysia time) to the Monday morning of the West (USA West Coast) is provided. The question paper for the OBOW examination is an authentic assessment instrument created exclusively by the faculty. It is based upon a real life case covering topics discussed in the course. Students, playing the role of consultants, are asked to suggest a pragmatic and implementable solution to solve the problem depicted in the case. As such, there is constructive alignment of pedagogy, curriculum and assessment in that a case-based, problem-solving approach is complemented by an authentic assessment regime.

6.3.5 Quality Assurance

GlobalNxt University has put in place an Academic Council, which is instrumental in ensuring that the university fulfils its mission. Through standards, frameworks and process, the Academic Council ensures that key decisions are discussed amongst academic stakeholders and that high standards of academic quality are maintained. It also provides a structure to support and promote continuous innovation in teaching, research and external engagement.

The online content developed for the courses is authored by an international faculty with strong credentials in the subject matter. It is double-blind reviewed to ensure its quality and relevance to the global student base. The content is continually updated and reviewed by the in-house faculty experts to include latest developments in the field.

As part of quality assurance, there are three mandatory surveys in place. The student evaluation of faculty (SEF) consists of 21 criteria divided into 5 categories such as personal attributes, learning facilitation, quality of feedback, overall rating, and overall satisfaction level. The performance of the faculty is regularly monitored by the Subject Chair as well as the Dean of Faculty Affairs for future appointments. The other two surveys include the student evaluation of the subject (SES) and the faculty evaluation of subject (FES), which provides feedback for quality control and continuous improvement.

6.3.6 Challenges and the Way Forward

GlobalNxt University is essentially a new institution registered as a full private university with the Ministry of Higher Education (MOHE), Malaysia and its programmes are therefore internationally recognised. In terms of transnational education mode,

it is neither a franchisee arrangement, nor a branch campus of an existing institution in another geography. Despite that, it faces most of the challenges typical of transnational institutions discussed earlier.

Regulation poses a challenge for GlobalNxt University, as MaGE had already started a brick-n-mortar university (Manipal International University—MIU) in Malaysia in 2010. In addition, the other online institutions in Malaysia were not doing very well. Even with an invitation from the Malaysian government to establish an online university, it took about 2 years for GlobalNxt University to receive its final approval. In regulating the university, MOHE has to comprehend the unique transnational model involving students as well as faculty based out of different countries. Fortunately, GlobalNxt was able to benefit from the experience of MaGE in its establishment of a Medical College in Malaysia a few decades back, which resulted in its strong standing with the Malaysian government due to its contributions in the field of medical education.

In terms of quality assurance, U21Global helped GlobalNxt University showcase established systems of quality assurance such as EFMD CEL accreditation and AACSB membership. Nevertheless, GlobalNxt University has to align these systems to the requirements of MOHE, which was a time consuming but beneficial experience. Recognition, which relates to the issue of accreditation, is another challenge for GlobalNxt University. The university prides itself in its leading-edge online pedagogy and highly experienced faculty. In order to gain further recognition, GlobalNxt University is establishing itself as a research-led institution and collaborating with premier institutions throughout the world. It has set up an International Advisory Council (IAC) for advising the university on a range of issues such as educational trends, industry needs, research focus, international partnerships and learning innovation. Members of the IAC are respected leaders and authorities drawn from business, academia and government. The IAC is international in its composition reflecting the university's desire to maintain globally diverse perspectives.

In terms of student outreach and awareness, GlobalNxt University has to allocate its marketing budgets judiciously in order to reach out to its potential students worldwide. The presence of MaGe recruitment network/offices, particularly in South Asia, the Middle East and North America helped support such activities. Another challenge faced is the lack of awareness about the effectiveness of online learning in most parts of the world except North America. GlobalNxt University tackled this issue by targeting various corporations for training their executives in online/blended pedagogy so that these potential employers would spread positive feedback about online learning.

6.4 Conclusion

GlobalNxt University has been fortunate to enjoy the rich heritage of quality education from U21Global and the vast resources of MaGe, which jointly provide it the necessary support to manage most of the challenges. Moving forward, GlobalNxt University aims to enter new domains such as education, media and health sciences,

while creating undergraduate, graduate research and doctoral programmes. Its strong linkage with the industry helps it overcome barriers that are new to online and blended formats of education.

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Chapter 7
Small Steps Towards Student-Centred Learning

George M Jacobs and Hwee Leng Toh-Heng

Abstract Student-centred learning classroom practices are contrasted with those in teacher-centred learning classrooms. The discussion focuses on the theoretical underpinnings of the former, and provides nine steps and tips on how to implement student-centred learning strategies, with the aim of developing the 21st century skills of self- directed and lifelong learning in students.

7.1 Introduction

Over the past 200 years, the world, including Asia, has witnessed a global paradigm shift, which has impacted many aspects of society. This paradigm shift remains ongoing, and its impact has varied in different parts of the world. In general, we can see this shift as a move to distribute power in its various forms more evenly. For instance, 200 years ago, slavery was legal in many countries, few people could vote and socio- economic mobility was highly restricted. In great contrast, today, slavery is largely illegal, universal suffrage is practised in the majority of the world's countries and many people climb the socio-economic ladder. In Asia, we have seen many of these changes; yet, as in other continents, more remains to be done.

This equalising paradigm shift has impacted education in at least two profound ways. First, 200 years ago, most children lacked the opportunity to go to school, even primary school, whereas now, we see increasing opportunities provided for young people and even older people, not just to attend primary school but even to attend tertiary education. Asia has an outstanding record of improvement in this area. Second, formerly education was a very top-down process, with classrooms dominated by teacher talk and rote learning. The constellation of educational practices associated with this top-down approach to education has been characterized as teacher-centred learning. Such instruction has long reigned in Asian education. The focus of the current paper involves the shift to what is known as student-centred learning. More specifically, the paper focuses on an offshore campus of an Australian university.

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The current paper begins by explaining student-centred learning and contrasting it with teacher-centred learning, and then discusses why student-centred learning should become more prominent in education. The main part of the paper outlines and gives examples of some small steps that educators at preschool, primary, secondary, tertiary and adult education can take to lay a foundation for shifting toward student-centred learning. Examples of these steps will be provided from study skills workshops done at the Australian university.

7.2 Student-Centred Learning

One means of understanding student-centred learning is to contrast it with the previously dominant paradigm in education, teacher-centred learning. In a teacher-centred learning class, typically, the teacher stands in the front of the classroom lecturing and leading. Students speak only when called on by the teacher. Interaction between peers during a lesson is not encouraged, as their attention should be focused on the teacher or engaged by the textbooks and written work on their individual desks. The teachers and other education professionals, the experts in knowledge and skills, decide on the curriculum content and dispense it accordingly in classroom lessons [30].

Assessment is another area where teacher-centred learning and student-centred learning differ. In teacher- centred learning classrooms, the teachers conduct assessment of student achievement to ascertain deficiencies in student learning and to determine a grade for each student [28]. In student-centred learning classrooms, students actively participate in the peer and self-assessment process, in conjunction with teacher assessment, for formative assessment [16]. In other words, the students learn to analyse and evaluate their own learning process with the support of teachers, rather than wait for teachers to tell them where their learning is deficient.

Motivation for learning also differs in the teacher-centred learning and student-centred learning classrooms. In the teacher-centred learning classroom, motivation is largely extrinsic, with teachers using both reinforcements and punishments to encourage student learning [7]. In contrast, teachers in student- centred classrooms focus on enabling student autonomy in learning, working on the students' intrinsic motivation for learning new ideas, skills and knowledge [14, 25]. Teachers' perception of their role in student learning also differs in the teacher-centred and student-centred classrooms. In the teacher-centred classroom, teachers perceive themselves as transmitters of existing knowledge, whereas in the student-centred learning classroom, teachers see themselves as facilitators of active student learning of new and changeable knowledge [12]. Similarly, the teacher-centred learning and student-centred learning classrooms have differing views regarding outcomes in student learning. The teacher-centred classroom is designed with a focus on cognitive achievement, while the student-centred learning classroom incorporates the affective awareness (e.g. intrinsic learning motivation arising from a stronger sense of wellbeing during the learning activities) as one of the lesson objectives [27].

Table 7.1 Selected continua where teacher-centred learning and student-centred learning differ

	Teacher-centred learning	Student-centred learning
1.	Teachers and course materials are seen as all knowing; knowledge is seen as fixed	Teachers and course materials can be wrong; teachers are co-learners along with students; knowledge is changeable and subject to debate
2.	Student talk is mostly directed at teachers, i.e., teacher-student interaction	Students also talk to peers, i.e., peer interaction
3.	Teachers and administrators are the only ones who decide what will be studied and how it will be studied	Students also have a voice in what they will study and how they will study it
4.	Assessment is done only by teachers	Students also do peer and self assessment
5.	Learning tasks are seen as preparation for what students will do after their education	Learning tasks can also connect to students' lives in the present
6.	Extrinsic motivation is the dominant form of motivation	Teachers attempt to build students' intrinsic motivation
7.	Most questions/tasks have only one correct answer; students are to repeat what they have been taught	Many questions/tasks have multiple correct answers; students are to go beyond what they have been taught and to thereby develop thinking skills
8.	One way of teaching predominates	Multiple way of teaching are used
9.	The focus is almost exclusively on cognitive outcomes, such as test scores	Affective outcomes, such as enthusiasm for learning and empathy, are also important

The teacher-centred classroom places power firmly in the hands of the teachers [30], while the student-centred classroom transfers some of the power over learning from expert teachers to student learners [20]. The differences explained above, however, do not represent two polar ends of a continuum. Rather, the focus of learning in these two types of classrooms can move to and fro within different lessons, enabling teachers and students to draw the best outcomes from their strengths. Indeed, teacher-centred learning and student-centred learning are best understood as a single continuum. Table 7.1 provides a comparison of the two types of classrooms.

7.3 Reasons for Student-Centred Learning

Two reasons provide the greatest incentive for implementing student-centred learning in classrooms. First, student-centred learning reflects the reality of how students learn regardless of how we teach. Cognitive and Socio-Constructivist Psychology and related theories now predominate in Educational Psychology, whereas when teacher-centred learning dominated, Behaviourist Psychology was the main paradigm [4]. Cognitive and Socio-Constructivist studies of how learning takes place tell us that we cannot pour knowledge into students' heads; they must actively construct knowledge for themselves. Furthermore, emotions, not just information, matter to students. Similarly, we cannot motivate students to be lifelong learners; they must find the motivation within themselves [11]. Thus, by aligning our instruction with the elements

of student-centred learning, we align our instruction with the practical realities of how our students actually learn.

The second reason for using student-centred learning is the type of learning that students need to prepare themselves and society for a better future, the learning of the 21st Century skills [24, 31]. The past 200 years have seen huge and parallel expansions in democracy and access to information. These trends look set to continue, and education is necessary for this development to be beneficial to both the individual and society. The focus of student-centred learning on lifelong learning, thinking skills, managing diversity in the environment and the social nature of learning, potentially empower students to shape the future in ways in which the planet and its inhabitants can co-exist and thrive.

7.4   Moving Toward Student-Centred Learning

Scholars of organisational change [23] and change in education [9] talk about the need for systemic, organization wide change. There is wisdom in their view that one teacher cannot do much to effect change. However, waiting for system-wide change can often be a painfully long and frustrating process. Thus, educators who wish to see their institution or at least their own classrooms move towards student-centred learning may want to set off on the journey on their own, perhaps enlisting their students and one or two colleagues [29]. As Bovey and Hede [2] indicate in their study of individuals and their resistance to organisational change, when change is perceived as part of one's personal growth and development, resistance to change can be reduced thus enabling system-wide organisational change to take place more smoothly and effectively.

The rest of this paper provides some ideas for small steps that educators might wish to take to more closely align their classrooms with student-centred learning. The authors serve as learning advisors at James Cook University's Singapore campus. They have used all these steps themselves and have had some success with them. The steps are based on the nine continua enumerated in Table 7.1 along which teacher-centred learning and student-centred learning differ. Please note that the presentation of the steps do not imply any order in which the steps must be done. Teachers are advised to use these as guides for how they can implement student-centred learning strategies in their own classrooms, as these steps are merely examples of how to more closely align education with student-centred learning.

Step 1 Educators Are Learners, Too! The teacher-centred learning paradigm sees educators and educational materials as the experts and repositories of knowledge. However, in today's knowledge-based economy and world, so much lies beyond the grasp of even the world's top experts. For instance, what is thought to be known may tomorrow be shown to be wrong [3, 18]. Students need to understand this reality. Teachers can aid this understanding by challenging students to individually and collaboratively search for more information to build knowledge [8, 22, 26], to create new knowledge [15, 19] and to teach it to their teachers and classmates. One

of the benefits of teachers admitting a lack of knowledge is that this admission makes education more exciting, because students are no longer confined to learning what is already known. Now, students are invited to join with teachers and others in a grand quest for greater understanding of our wonderfully complex world.

A small step: Find a time to admit that you (and probably all the experts on the topic the class is studying) do not know important information related to what the class is studying. It should not be long before an opportunity for such an admission arises. For example, in our study skills workshops on writing, we talk about the fact that we are writers too, and we admit that we are still struggling to improve our writing skill, so as to communicate more effectively with our audiences.

Step 2 Students Talk Much More Active learning is sometimes used as a synonym for student-centred learning. Active learning fits the cognitivists' and socio-constructivists' view that students construct their own learning [5]. Language plays a crucial role in knowledge construction. That is why small group activities (with two to four students) feature prominently in much of student-centred learning, because groups allow for much more student talk [32]. Compare the quantity of student talk in a teacher fronted classroom with that which occurs during group activities. With a teacher dominated interaction pattern, only one person speaks at a time, and that person is usually the teacher. Even when the teacher is not speaking, there is still only one person, the student called on by the teacher, who speaks. In such a situation with a class of 50 students, only one student speaks at a time, i.e., 2 % of the class. Contrast this with the same class of 50 but this time, students are talking in pairs. Now, 50 % of the class are speaking.

A small step: After speaking for a while, the teacher stops talking and gives students a short, doable question or task to do in pairs. This will help them process the content that was just delivered. As students interact, the teacher walks around and monitors what students have constructed in their minds. Our study skills workshop often features many activities that students do in groups of two. For instance, in a workshop on "How To Be a Good Groupmate", students tell their partners about a successful group experience and analyse what made the group experience successful.

Step 3 Students have a voice in what and how they study Cognitive psychologists suggest that instruction works best when it connects to students' current knowledge and interests. In other words, new learning needs to connect to students' schema, i.e., their background knowledge [4]. Furthermore, student engagement and ownership may increase when they are involved in deciding what and how they study [27].

A small step: The teacher asks students to contribute examples on the topic that the class is studying. For instance, if the class is studying employee benefit packages, students can give examples from their work experience or from people in their social network, or on the Internet. An example from our study skills workshops would be that when students do writing activities in the workshops, they choose their own topics.

Step 4 Students have a role in assessment In the teacher-centred learning paradigm, teachers conduct all assessment as students are not deemed sufficiently competent

to evaluate their own or their peers' work [28]. However, involving students in assessment familiarises them with and helps them internalise assessment criteria. Another advantage of students participating in assessment is that now many people can offer feedback. As a result, students receive more immediate feedback, and this facilitates more task improvement [1]. Nonetheless, students cannot be expected to provide assessment of the same depth and breadth that teachers provide. Thus, rubrics assessment is recommended for peer and self-assessment by students, with prior discussion and practice in using the rubrics assessment tool to enhance student feedback for task improvement [21].

A small step: For an assignment, students are given a rubric or checklist, which is discussed in class. Before the assignment is handed in, students exchange their assignments with a peer who looks through their partner's work and highlights at least three points in the rubric/checklist that the partner has done well. The checker's name appears on the students' work. In one activity during the James Cook University (Singapore) study skills workshop of citations and references, students practice writing references. These references are checked by their partners who refer to the examples of the various types of references.

Step 5 Learning connects to students' lives beyond school In the teacher-centred learning classroom, students learn in order to cover the syllabus and prepare for summative assessments [28]. In contrast, the student-centred learning paradigm seeks to closely connect learning to the outside world, as is expressed in this quote from Dewey, who pioneered many of the concepts embraced by student-centred learning, "The acquisition of skills is not an end in itself. They are things to be put to use, and that use is their contribution to a common and shared life" [6, p. 11].

A small step: Teachers learn about students' lives and interests. They look for examples that fit students' lives. For instance, if students hope to find jobs in a particular industry after graduation, teachers use examples from that industry or ask students for such examples. The initial study skills workshop at James Cook University (Singapore) features a component on happiness, including a video that talks about the advantages of happiness in the workplace.

Step 6 Intrinsic motivation is the ideal In the teacher-centred classroom, teachers act as the main motivators of students, giving praise and using grades to encourage students to study hard [7]. In other words, motivation is external, i.e. extrinsic. While extrinsic motivation may seem necessary in order to encourage students to prepare for and attend class, complete assignments, and perform in summative assessments, it does not grow students' interest in what they are studying; indeed, studying just to gain rewards may dampen any interest that students might originally have. The student-centred classroom, on the other hand, seeks to develop intrinsic motivation. Such motivation, coming from within, is more likely to be sustainable. Many of the previous steps work towards the development of intrinsic motivation. For instance, Step 1 invites students to join the community of scholars who are searching for understanding and applications. Steps 2 and 3 encourage students to be more active and to play a greater role in shaping their learning. Step 5 helps students discover the importance for themselves and others of what they are studying.

A small step: Teachers stop class 5 min before it is scheduled to end and ask students to write briefly on (a) what was the most interesting idea in today's class, (b) how that idea could be useful for them and others, and (c) how they could find out more about that idea. This helps to encourage metacognitive reflection, a quality exhibited by highly motivated students [17]. The theme of one of the James Cook University (Singapore) study skills workshops is 'Study Smarter, Not Harder', including the topic of scheduling. In that workshop, students create their own schedules, including time for pursuing their interests, academic and otherwise.

Step 7 Learning tasks encourage thinking In teacher-centred classrooms, students focus on absorbing the information dispensed to them by teachers and lesson materials, and being able to reproduce that information in assignments and exams [12]. The student-centred learning paradigm takes that a step further by asking students to elaborate and build on the information given. The teacher-centred learning model is built on the premise of the past, where information was limited and difficult to find. However, in today's knowledge-based world, information is plentiful and easily accessible. What matters now and in the future is the ability to elaborate on that information, to understand, teach, apply, analyse, evaluate and synthesise that information by creating and building new information [22].

A small step: Ask students to take what the class is studying and imagine teaching that information or concept to the person sitting next to them on a bus or a younger family member or one of their grandparents. In other words, students need to explain what they have learned to someone with little or no background on the topic. It might seem that it is easier to explain something to someone without much prior knowledge, but in reality, such explanations require a deep understanding. An example of how thinking is encouraged during the James Cook University (Singapore) study skills workshops would be when students practice summarising, which involves identifying and paraphrasing the main ideas.

Step 8 Teaching takes place in multiple ways Teacher-centred learning focuses on didactic teaching, where the teacher/lecturer stands in front of the class and lectures on the key concepts and knowledge, perhaps with the help of pictures, PowerPoint presentations or videos [12]. This single direction flow of information conflicts with another lesson from Cognitivism and Socio-Constructivism, i.e., that different people learn in different ways [10]. In other words, to help students learn, a variety of teaching strategies should be employed.

A small step: Ask students to create visuals to illustrate key concepts. Visuals include graphic organisers, such as mind maps, flowcharts, Venn diagrams and graphs, as well as drawings, photographs and videos. These visuals should be integrated with words, either spoken or written. Role plays offer another means of teaching via multiple modes. For instance, during the James Cook University (Singapore) study skills workshop on working in groups, students create role plays to demonstrate positive and negative ways to interact with group mates.

Step 9 Affect receives attention In the teacher-centred learning paradigm, short range results, e.g., test scores, dominate. Affective issues, such as classroom climate and students' emotions, receive little attention. While results certainly do matter

Table 7.2 Summary of student-centred learning and classroom tips

	Student-centred learning steps	Classroom tips
1.	Educators are learners, too	Invite students to search for and add new information
2.	Students talk much more	Give doable tasks to students to work on in groups of two to four
3.	Students have a voice in what and how they study	Invite students to contribute examples for discussion during the lesson
4.	Students have a role in assessment	Provide peer and self assessment using rubrics
5.	Learning connects to students' lives beyond school	Use examples from students' environment and interests
6.	Intrinsic motivation is the ideal	Prove opportunities for individual reflection at the end of a lesson to help students link the lesson to what matters to them
7.	Learning tasks encourage thinking.	Invite students to explain knowledge learnt to others
8.	Teaching takes place in multiple ways	Invite students to create visuals based on key ideas
9.	Affect receives attention	Promote mutual respect between teachers and students and among students

in student-centred learning, affect also receives major attention. This fits with Step 6 about intrinsic motivation. If students are to become lifelong learners, they need to find learning an engaging process [31]. For instance, what is the value of knowing how to read if students dislike reading? In keeping with Maslow's [13] hierarchy of needs, educators should also look to making the classroom a place that provides for students' needs for emotional security, connections with others, self-esteem and opportunities to develop their potential [27].

A small step: Incivility on the part of both students and teachers can hinder the building of learning climates that match Maslow's vision. Educators can set an example of civility by, for instance, avoiding sarcasm and being respectful when dealing with all students, even the weakest ones, even the ones who show little civility towards teachers and peers. Another idea for taking into account the impact of affect on learning would be the use of doable tasks in the study skills workshops done by the learning support advisors at James Cook University (Singapore). By designing tasks in which our experience suggests students can succeed, we strive to boost students' self confidence and to help them believe that we can offer them useful guidance. Another way that we help students succeed is by asking them to work in groups of two with someone from a different country.

Table 7.2 summarises the nine steps and the classroom tips put forward for educators to embark on the student-centred learning journey in their own classrooms.

7.5 Conclusion

This paper began by explaining student-centred learning and how it contrasts with teacher-centred learning. The largest section of the paper provided further explanation of nine sample elements of student-centred learning and suggested small steps

that educators might take, given the constraints of their own context, to implement each of those elements of student-centred learning. Examples were given from the work of learning advisors at James Cook University's Singapore campus.

With the many changes the world, including Asia, is undergoing, with the many challenges Asia faces, student-centred learning seems more important than ever. Thus, to fulfil the potential of the ongoing equalising paradigm shift towards a better world for all, educators should not wait for top down change but, in the spirit of the paradigm shift itself, educators should team with colleagues and students today to do what they can to bring to life the student-centred learning vision. The small steps suggested in this paper may be of use along that path towards student-centred learning.

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Chapter 8
The Competitive Advantage of Singapore Tertiary Education

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Abstract According to UNESCO's final figures for 2009, since 2000 the number of international students has increased by 75 %, about 8 % annual growth rate. The number of international students in Singapore is also expected to grow at 10 % annual rate reaching 150,000 in 2015. Singapore has become one of most favorite destinations for international students for higher education, its growth rate surpassing traditionally favored Western countries, such as US. International students have also become an important economic factor. The total economic contribution from international students studying in Singapore is about 2 % of Singapore GDP. We have surveyed 234 students who are currently studying in Singapore to find out the competitive advantage of Singapore Tertiary Education. The results show that recommendations from friends and teachers have major influences on students' decision in choosing schools and countries, followed by country factors, such as personal security. Surprisingly, schools' promotional activities and agents have limited influence on students' decision making.

8.1 Introduction

In recent years, the number of international students around the world has increased dramatically in spite of global economic downturn. According to UNESCO's final figures for 2009, the number of international students rose by 75 % between 2000 and

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2009. This figure reached 3.43 million in 2009, and is expected to increase annually by 12 % [1]. According to the UK Vision 2020 report, Asia is set to account for 70 % of the global demand for international higher education by 2025.

While Western countries, such as USA, UK, Australia, still remains as the favorite destinations, with great demand and development of several Asian countries in education, a new trend is starting to emerge. Base on the Times Higher Education World Reputation Rankings [2], many of Asia's institutions have become mainstream top universities in the world, making Singapore, Japan, Korea, or even China as potential destinations for study abroad. In particular, Singapore places strategic intent to increase international students, such as the 'Global School house' blueprint [3]. Singapore is now expecting to host 150,000 foreign students by 2015, creating 22,000 jobs and contributing approximately US$ 5 billion to the economy, about 2–5 % of Singapore GDP [4]. Therefore, there are great opportunities to invest in education industry. In a business context, understanding customer behavior is very important for firms to design their own business strategies. According to Phillip Kotler [5], in order to create value for customers and build meaningful relationship with customers, marketers must first gain fresh and deep insight into what customers need and want, and this is also critical in developing competitive advantages of the firm.

The main objective of this case study is to discover the factors that influence international students in choosing their schools. Unlike previous studies, data are collected from students who are currently studying in many different public and private universities in Singapore. In particular, the case study focuses on proving the following two key hypotheses that are important for the market research of educational sectors:

- Hypothesis 1: Surrounding relationships affect more on students than students' personal experiences when students consider their study abroad.
- Hypothesis 2: Institutional factors are more important reasons for students than country factors when deciding to study in Singapore.

The paper is organized as follows. In the next section, we review previous stud- ies in educational service markets. In Sect. 3, the research methodology is described. In Section 4, we summarize the survey data collected for the study. In Sect. 5, we show the results of the analysis. Finally in Sect. 6, we discuss the results and conclude the paper.

8.2   Background

8.2.1   Types of Information Sources Affecting International Students

According to Phillip Kotler [5], international students rely on the following types of information sources in choosing educational institutes: personal sources (family, friends, acquaintances, etc.), commercial sources (advertising, sales people, etc.), public sources (Internet search, firm ranking, etc.) and experiential sources. An

early study done by Steadman and Dagwell [6] shows that the opinions of family and friends have major influence on students' choice of colleges. Donnellan [7], in a paper exploring the impact of marketer controlled factors on college choice decisions by students at a public research university, concludes that beyond the influence of parents, the others factors such as personal contacts and social life also have great impact on students' decisions. Similarly, Mário Raposo and Helena Alves [8] concludes that personal perception including background, financial ability and culture have the greatest positive impact, while the influence of external factors, such as advertisements, has negative impact on the decision-making. However, students now depended on more variety of information sources, in particular information available on the internet, for their decision-making [9].

8.2.2 Institutional Factors in Choosing Universities

Chapman [10] proposes a model of students' decision making process in selecting colleges. The model emphasizes three main factors: (1) quality of faculty; (2) quality of degrees; and (3) overalls academic reputation. These factors are mainly based on educational quality of institutes. Coccari and Javalgi [11] point out that, in addition to the educational quality factors, cost and variety of courses offering also have impacts on students choosing colleges. Furthermore, Kallio [12], in a re- search of the college choice decisions of graduate students, highlights factors of institutional quality, reputation and course diversity. Another research of students' preferences for university conducted by Soutar and Turner [13] reports that stu- dents are now more concerned about the bottom line outcome after they completed their degrees.

8.2.3 Country Factors in Choosing Study Abroad Destinations

Shanka et al. (Tekle Shanka 2005) examine the major reasons why students chose Australia. They report that the distance of the school to a student's home country is a vital factor that influenced international students' choice followed by safety, educational quality, cost of living, and tuition fee. Similarly, Rajdeep Singh [14], the executive director of Angad Info—Overseas Communication Consultancy, states that safety and cultural similarities are Singapore's advantages that ensures in bringing international students, especially from India and regional areas. Yilin et al. [15] in a study on Chinese students' decision making of oversea studies claim that those who are willing to study abroad have strong motivation to live and work overseas after graduating, indicating that students are more independent in choosing study aboard destinations.

Table 8.1 Demographics of respondents

	India	China	SE Asia	Other	Sum	Percentage
NUS	7	31	4	2	44	19
NTU	3	2	3	0	8	3
JCU	22	21	39	26	108	46
SIM	0	5	6	4	15	6
MDIS	0	0	2	3	5	2
PSB	4	7	4	7	22	9
NYP	0	3	5	0	8	3
Other	3	4	11	6	24	10
Sum	39	73	74	48	234	100
Percentage	17	31	32	20	100	

8.3 Methodology

We have surveyed international students who are currently studying in Singapore. A questionnaire is designed to gather the following types of information from the international students using a five-point Likert scale:

1. Information sources that affected students in choosing studying abroad destinations, such as agent and the internet.
2. Country factors, such as living condition and safety.
3. Institutional factors, such as campus facilities, institute reputation, and student service.

Respondents are also asked to rank top 10 countries which they had considered before coming to Singapore. The collected data are than analyzed using SPSS for demographic analysis, descriptive statistics to remove outliers and noise, and select appropriate analysis methods. One-sample t-test and paired-sample t-test are then selected to prove the two hypothesis stated in Sec. 1.

8.4 Survey Data

Data collection is conducted from the 8th of August to 17th of August in 2012. The respondents are diploma, foundation, bachelor, master and PhD students and they are randomly picked from various different public and private universities across Singapore including SIM, JCU, NUS, NTU and other private educational institutes. Questionnaires are completed in two ways: online and delivery collection. For online survey, the questionnaire are posted in Survey-Monkey, and the link of the questionnaire is sent to the international students in Singapore.

Table 8.1 shows the demographics of the respondents. A total of 234 survey responses are collected. About 24 % of respondents are from public universities and the majority of the rest are from other well-known private higher learning institutes.

Fig. 8.1 Course demographics of respondents
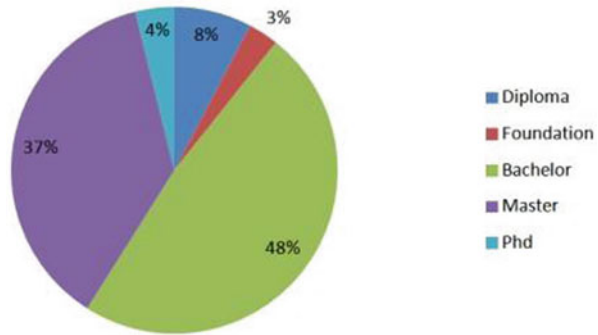
The majority of them are from South East Asia and China which account for over 60 in total numbers of respondents. Few respondents are from Europe, USA, Australia, Japan, and South Korea.

Figure 8.1 Shows the distribution of types of degree the respondents are currently undertaking.

8.5 Analysis Result

Table 8.2 summaries the ranks of countries that the respondents selected as their preferred destination before coming to Singapore for their studies. Despite that the students are currently studying in Singapore, the students considered other western countries as their favorite destinations.

One-same t-tests are performed on the average scores of survey responses with $p = 0.05$ to test Ho: information type X is used in decision making. According to the testing result, students use the following information sources to make their decisions: (1) information from the internet; (2) suggestions from their familiars including their parents, teachers and friends; (3) promotional activities of schools, such as advertisement and events. Surprisingly, agents' opinions are not used in decision making. It also shows that the following country factors also play an important role in their decision making in the following order: Safety, Living condition, Education quality

Table 8.2 Rank of countries for overseas education

Priority of choices						
	1st	2nd	3rd	4th	5th	Total choices
	(1)	(2)	(3)	(4)	(5)	(6) = (1) + (2) + (3) + (4) + (5)
USA	75	53	29	12	2	171
UK	51	53	39	14	5	162
Australia	47	41	42	13	3	146
Canada	14	11	13	15	7	60
Singapore	11	12	12	12	11	58

guarantee, Job & Settlement, International experience, Location, Cultural similarity, Living cost. It also shows that the following institutional factors are important in the following order: Program, Reputation, Facilities, Academic activities, Admission condition, Tuition fee, Student services, and Campus activities.

Paired-sample t-tests are performed to test the two hypotheses defined in Section 1 with $p = 0.05$ (two-tailed). The tests shows that the average scores surrounding relationships are significantly higher than personal experiences. It also shows that the average scores of institutional factors are significantly higher than country factors.

8.6   Discussion and Conclusion

Based on what are found out in the case study, higher learning institutes and the government of Singapore should be concentrated on using Internet and alumni community for their communication activities, and country's specific feature as well as education quality and institutes' reputation should be highlighted. Furthermore, higher learning institute in Singapore should provide a multi-national environment, and design their academic and campus activities aligning on Singapore's experience. For further research, studies will need to concentrate on com- paring competitive advantages of Singapore higher learning institutes to competitors in Northern America, Europe and Australia. These developments could help Singapore players to determine relevant competitive strategies.

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Chapter 9
Transnational Psychology: A Case Study of South East Asia

Lennie Geerlings, Anita Lundberg and Claire Thompson

Abstract In the last two decades transnational education has intensified. This paper provides a case study of transnational education in South East Asia by mapping historical and current transnational psychology education in Australia, Singapore and Malaysia. Given psychology's roots in Europe and the United States of America, and its close interrelation with norms of 'western' societies, the data accrued from research for this paper raises important questions regarding how South East Asian countries are dealing with foreign influence through education.

9.1 Introduction: Changing Education

In recent decades, education has become increasingly transnational [1–7]. In Asia, several countries are in a race to be named an 'education hub'. In other words, through education these countries aim to develop a strategic pool of local and international actors who engage in knowledge production and innovation initiatives [3]. The rationale is that education can contribute to the economic growth, human capital development, and talent attraction, required for progress of the 'knowledge economy' as a new stage of post-industrial development [8]. Strategies include privatization of education and massive cross-border expansion [5, 7, 9–12]. Prestigious foreign institutes are invited to collaborate with local institutes and countries open their borders for the development of international campuses.

Transnational education is frequently studied in terms of governance [6, 7, 10, 12]. However, as the education hub quest matures [13], government strategies to set up

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transnational education are near complete. Therefore, this paper proposes a different vantage point for transnational education: studying the actual university programs. This has two benefits. Firstly, university programs provide a source of content that allow us to look beyond the organizational, political, and economic benefits of internationalization of education. In other words, investigating curricula returns our attention to the actual educational activities [14]. Second, university curricula are a temporary consensus of competing interests in shaping future citizens [15, 16]. They can be regarded as a source of discursive power. Curricula may therefore provide insights in how 'education hub' countries are dealing with competing social, cultural, material and geopolitical interests [17].

This paper outlines an interdisciplinary case study of transnational exchanges in psychology education. It focuses on Australia, Singapore and Malaysia as these countries experience massive transnational expansion of education. Psychology is of specific interest as it can be viewed as a 'western' science and discipline. It developed in Europe and the United States of America and is based on western values, such as individuality [18–21]. This study places a special emphasis on clinical psychology, which is the examination, treatment and prevention of psychological 'maladjustment, disability and discomfort' [22]. It is intertwined with norms for behaviour in society. Therefore, to trace exchanges of psychology in South East Asia means tracing how the region deals with foreign influence through education.

9.2 Historical Transnational Psychology

This section briefly outlines the history of transnational psychology. A fuller exposition can be found in Geerlings, Thompson and Lundberg [23].

Psychology education developed from the second half of the nineteenth century onwards in Europe and the United States. Since the opening of the first psychological laboratory by Wilhelm Wundt at the University of Leipzig, Germany, in 1879, the PhD (Doctor of Philosophy) in psychology was introduced in European universities [20, 21]. Psychological knowledge was taken up and further developed in the United States. When Lightner Witmer opened a university clinic at the University of Pennsylvania, USA, in 1896, clinical training was added to the PhD [24]. This can be regarded as the start of clinical psychology education.

Psychology was adopted in Australia in 1913, when the first psychology lecturer was appointed at the University of Western Australia [25, 26]. The early Australian programs depended heavily on foreign psychology developments, and most lecturers were trained in the 'west'. [25, 26]. The Second World War accelerated the development of clinical psychology [25–27]. Clinical psychology education was taken up by the majority of universities in Europe, the USA and Australia. In the USA, clinical psychology education was standardized. In 1949 the combination of academic research and practical training was set as the standard model for clinical psychology education during the Boulder Conference [24, 27]. An alternative, more practice-based model was developed in 1973 in Vail, USA.

The Australian Colombo Plan visiting lecturer Beryl Wright brought psychology education to Singapore in 1952 [28]. The Colombo Plan was a developmental aid scheme for Asia and the Pacific, originally signed in Colombo by Australia, Canada, India, New Zealand, Pakistan, Sri Lanka, and the United Kingdom [29]. The aid program incorporated education involving both experts travelling to Asia and the sponsorship of students from developing countries in Asia to study at western universities of the signatory countries, including Australian universities. The first psychology program started at National University of Singapore (NUS) in 1987; a master of clinical psychology in 1998, patterned after programs in British universities [30, 31].

In Malaysia, the first department of psychology was opened at the *Universiti Kebangsaan Malaysia* (UKM; National University of Malaysia) in 1979, although psychology subjects had been taught previously to serve other disciplines [31, 32]. Psychology was introduced by the first two Malaysian psychologists. It was further adopted by other universities. Similar to Australia and Singapore, the majority of these early programs in Malaysia depended heavily upon imported models although there is some evidence of contextualisation in Malaysia [28], notably by the International Islamic University of Malaysia which integrated psychology with an Islamic outlook [33].

9.3 Transnational Psychology Today

Since its introduction into Australia, Singapore and Malaysia, psychology education has followed the same curriculum—however, there are differences in the landscapes of psychology education in each of these countries. This section emphasises clinical psychology (both Boulder and Vail models: Master of Clinical Psychology and Doctor of Clinical Psychology).

9.3.1 Australia

In Australia clinical psychology is the most popular postgraduate program, offered in 32 out of 40 Australian universities. Clinical programs are highly standardized, they usually take 2 or 3 years to complete and contain a coursework, research and professional experience element. Coursework is mainly focused on psychopathology, diagnosis, and intervention of psychological disorders listed in the standard diagnostic manual, DSM. The majority of the universities report a competitive selection process; only a few students are admitted to these programs each year.

The Australian clinical psychology programs are quality checked by the Australian Psychological Accreditation Council (APAC). Quality is defined by duration, course structure, course content, assessment methods, staffing, resources, and the quality of the practical components [34]. APAC accreditation enables unconstrained exchange of psychology students across Australian universities. However, for students with a foreign degree, admittance to psychology programs is difficult as it requires APAC accreditation of previous degrees.

Australia is one of the main exporters of psychology education to Asia [35, 36]. Eleven out of thirteen Australian universities have international offshore campuses based in Asia, two of which offer psychology education in joint degrees with Singaporean and Malaysian institutions (Central Queensland University; University of Wollongong; University of Melbourne), and two offer independent programs (James Cook University (JCU) and Monash University). One university offers clinical psychology (JCU Singapore campus). In sum, five Australian universities are involved in psychology education in Singapore and Malaysia [37]. In contrast, in Australia, there are no foreign institutions involved in psychology education.

9.3.2 Singapore

In the last two decades, university education in Singapore has changed dramatically, driven by the Global Schoolhouse initiative [10]. Through the Global Schoolhouse program Singapore aims to become a main exporter of education in the region by attracting large numbers of international students [7, 12]. Strategies include collaboration with foreign universities and institutes and the development of international campuses in the city-state. In 2011, Singapore hosted 16 foreign tertiary institutions [42]. These foreign universities and institutes can collaborate with local education providers in various ways [38]. This study is confined to international campuses offering on-site degree education and joint degrees.

Clinical psychology is available in Singapore in one national university program (National University of Singapore); in a program from a foreign university (JCU Singapore) and in a joint degree of a local and foreign university (NUS—University of Melbourne). The latter two programs are APAC accredited. The Singapore Psychological Society does not yet accredit psychology programs. However, the APAC and local clinical psychology programs in Singapore are similar to each other and to their Australian counterparts in their duration, method, curricula and selectivity of candidates.

9.3.3 Malaysia

Malaysia aims to develop two regions into centres of education excellence: Educity in Iskandar and Kuala Lumpur Education City (KLEC) in the Klang Valley [5, 7]. From 1996, international campuses were allowed to establish themselves in Malaysia [39]. To date, this has resulted in five established international campuses throughout the country, of which two offer psychology education (the Malaysian campuses of University of Nottingham and Monash University) [40]. In total 16 Malaysian universities offer psychology, of which seven are public universities. Geographically, the majority of these universities are located in KLEC. Exceptions are located in the North (Universiti Utara Malaysia), in Sabah (Universiti Malaysia Sabah), in Kuantan (University College Shah Putra), in Selangor (Universiti Selangor) and one university in the Iskandar hub (University Tun Hussein Onn Malaysia).

The specialised area of Clinical Psychology is offered in two Malaysian universities (Universiti Kebangsaan Malaysia and HELP University). These two clinical programs are similar to Australian and Singaporean ones in terms of duration, method, curricula and selectivity. Similar to Singapore, the Malaysian Psychological Association does not yet accredit psychology programs. However, noteworthy in the Malaysian masters' curricula is its attention to sociocultural issues [32, 41]. This cultural contextualisation is unique to the Malaysian programs.

9.4   Critical Questions and Future Directions

The data outlined above illustrates how psychology education and knowledge are historically and currently exported and imported in transnational domains. Psychology originated in Europe and the USA, and the development of psychology as a science and discipline is based upon these western developments (which were based on exchanges of scholars and ideas). However, Psychology has a shorter history in Australia and South East Asia. Its development in the region is built upon prior developments of psychology in the west. In other words: the psychology brought to the South East Asian region is western psychology.

Psychology in Australia and South East Asia has been based upon a one-way 'flow of knowledge' from north to south, from west to east [42]: South East Asian academics who studied abroad brought western psychological knowledge back to their home countries. Today, we are seeing the beginnings of *exchanges* taking place within South East Asian countries—in local-foreign collaborations and in the importation of foreign campuses, including a strong presence of Australian campuses and joint degree programs. This situation opens up the question of whether these transnational *collaborations* in psychology contribute to knowledge sharing, or to the continued imposition of western psychology in South East Asia.

The many APAC accredited programs in Singapore may point out that a bi-directional flow of knowledge has yet to be attained. The strict standardisation of curricula from Australia to Asia also indicates a unidirectional flow of knowledge. The diversity of the education provider landscape created through transnational education has not yet opened up a bi-lateral or multi- lateral flow or exchange of knowledge, however, the very complexity of this landscape suggests the potential for this opening.

The assumption in psychology is that it is a 'global curricula'. This is particularly apparent in clinical psychology, where it is assumed (and taught) that its knowledge and norms for behaviour are applicable in all countries. Given clinical psychology's reliance on the diagnostic manual, DSM—already substantially criticised for being based upon western knowledge and for medicalising behaviour [43]—this opens up critical questioning of the sociocultural consequences of the import-export of transnational psychology education for South East Asian countries. This calls for an urgent need for further study.

Specifically, these conclusions point to the need for a postcolonial perspective on transnational education in which the negotiations of local and foreign geopolitical

and anthropological influences in education in South East Asian countries are illuminated. Such interdisciplinary inquiry may provide insights into how we ensure that psychology programs are contributing to enhancing academic excellence, promoting social justice and creating responsiveness toward societal mental health needs.

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Chapter 10
Challenges in Teaching Tertiary English: Benefits of Action Research, Professional Reflection and Professional Development

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Abstract This study identifies challenges that teachers face in English classrooms at the tertiary educational level. A focus on the complications that commonly arise from curricular, extra-curricular and professional hurdles helps to resolve those problems and provide answers through recommendations for increased collaboration, reflection and action research. The results indicate the benefits to teachers of participating in professional and language development courses, creating a more comprehensive course syllabus/outline, professional reflection and increasing efficiency by using action research.

10.1 Introduction

Teachers at many levels are increasingly more distracted from their immediate classroom responsibilities, while at the same time, their classroom responsibilities are growing more encompassing and rigorous. This is especially true at the tertiary level where the final goal of preparing competent and capable students has real world and immediate implications. Some of the most common struggles facing English teachers include helping students to develop oral, aural, written and verbal communication skills including, pronunciation and grammar. The practical problems teachers face include the classroom related concerns of management and student motivation both of which are a means, directly related to the preparation and implementation of multiple assessments ends. In addition to these challenges, teachers are faced with modern trends of high-stakes-test scores acting in place of school and state policies [1]. The *defacto* policies demand that teachers present demonstrable learning improvements through adequate student test-pass-rates. An example of these tests is the International English Language Test Proficiency or IELTS [2].

Teachers react and cope in various ways. On the positive side there are those who vary their teaching style to foster a non-threatening learning environment or one

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which encourages effective communication [3]. However, some alter their teaching methods away from student-centered and toward, the less preferable, test-centered style [1]. Others reject the demands dictated by their supervisors; yet remain adamant for a less obtrusive change [4]. On top of this, teachers have extracurricular work such as creating and improving curricula of their schools. While professional development is widely regarded as a necessary component for successful institutions, it is not always provided. Teachers, however, do need a professional growth technique or strategy on which they can rely to improve themselves and their work. Thus this study will argue that incorporating the practice of action research can provide a beacon for teachers struggling to cut through the fog, created by their ever-increasing responsibilities, in the interest of efficiency related to all of their work. When action research is incorporated with regular professional reflection, collaboration and professional development, English teachers at the tertiary level will experience increased efficacy in their classrooms and in their work. The following literature review explores the guiding theories, which lead to this assertion.

It is always wise to acquire wisdom from the past to face the challenges of the present. Ryan [5] suggests that knowledge of language theories, the numerous language acquisition and development theories, is necessary for an informed investigation of this topic. Some of the theories include those of Noam Chomsky who developed many theories that acknowledge the presence of innate language skills in children; Lev Vygostky, believed socialization of humans can be seen in *self-talk*, a behavior linked with the practice of thinking in a language and Carl Rogers who believed that given positive regard, a person will naturally realize their self-actualization [3]. Applying these theories in language development suggests the following: Language and grammar skills are innate in people, can be developed through socialization, which is expressed in self-talk and is changeable by experience through adaptation. Thus it can be reasonably assumed that students, with proper guidance, can reach fluency and achieve English proficiency in communication.

Action research is widely regarded as a useful tool for teachers. According to Moll [6]"One type of research that has been carried out by teachers in their classrooms is 'action research', that is teacher-initiated classroom investigation which seeks to increase the teacher's understanding of classroom teaching and learning, and to bring about change in classroom practices. It is precisely this type of research that we believe should also be brought into the university classroom. Action research promotes reflection of one's own practice." The primary focus of this research is defining the roadblocks that teachers face in guiding their students to achieve English proficiency in communication. As action research is useful in identifying questions and determining methods and solutions to problems, it will be the primary tool used within this research.

10.2 Significance of the Study

This study shall identify the challenges that teachers encounter in a tertiary educational institution. After thorough identification of the challenges, suggestions for solutions and recommendations based on current techniques and strategies will be

offered. The results of this study will benefit participating teachers and their students by exhibiting to them the importance of including action research in their work. Through collaborative professional reflection with the teachers, a promotion of professional development and incorporation of action research, an increase in English efficiency and English language abilities is predicted. Additional benefits include developing more comprehensive course syllabuses and outlines along with an expansion of professional and language training for the teachers. The students of teachers who practice action research will likely see the most benefit as their language skills improve due to improved teaching techniques. All of this will help both teachers and students succeed in their chosen fields, especially related to using English for professional purposes as the target language becomes increasingly prevalent on a global scale.

10.3   Reflection in Teaching: Theoretical Background

Reflection in teaching is largely elaborated in Dewey's writings [7]. Reflection appears as the most viable of all theories since reflection "enables us to solve problems while we are engaged in our normal practice. It allows us to confront and overcome anomalies (doubts, uncertainties, surprises, interruptions) in our experience. It can help us look back and understand what has happened" [7]. Dewey defined reflective thinking as "the kind of thinking that consists of turning a subject over in the mind and giving it serious and consecutive consideration" (Dewey, as mentioned in [7]). It is different from daydreaming since reflective thought in Dewey's concept is disciplined, problem centered, purposeful and directed—"intent on understanding and creating meaning from an interaction or realization" [8]. The only similarity between reflective thought and daydreaming is that both are conscious streams of thought and internal processes of the mind.

Heflich and Iran-Nijad [8] describe the five phases in the reflective cycle of thought that Dewey writes about. It is interesting to note how these are very much amenable to the practice of English education: (1) a doubt or uncertainty that arises unconsciously about an activity (a lot of espoused methodologies in English teaching are Western based and may not be much applicable in the local context); (2) the active organization of the uncertainty into a question to be solved (objective measures confirming the presence of the problem is taken into consideration); (3) the problem is thoroughly organized and a tentative solution is formulated (here the outlines of the possible solutions are written based on teacher's knowledge and first-hand experience of the class); (4) a rigorous examination of the idea is made (the tentative solution is consulted with other experts in the field or with literatures); and (5) action and testing of the hypothesis to see if the planned solution to the problem actually does what is expected (the finalized solution is tried and tested, this is the trial and error phase resolving challenges in English teaching—this stage can happen in many cycles until the problem is resolved). Similar to Dutertre's [9] execution of her action research, she went through at least four cycles. As Dewey concept shows reflective thinking

in adjusts the phases to the start, a kind of feedback loop, until the problem at hand is resolved.

Following the ideas of Dewey, Schon introduces the concept of Knowing-In-Action (KIA). KIA happens every time knowledge occurs due to internal or external environmental situations. Heflich and Iran-Nijad [8] explains it this way: when we see a face we recognize who that face is but we can't explain how the process occurs. Schon explained that reflection happens when "there is a surprise, when something interrupts the flow of the KIA that guides our everyday activity." This is similar to Dewey's beginning of reflection triggered by uncertainty and doubt. Schon explained that this interruption in the KIA, or the surprise or doubt, that which can be resolved by reflection in two ways: Reflection-on-action and reflection-in-action. Reflection-in-action happens when one looks back in the KIA and thinks why the surprise has occurred. It occurs when after some considerable distance is established with the KIA, one thinks critically and 'evaluatively'. Reflection-in-action happens on the spot when the surprise occurs. It is almost always intuitive. Action research uses both reflection-on-action and reflection-in-action but gives weight to the utility of the former due to its carefulness in documenting and delivering set solutions to problems at hand.

Heflich and Iran-Nijad [8] opines that reflection is an alternative to the failing rigid radical-scientific approach that is permeating the present educational system. Kompf and Bond [7] on the other hand criticize the overuse of reflection beyond its conceptual definitions and limit it as a philosophy similar to hypothesis testing. Kompf and Bond [7], however, mentioned the theory of Jean Piaget to support the concepts proliferated by Dewey and Schon on reflection.

Piaget's terminology explains the process of reflection [7]. According to him, the existence of a schema is found in all people. It is the "fundamental unit of organization derived from experience and produces a unified pattern of behavior" [7]. When new information is at hand, adaptation happens. Kompf and Bond [7] explain that "Adaptation is facilitated by the complementary process of assimilation and accommodation. They added that, "assimilation integrates environmental influences into an already-existing physical or cognitive structure thereby extending existing schemata. Accommodation alters physical or cognitive structures having to do with new patterns of behavior." Reflection involves the schema's transformation either by assimilation or accommodation.

On the administration of a solution for the problem at hand, in delivering action research, this research takes on the theory of humanism, particularly that of Carl Rogers. Rogers (as mentioned in [7]) "advocated . . . "whole person" learning, which promoted cognitive and affective learning simultaneously. . . ." According to most experts the inclusion of both cognition and emotion, the inclusion of both interests and challenge motivates students [10]. Ginsberg [7] furthers, "Teachers facilitate this type of learning with what Rogers . . . termed "realness". . . or being genuinely you in the relationship with learners. The notions of positive regard for the students, a holistic view of them, and engaging in constructive relationships with them are all integral to the concepts of humanistic education." The constructive relationship with the students in English as conceptualized in this research is found not just in

classroom teaching or facilitating, but also on the conversations pertaining to the resolution of problems. Action research will be openly administered and comments and opinions of the students shall be taken into account to develop interventions and to measure the success of these interventions. The review of literature shows that this unconditional positive regard or caring is identified as one of the most important characteristics of an effective teacher [11].

10.4 Synthesis

The review of the related literature outlines the challenges or problems that face English teachers. Two of the most important and prevailing problems in our age are (1) the English proficiency or linguistic competence of the teacher and (2) the specific needs of the students. The need for English proficiency and linguistic competence seems to be a by-product of the increase of ESL students because of the influx of the internet where the language medium is mostly English. The specific needs of the students refer to their cultural and situational specific needs ranging from their religion, social class, country, personality and/or even their motivation for studying English. This review featured six cases of action research. All of which intervened to help students learn English by letting the teacher adjust his curriculum, teaching style or even his over-all approach to the student. One researcher even asked teachers to act as *defacto* students. Action research is a viable solution to the challenges at hand. It is not a new concept in English teaching but a lot of teachers avoid it because they don't see the practicality of research in general [4]. However, action research is practical. It is flexible and its theoretical base, as mentioned here, is compatible with the busy academic life of the teacher. The theoretical foundations from which this study will be built upon will be the theories on reflection according to Dewey, Schon and Piaget (as mentioned by [7, 8]. The outcome of the action research relies heavily on humanistic theory, particularly that of Rogers and Maslow, who articulated the importance of positive regard, warm feelings and a caring approach—which needs to be communicated to the student to support him in this cycle of teaching and learning and research—for the student to develop the language skills needed for him to succeed.

The literature review leads to the following aims of the study:

1. Identify the challenges faced by teachers of students in an English language preparatory course.
2. Develop interventions leading to solutions, to the problems, through teacher collaborations.
3. Spotlight the effectiveness of these solutions in helping teachers.

10.5 Descriptive Research Notes

The goal of this review is to identify ways teachers can improve in the classroom. The research of literature including: on-line publications, archival websites, books and other publications will be used to gather and sort information. Surveying the literature indicated that the various challenges and needs are found in many TEFL/TESL settings regardless of country or demographic status. Thus, the next course of action was to identify how the authors resolved the challenges indicated in the literature. As these are all preliminary findings, additional literature will be added as the specific problems of the study are identified and developed.

This review will show teachers' preferences related to action research and the use of professional reflection. The literature review shows that solutions exist for the challenges facing teachers, professional reflection is the place they can start. The information gathered here-in is based on internet and library searches that used *effective teaching* of ESL/EFL students, *challenges*, *professional reflection* and *action research* as key words. During the course of the review the settings of the search engine were set to PDF files only, as online research is commonly found in PDF format. The purpose of this practice is to find documents found in online English journals (TESL- Electronic Journal and others). Notes are kept on scratch paper emphasizing key words and useful quotes—anything that is related to helping teachers to improve their classroom teaching. The current literature review, still a work in progress, has produced the statement of the problem along with reflection statements. The overarching purpose of this work is to explore how action research can be implemented in the local setting. This will be achieved through identification of the most pressing and common challenges that teachers encounter, accompanied by suggestions for how action research can be a catalyst of change for the good of ESL/EFL teachers and the success of their students.

10.6 Benefits of this Research

Singapore government is moving towards making Singapore an education hub by 2020. As such, this research is of extremely high relevance as it is focused on English Language learners at tertiary levels, which comprise mostly of foreign students studying English Language in Singapore. The benefits are at three levels: (a) individual teaching level, (b) institutional level, and (c) national level. The research findings, which would bring to light the problems faced by teachers and students would help educators, education administrators and the relevant authorities look into the problems and find relevant solutions thereby making the education landscape more appealing and relevant to future students, their parents and educators.

10.7   Action Plan

At the time of writing the action plan is not yet finalized. Approval from the Research Supervisor and face validation of the instruments cited here are needed before finalization. However, the action plan will focus on interventions, for English classroom teaching, improving students' oral and/or written communication skills. The study plans to report only one action plan. However if the action plan proves to be successful it shall be administered again (with modifications from feedback) to initiate a continuous and systemic part of English education in the institution.

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Chapter 11
MOOCs vs MMOGs

Chek Tien Tan

Abstract Much hype has been centered on MOOCs, or Massive Online Open Courses, in higher education recently. They possess the noble aim of bringing top quality education to the masses, often for free, but suffer from several drawbacks that include student motivation and a lack of team-based activities. Other than to alleviate some of these shortcomings, the main goal of this paper is to explore what the design of Massively Multiplayer Online Games (MMOGs) can offer for the design of MOOCs. A review of MOOCs is first presented, followed by a dissection of the general structure of MOOCs with a formal game perspective. A comparative analysis with MMOGs is then provided which finally leads to a set of design guidelines for creating more engaging MOOCs.

11.1 Introduction

MOOCs (Massive Online Open Courses) are widely considered to be the potential game changers in higher education and have been given much attention recently, with some of the world's leading colleges competing to offer a rapidly increasing number of online courses as well as build the supporting technical framework behind them. On the contrary, MMOGs (Massively Multiplayer Online Games) have been around since the dawn of computer gaming in the 1980s. Good MMOGs are well known for their ability to engage players for countless hours and provide a heightened sense of intrinsic motivation, amongst other qualities from the concept of flow by Csikszentmihalyi [1], which is used widely to explain positive gaming experiences.

Although MOOCs have enjoyed wide positive reception, they are mostly well received for their potential benefits rather than currently perceived benefits. For example, Vardi highlighted that MOOCs might be seriously lacking pedagogy and popular only for getting a fast and free education from prestigious colleges [14]. In

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one case, a MOOC that had over 40,000 students was stopped halfway due to massive student complaints[1]. Ironically, it was a MOOC that taught online education. Indeed, as we will see in the review of MOOCs in the next section, current MOOCs lack some of the important components that provide essential graduate attributes. Nevertheless, if designed properly, we believe MOOCs do possess the potential to revolutionize the way tertiary education is being delivered and also how accessible quality education is to the masses, hence this paper hopes to provide some insights into how to design it better.

In the rest of this paper, a review of some of the most prominent MOOCs is first presented. We then introduce MMOGs and analyze their game design strategies in terms of formal and dramatic elements. We then dissect MOOCs with the same game design perspective and finally conclude with a set of design guidelines for creating more engaging and complete MOOCs.

11.2   MOOCs

Although the notion of MOOCs originated sometime in 2008, the term MOOC only became widely popular when Stanford University launched three official courses for free public enrolment in the year 2012. These three courses received a massive reception around the world with enormous enrolment numbers. From then on, many initiatives followed suit with some of the world's leading colleges like Stanford, MIT and Havard heavily invested in the development of MOOCs. Hence it is no surprise that the more successful and well-known MOOCs have roots in these universities, which includes Coursera[2], edX[3] and Udacity[4]. Hence MOOCs are largely known to represent full-blown university courses that are offered for public enrolment online. This means a typical MOOC comprises of lectures, assignments, quizzes and final examinations, but are delivered using online mediums. It is worth nothing that there are a number of popular online educational resources, like Khan Academy[5] and MIT OpenCourseWare[6], which do not possess strict enough structures to fit into this modern definition of MOOCs, but have very similar goals. In general, MOOCs can certainly take on a large number of variations depending on how loose one wishes to define it but we will limit our discussions to the typical notion of full-blown university online courses. Hence we will look at Coursera, edX and Udacity in more detail.

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[1] http://www.insidehighered.com/news/2013/02/04/coursera-forced-call-mooc-amid-complaints-about-course.

[2] https://www.coursera.org

[3] https://www.edx.org

[4] https://www.udacity.com

[5] https://www.khanacademy.org

[6] http://ocw.mit.edu

11.2.1 Coursera

Coursera was founded by Stanford University professors Andrew Ng and Daphne Koller. It started offering courses from only Stanford University, the University of Michigan, Princeton, and the University of Pennsylvania, but has since expanded to become the largest MOOC portal offering over 350 courses from a large variety of disciplines from more than 60 universities, at the time of writing. Coursera courses represent typical MOOCs with courseware organized into lectures, assessments and discussion forums. The courses run at fixed periods with a clear start and end date with weekly content and assessment deadlines given as they are released. Enrolled students have to adhere to the stipulated schedule.

Lectures are video recordings delivered via an advanced web player that allows the student to change playback speeds. The lectures look mostly professionally edited, and feel more engaging than a traditional voiceover slide presentation. For example, in the course *Statistics:Making Sense of Data*, the lecturer speaks in a self video overlaid on top of content material. He even appears to be looking at the correct locations of text he is referring to in the content behind him. The content material also often involves animated digital handwriting used to engage the attention of student viewers.

A prominent feature of the video lectures is that they contain breakpoints that require students to answer short quizzes before continuing. The videos in Coursera are simply short-circuited and an online form is presented to the user to prompt for an answer to a question. Students can also choose to skip the quizzes to continue viewing the video. The only feedback the student gets in these quizzes is the correctness, and the results of these quizzes do not affect the video afterwards

The assessment items often includes automatic software graded multiple choice questions as well as peer graded work that have more complex submission formats. Students will get grades for these items that count toward their final course grades.

The discussion forums are simple online threaded discussion forums that are commonly seen on the web. This non-real-time interaction seems to be the only mode of communication between the instructors and the students, as well as between students.

11.2.2 edX

edX is a not-for-profit organization founded by Harvard University and the Massachusetts Institute of Technology. It has since expanded to include a total of 12 universities as partners. Compared to Coursera, edX has a much smaller number of courses, around 33 at the time of writing. edX has a very similar structure to Coursera with similar courseware content whereby students need to adhere to the strict timelines of each course.

The format of the videos in edX reflects most closely to traditional recorded university lectures. For example in the course *Stat2.1x Introduction to Statistics*, a

typical video shows PowerPoint slides guided by a virtual pointer with a voiceover from the lecturer, and in *CS188.1x Artificial Intelligence*, the video is a mix of PowerPoint slides and recordings of the lecturer appearing to give actual lectures to live audiences. Just to be clear, the videos are pre-recorded and not streamed live. The videos appear to be non-interactive, in that there are no embedded quizzes in the midst of viewing, unlike the ones Coursera has.

The graded assessments are similar to Coursera's, which include automatic and peer graded tasks. The discussion forum also appears to be of a similar type, which contains non real-time threaded posts.

One unique offering of edX is that its platform technology is also open-sourced, which includes a course authoring tool, assessment tools and even an Artificial Intelligence (AI) grader based in machine learning. This is an important feature of edX that aims to advance the state of the art in MOOCs by giving developers free access to a good starting framework.

11.2.3 Udacity

Sebastian Thrun, David Stavens and Mike Sokolsky, who are all prominent researchers in computer science, founded Udacity. Udacity started from a Stanford University experiment (which Sebastian Thrun was a part-time Professor at) with an online course, much like the story of Coursera. Udacity has an even smaller number of courses, 25 at the time of writing, and the structure of content in Udacity is very similar to those of Coursera and edX, with Lectures, assessment items and discussion forums at the core. However, Udacity's MOOC offering does differ quite a bit from those of Coursera's and edX's.

Firstly, Udacity does not require students to adhere to a fixed semester timeline. Students can complete the courses entirely in their own pace. This means more flexibility, but also means that it is harder for the instructors to coordinate, and that group-based assignments will be really complicated to implement. Currently, it seems like all assignments in Udacity are individual-based. That being said, most assignments in Coursera and edX are also targeted at only individuals.

Secondly, the video lectures in Udacity have a different level of engagement. One visible difference is that all courses are delivered in a very similar way, with the lecturer primarily using a digital pen to illustrate concepts, with the hand totally visible. Like Coursera, Udacity's videos have short quizzes that break up the lectures to engage the students. But unlike Coursera, the quizzes actually blend into the visuals of the content. For example, in the course *Introduction to Statistics*, each quiz actually involves the lecturer asking a question in the midst of his lecture, and writing the question digitally by hand on the screen. He then draws a text box by hand and asks for an input from the student. The text box then displayed to the user is actually overlaid onto the actual position where the lecturer draws his hand-drawn box. This most likely aims to provide a more seamless and engaging experience than the static one in Coursera. Whether it actually does provide this heightened experience is a research question to be uncovered by more formalized experiments, but from the personal usage experience of the author, he certainly thinks it does.

For the assessment items, the graded assessments also follow a similar video-based quiz approach, including assignments and final examinations. This aims to make the whole experience uniform and seamless to increase engagement. In all, the usability of the website also appears to be much more intuitive and simpler, as the student simply needs to follow the linear path depicted by the videos. The discussion forum however, is largely similar to Coursera and edX.

From the above review of the major players, the biggest advantage of MOOCs over traditional classroom seems to be the delivery of lectures. Using recorded video means students can watch them at their own time, scrub forwards and backwards and change playback speeds. One big advantage is that these capabilities make it more conducive for students to grasp difficult concepts where there is a need for repeated viewing. Also, the embedding of short practice quizzes within the videos makes it more engaging than static videos and also provides a more interactive experience, which has been known to improve learning [11].

Apart from the improved lecture delivery, the rest of the MOOC offering has several potential drawbacks however, including the following:

- The improvement in video lecture delivery does not guarantee a student will want to look at them if one is not motivated by the course nature. Making the course purely online might be worse if the student is not even motivated to start looking at it, but the course is essential for his overall studies. To make this point clearer, take for example a student studying a game development degree. Calculus is an important fundamental knowledge for many graphical techniques in games, but it is common that many students are not able to see the value when they are taking it in a foundational year. Hence if the degree was entirely online, this student might fare badly or in the worst case not even try to go through the calculus course. Hence the issue of motiving and engaging students is a bigger problem in online courses as the responsibility of learning falls entirely on the students.
- Current approaches seem to favor tasks that can only be performed individually, whilst most educators would agree that group work is an important aspect of learning in many disciplines [12].
- There is a lack of the human touch and the participation in a real community. Most current approaches to interaction revolve around the use of online discussion forums. When all interactions are non real-time and happens without knowledge of what the others look like or how the others sound like, learning feels like a solo endeavor. In addition, having all the assignments done individually reinforces this separation. Prior study has shown that there is a significant difference in learning perceptions when the notion of a social community is absent [2]. Provision for more interaction modes between students are needed, even if they are done in an online setting.
- In the online assessments there seems to be no requirements for presentations. Classroom presentations are an essential part of tertiary courses as public speaking is a core graduate attribute valued by many professions. Technology does allow for streamed presentations but perhaps the sheer size of the MOOCs poses a big practical challenge for developers.

In the first instance it seems like going back to a traditional mode of face-to-face classroom delivery solves some of these problems. Hence one solution might be the popular concept of blended learning [6], whereby face-to-face delivery mixed with online solutions have been shown to improve learning outcomes [7]. However, this paper proposes an alternative solution, and that is the use of MMOG design concepts to improve these aspects, and possibly even increase the value proposition beyond these problems.

11.3   MOOCs as MMOGs?

MMOGs take on a variety of genres but have several distinct characteristics can be implied by the name. Firstly the words "Massively Multiplayer Online" in MMOG means that it involves a large number of online players. The second part of the name, "Game", naturally means that it is a digital game, and the notion of a game is what primarily empowers the MMOG experience.

Some of the most successful MMOGs currently include League of Legends, World of Warcraft, and Diablo III [7]. In 2011, 7 years after the release of World of Warcraft, it still had over 10 million paid subscribers [8] with over 600 million hours played in the United States and Europe region. In these kind of games, concepts of engagement, immersion, and flow [8] are often used to explain the positive player experiences leading to their massive success. Hence, to understand how they have achieved these positive player experiences, we will need to analyze the components of such games.

The structure of an MMOG can be concisely decomposed using concept of formal and dramatic elements [3]. Formal elements include the online **players**, clear game **objectives**, software defined game **rules**, core gameplay **procedures**, game **resources**, artificial **conflict**, virtual game **boundaries** and clear **outcomes**. Dramatic elements a mix of mimicry, alea and agon **play**, progressively harder **challenges**, a game world **premise**, fantasy **characters** and an immersive **story**.

Now let us look at the structure of a MOOC in the same formal and dramatic element style used for games. It can be seen that formal elements are very similar to MMOGs, which includes online students (**players**), course **objectives**, course **rules**, study plans (**procedures**), learning **resources**, tests (**conflict**), course **boundaries**, and graded **outcomes**. However, dramatic elements seem to be drastically different from MMOGs:

11.3.1   Play

MOOCs basically provide just one form of "play" within a strict rule-based system, and that is the competitive "play" between each student and the course system. There

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[7] http://www.forbes.com/sites/johngaudiosi/2012/07/11/riot-games-league-of-legends-officially-becomes-most-played-pc-game-in-the-world/

[8] http://www.bbc.co.uk/news/technology-15672416

is also a strong emphasis on attaining final grades that depend on single-attempt or limited-attempt assessment tasks. This limits the amount of free-play in the system. Failure to attain the required grades for each assessment also adds to the looming possibility of needing to repeat the course several months later only when it is next offered. Most would agree that the experience it provides can hardly be classified as play, and is closer to "work" instead.

Although MMOGs also provides play within a relatively tight rule-based system, MMOGs have a form of play that emerges from a mix of competition, chance-based play, and role-play. Players often have an almost unlimited number of tries at a quest or puzzle until they finally figure out how to conquer them. Moreover, players can often choose from various modes of play that involves different player interaction types. A well playtested ecosystem of play is hence a core component of successful MMOGs. MOOCs can perhaps incorporate a more flexible and varied nature of play.

11.3.2   Challenge

The types of challenges presented to students in MOOCs include practice quizzes (in the video lectures), graded assignments, and graded tests. Most of the time these challenges are just chronologically successive tasks given according to what was taught so far, and are not purposefully designed to cater to the increasing skills of the students. These tasks, especially the graded assessment items, are usually few in numbers, and are of moderately high difficulty, with the same difficulty presented to all students regardless of their ability, in order to fairly spread the grade distribution. This potentially hinders learning for slower paced learners when their skills do not match the time these assessments are given out.

In MMOGs or even most good games in general, balancing challenge is considered one of the most crucial aspects of design in order to achieve positive, engaging player experiences. Game designers spend a majority of time playtesting and meticulously tweaking each game parameter in order to get the level progression right so that players can easily get into the mental state of flow during play. In general, it means that as the player's skill improves, the game should present an appropriate heightened challenge in order to motivate play progression so as to maintain an optimal experience that is constantly intrinsically satisfying. For example one strategy to achieve this is to keep player performance in close check as frequent as possible with game levels and quests kept small and contained, especially at the start. It is also important to understand different players might progress differently, so the design needs to take this into consideration. The correlation of flow to positive player experience has been shown by a large number of studies [4, 9, 13] and is hence a key notion MOOCs might be able to learn from.

11.3.3   Premise, Character and Story

MOOCs do not have a crafted premise, character or story. On the contrary, these elements are usually what stand out the most to players in many MMOGs. A large portion of any MMOG investment usually goes into the careful crafting of immersive game worlds with deep, compelling characters and storylines. Perhaps when compared to single-player Role-Playing Games (RPGs), stories in MMOGs are less well-received, but there is little doubt premise and characters play a big part in the play experience [10]. Moreover as mentioned, the stories in MMOGs can be treated as the emergent relationships in player-to-player interactions in the game world. When the premise and character design have enough depth, players can easily form stories around their interactions. Premise, character and story have also been shown to be important measures of immersion for games [5], and MOOCs might similarly use this to their advantage.

11.4   Designing MOOCs with MMOGs

With the comparative analysis in the previous section, we can now derive several guidelines to improve MOOCs from a design perspective.

- Focus on getting the challenge progression correct.
  This might mean a major re-design of the quizzes, assignments and tests in order to have a gradually rising challenge that accumulates each additional set of knowledge presented via the videos. This also mean having a lot more points of practice throughout the MOOCs that are small and test concise portions of knowledge. Moreover, instructors should allow students to practice applying concepts a large number of times in different situations before going on to more difficult concepts. This adheres to good challenge design, whereby for example in games after a new mechanic is introduced, multiple successive levels will test the player in various ways, before requiring to combine the mechanic with the player's previous arsenal of skills for a next higher challenge.
  There is also a need to recognize that every student progresses differently, so it might be good to ensure he/she is able to competently make use the current knowledge first, before allowing him/her to proceed, akin to the level progression system in games. Hence we suggest allowing for repeated tries in graded assessment tasks. To progress to the next task, it is important to ensure the student has acquired the required knowledge up to the current point. It is a pity that current MOOC assessments serve more as performance evaluators rather than learning facilitators. However, we recognize that this depends a lot on the goals of the instructor, as to whether it is more important to make sure every student has the best learning experience, or to make sure that students are judged, ranked and rewarded accurately.

Nevertheless, as with good MMOGs, a lot of user testing needs to be employed in order to get the challenge aspect right in MOOCs.

- Have different student interaction modes for assignments.

  For example, include team assignment "arenas" in which fixed roles have to be taken in order to complete the assignments. Then groups of students can arrange for times to meet online and tackle these assignments together. This is much like the multiplayer dungeons in MMOGs. Another example might be student versus student assignments in which students go against each other in friendly competition much like the player versus player arenas in MMOGs. Care needs to be taken in distributing course credit however, as too much competition might deter learning instead. Having various student interaction types can also help develop different inter-personal skills common to many graduate attribute goals of universities.

  In addition to the provision of more interaction modes, the use of technology familiar to MMOG players can be employed to enhance the way these interactions are performed. In MMOGs, especially intense dungeon battles that require a lot of coordination, live voice communication tools are often used, and players sometimes have to be in constant communication in order to conquer the challenges properly. Many multiplayer games have this feature built into the system as well. MOOCs can also consider integrating such technology such that it can increase the human touch and sense of participation in a community, which has been shown to be of great value in learning [2]. Coupled with group video streaming technology, group presentations in these assignment "arenas" will likewise be possible. Use of appropriate technology already prevalent in MMOGs would hence serve to enhance the social benefits of learning even more.

- Create premise and characters.

  In the first instance this might be in the form of consistent aesthetics across all MOOCs in a MOOC university portraying a theme in which each student is required to have a character representation of themselves. Having a story around them might be even more compelling but as mentioned story can be built by the student interactions if a strong premise and rich characters are present. Moreover, designing story is especially time-consuming and the returns might not be high enough to justify the investment, hence we suggest that story be optional.

  As discussed, it is evident that premise, character and story are central to immersion in MMOGs and using this to engage students in MOOCs might be something worth trying out. Increasing the immersive experience might also improve the intrinsic motivation required to "attend" the classes online, even if it was the Calculus course that students might hate in a game design online degree.

11.5   Conclusion

In this paper, we have provided a review of popular MOOCs and pointed out several shortcomings. We then perform a structural analysis of MOOCs from the viewpoint of MMOGs so as to compare the similarities and differences in order to extract the

elements of success from good MMOGs. We find that the main insights MMOGs can offer are the design of the dramatic elements in MMOGs, hence we have also provided an elaboration on ways to implement them. Note that we do not exclude the fact that a closer look at the formal elements might uncover more insights, but this paper limits the discussion on the areas that are most glaringly absent in MOOCs, and those are the dramatic elements.

On the whole, we are not claiming that this is the best or preferred way to resolve the current issues or is the best way to enhance MOOCs. What we aim to provide is an alternative lens to look at MOOC design and proposing that more can be done is this aspect to investigate the possibilities of applying MMOG design to MOOCs. We are also not advocating that MOOCs will take over tertiary education, but acknowledging that they will potentially have a big impact on education. We hence hope to contribute to that impact in a positive way.

In terms of limitations, development time is certainly a prohibitive factor in taking up our suggestions. We do recognize that a lot of the guidelines are easier said than done. However, they are at the most they are as hard as making a game, and the game industry is a well-established industry with many good processes to gather from. The implementations are certainly technically feasible, but business wise it might be a harder decision to make. One primary issue is also the fact that this has not been tried before and investing resources into it might be extremely risky for the MOOC providers. One way for instructors might be to collaborate with game companies to enhance their MOOCs.

Hence as future work, we aim to perform a formal investigation into the proposed benefits of our guidelines. We hope to embark on actually designing a simple MOOC, which we will coin gMOOC (gamified MOOC), that includes the dramatic element designs that we have discussed. We will then perform a formal user study on whether gMOOCs indeed have an edge over current MOOCs.

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Chapter 12
The Evolution of Business Models in the Video Game Industry

Roberto Dillon and Ori Cohen

Abstract This paper aims at discussing the evolution of business models that have characterized the video game industry in recent times and use it as a starting point to predict possible scenarios that may develop in a near future. Different trends will be reviewed and discussed both under a general, worldwide perspective as well as a more localized, Asian one to gain insights on how this sector is evolving into new, unexpected directions.

12.1 Introduction

Despite the Video Games industry being generally considered "recession proof" [1], [2] its traditional ways of doing business by funding game projects to be published on high end dedicated consoles sold through retailers and physical shops have gone through a constant decline at alarming rates after peaking in 2008. During 2012 many analysts were actually expecting a turnaround in November, with the Christmas season approaching and the launch of the Wii U, the latest console from Nintendo, but, surprisingly the data from NPD still showed an 11 % year over year decline [3].

So, what is happening exactly in the video game industry? Is it evolving into something else where people enjoy games in novel ways which are more difficult to track and quantify? Most importantly, by analyzing the latest developments, can we make some educated guesses on what could be the next evolutions and opportunities that will arise in a near future?

To address these questions, we will start by describing the different developments and trends that completely reshaped this industry thanks to very fast advancements across different technologies.

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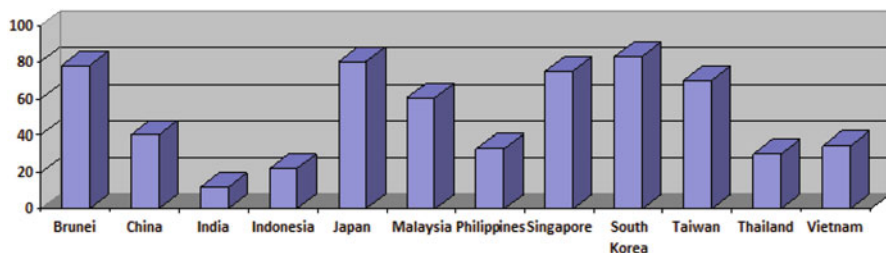
Fig. 12.1 Percentage of population accessing the Internet for selected Asian countries, showcasing excellent results in several regions while also showing margins for further growth. (Source: Internet World Stats as of June 2012)

12.2 The Rise of Online and MMO games

Internet penetration did great strides in the last 10 years all around the world. This, together with a more reliable infrastructure, allowed for faster connections and, ultimately, offered novel ways of accessing games. Internet population growth was particularly evident across Asia and even more so in South East Asia where many countries can now proudly assert to have a significant share of their population online (Fig. 12.1).

These terrific developments allowed for new ways to communicate, exchange information and, last but not least, play games.

While online gaming was by no means a new concept, "Neverwinter Nights", the first online game to also offer a proper GUI and a graphical representation of different environment for players to explore and coexist in, was released in 1991 [4], it was only around the turn of the century with ground breaking successes like Everquest and World of Warcraft that Massive Multiplayer Online (MMO) games reached their apex and mainstream popularity.

These persistent virtual worlds were accessible by monthly subscription, providing their developers with a continuous stream of income. At the same time, players started buying and selling virtual item by using real money, developing in game economic systems comparable to those of real countries: it was estimated in 2002 that Everquest was the 77th richest country in the world, sandwiched between Russia and Bulgaria with GDP per capita higher than that of the People's Republic of China and India. A few years later, on October 7, 2010 World of Warcraft reached a subscriber base of over 12 million players, making Blizzard one of the most profitable software development companies in the world.

Most importantly, from a business perspective, the game clients for connecting to nearby servers and start playing MMO games were not only distributed through retailers in physical format but they soon started to be also available for download online, giving developers a new way to get in touch directly with their audience cutting any eventual middleman.

Fostered by a faster and more reliable internet infrastructure, the growing popularity of MMO games to be played online via subscription models was the first big event to shake the traditional boxed game sales business.

12.3   The Rise of Social Networks and Free-to-Play Gaming

The next important event we need to focus our attention on to understand the modern scenario is still closely related to the exponential growth of the internet population. This time, though, it didn't involve only traditional gamers but also a more general crowd, often referred to as "casual gamers".

More specifically, developers realized that social networks like Facebook, due to their extreme popularity among internet users worldwide (see Fig. 12.2 for statistics in Asia) were actually viable platform to deliver a new type of games.

These games relied on the viral qualities offered by the new hosting social platform where players could spontaneously promote games they were playing among their friends but, to exploit these possibilities to the fullest, developers had to evolve both their development and business models.

Traditionally, in fact, games to be sold at retail had to be highly polished and thoroughly tested before sending out the final, gold master into production but this approach proved too slow and ineffective for the new online medium where it was soon realized that capturing a critical mass of users as fast as possible was of paramount importance instead. Developers decided then that, instead of waiting till being able of releasing a fully polished game, it would be much more effective to start releasing the game as soon as it reached a minimum amount of playable features, called the "Minimum Viable Product" or MVP.

The MVP would be good enough to test the audience's reception and then the team would keep developing new content, fine tuning and polishing the playing experience according to users' feedback while the game, in the meantime, slowly but naturally went viral.

This development approach also had a natural consequence from a business perspective since, in general, a MVP can't be sold upfront as a boxed game or even as a digital download either. To facilitate the viral spread, players needed to access it for free, and this implied a completely different monetization strategy: the game would be free to play but there will be several opportunities for players to spend money within the game, to acquire special virtual goods or speed up specific processes.

This strategy, called In-App-Purchase, or IAP, quickly became the standard business model for all companies developing games on social platforms like Facebook.

Results were explosive and beyond expectations: Zynga, a pioneer in the field founded in 2007, quickly surged as the most powerful player thanks to games like FarmVille which was able to gather more than 60 million active monthly users at its peak in 2009.
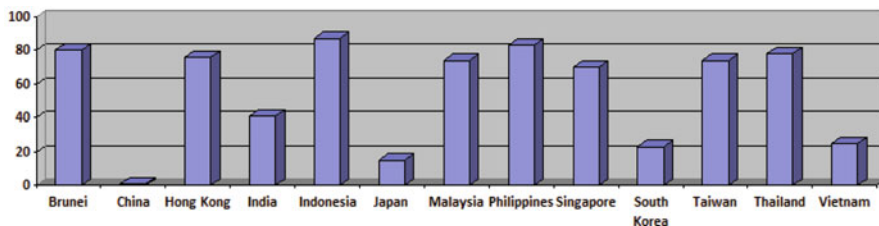
Fig. 12.2 Percentage of Internet population subscribed to Facebook in Asia: with a few notable exceptions, people who are online most likely also have a Facebook presence, especially in South East Asia. (Source: Internet World Stats as of June 2012)

The explosive rise in popularity of social Free to Play (F2P) games among players became so pervasive that accessing playable content for free started being an expected feature for all online activities, disrupting even the business models of other types of games, like MMO, that were very successful up to that point by using more traditional subscription models.

For example, the highest profile title released in the last few year, "Star Wars: the Old Republic", developed by BioWare/EA with an estimated budget in excess of US$ 150 million, was released with critical acclaim and had a truly encouraging start: despite players had to pay both for the game itself and then pay a US$ 15 monthly subscription fee, the game captured 1 million subscribers within three days from its launch but then didn't manage to keep the momentum going. In a matter of months, players started complaining about having to pay monthly fees and the user base dropped at an alarming rate. Ultimately, the subscription model proved itself unable to sustain the game and developers had to reorganize it to make it accessible also as a free to play experience with in-game-purchases to keep people engaged.

Around the same time, even for the most successful MMO game of all time, World Of Warcraft, started to suffer the popularity of free to play games and, after peaking in 2010, it started shedding players at an alarming rate.

In the end, to keep the game relevant, free to play access had to be given here as well, showing that games based on subscription models alone are not sustainable any longer.

12.4 The Rise of Mobile

The last few years didn't witness only the rise of online gaming experiences played on PCs, though, and another even more disrupting phenomenon occurred: the rise of mobile platforms.

While analysts and the gaming industry at large have been bullish on the prospects of the mobile sector since the beginning of this century, an excessive market fragmentation and overly tight control by carrier operators prevented it to really establish itself at a mainstream level. Things changed completely when Apple released the iPhone in

2007 with its annexed AppStore in July 2008. Since then, mobile devices and online stores became increasingly popular and are now becoming the devices of choice for surfing the internet, as shown in Fig. 12.3.

Obviously, the new platforms didn't pass unnoticed to game developers and countless games started being developed and published with very interesting results as soon as the mobile audience proved itself particularly receptive to the consumption of games, so much so that, today, more than half of the most popular paid apps being purchased on Apple AppStore are games and games also represent about 70 % of the top grossing apps, according to iTunes data.

Indeed, recent data show that smartphones and tablets are increasingly becoming the platform of choice for gamers and that a significant percentage of people prefer playing games on the mobile device rather than on a computer or console.

When the first games started being released, most of them adopted the revenue model common to retail games: players had to pay a certain amount of money upfront to get the game. As this scenario proved to be highly profitable, more and more games were produced and released, with a very important consequence: while at retail games have limited shelf space and a rotation of titles is automatic with a new release substituting an older one, in digital stores shelf space is unlimited. This quickly resulted in a very crowded space where visibility became a real issue, day after day.

In fact, in most app stores, visibility is determined by popularity, i.e. the more a game is downloaded, the easier it is to find as it climbs the charts and it is displayed among the top titles in its category. But in an environment where we have more than one hundred titles added each day (for example, at the time of writing, on Apple's iOS AppStore, there are 130 new games released daily) how can a game get more downloads to become more visible and then be downloaded even more?

Investing in marketing would be a natural, though expensive, answer but there is also a cheaper possibility: slash prices. The latter is exactly what happened across all app stores, with apps in general and games in particular being sold for less and less and, when even the minimum threshold of $ 0.99 was not enough anymore to attract a meaningful interest, games started to be given away for free.

Once again, free to play superseded more traditional approaches and changed the underlying revenue models from pay to download into advertisement based ones, where ads are displayed during the game or, more commonly for top grossing games, in an in-app-purchase model, exactly like it happened for MMO games when players, spoilt by many other free to play games, became tired of paying a subscription fee.

12.5   Game Industry Market Size and Future Projections

So, where are we headed? The traditional PC and console games with their traditional retail distribution model are obviously going through a tough period, possibly changing forever as the large companies that have been producing retail box titles are in the process of transitioning and consolidating.

However on the other side, social games, casual games and mobile games are growing at exponential rates and taking a big share of the play-time, and revenue.

Fig. 12.3 Internet broadband access in G-20 countries, measured in millions and including near-future projections: mobile will be the platform of choice for accessing the internet. (Source: Boston Consulting Group, Mary Meeker, Kleiner Perkins, Morgan Stanley Research, Berg Insight, BI Intelligence)
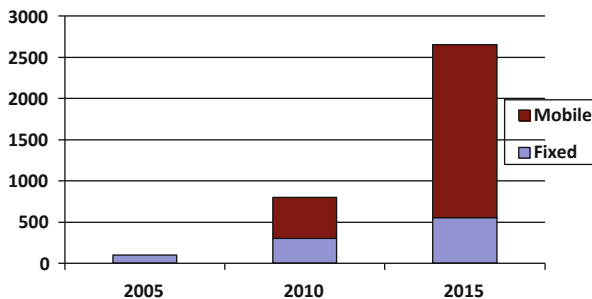
The interesting finding is that not only they are compensating for the loss in PC-console-retail, they are actually enlarging the size of the market as a whole. Thanks to mobile devices, gamers have access to games anywhere and anytime. In the US and UK 59 % of mobile phone owners are playing games, and the number has increased by 45 % from 2011 to 2012.

Social and mobile games for their simplicity, and accessibility are now being played by demographics that traditionally have not been playing games in the past, in 2012 an equal number of male and female played mobile games while in 2011 55 % where male and 45 % female. In addition the average age of mobile player is now 39.5 years old, and the time spent playing and frequency of play has increased to 96 % playing a game at least weekly in 2012 compared to 84 % in 2011.

The game industry is estimated at around US$ 70B in 2012, and 49 % is estimated to be the revenue from Online and Mobile games. The size of the industry is expected to grow to US$ 83B by 2016 and the share of online and mobile game to grow to 55 %. The numbers vary between different research groups and method, but the general consensus seem to be that online games and mobile games are the reason of the growth in the games industry.

12.6 Conclusions

In the end, with the seemingly unstoppable rise of online and mobile games, are high quality boxed games going to disappear entirely and, with them, their creators as well?

The debate, fostered by data like those seen in Fig. 12.1, is very lively and pessimistic views tend to be common among analysts and industry insiders alike. Indeed, many companies were recently forced to significantly scale down or close altogether, bringing further consolidation in the industry.

Anyway, we should not forget that we are talking about a sector still worth several billion dollars so, while a significant downsizing is most likely going to continue, boxed games won't disappear completely: in a way not dissimilar to the passionate communities who, today, keep collecting and buying old classic games, a sizable

group of players will always be interested in boxed games delivered on a physical medium.

Under this scenario, specialty shops selling "Collector's Limited Edition" of video games will still have a significant niche of customers, notwithstanding the fact that a downloadable "standard edition" of the game itself will likely be the main distribution method to reach an audience big enough to justify a quality production and, henceforth, securing a proper development budget.

Most importantly, though, the recent evolution we are witnessing is also offering plenty of opportunities to smaller developers for entering the industry, also in developing and emerging countries.

The barrier of entry, in fact, has never been so low, with platforms counting hundreds of millions of users who are easily reachable.

Indeed, studios focusing on mobile and social games have recently spawn all around Asia, not only in fully developed countries like Singapore and Japan, but also in emerging countries like Vietnam, Thailand and Indonesia, where we can count hundreds of small companies and start-ups developing games and related services for these new platforms.

In this burgeoning environment many opportunities may be available for discovering new niche audiences, like the online video and music distribution models over the last couple of years have shown, where long tail models have created vast opportunities for many niche content producers that meet the demand for more such segmented content. The low barrier to entry, which allows even a single developer to release a new game, quickly and with almost zero budget, gives opportunity for many niche games to target a smaller player group.

The other side of the coin, unfortunately, is that all this also means higher competition and lower visibility for most products, regardless of their quality, like the Oyatsukai case study showed.

As the market becomes more and more crowded, a need for discriminating good from bad and give proper visibility to worthy products becomes of paramount importance to keep players interested as well as allowing talented teams to be profitable and develop new content.

How can this be achieved?

Most likely, the various app stores will have to find new ways to give exposure to titles and simplify searches but developers also have to understand how to capitalize on the popularity of the different platforms by finding a synergy between them.

This might be achieved also thanks to the help of a new breed of smaller publishers who are not concerned about providing big funding for AAA projects but, instead, can help in the marketing and cross promotional activities together with the ability, as discussed in, of offering a consistent gaming experience of a given title across multiple platforms. In this way players can seamlessly switch between social networks on PC to mobile while playing the same game and discover new ones as well.

A helpful step in this direction seems offered also by the latest effort from Microsoft with the newly launched Windows 8, providing a common platform for applications and games across PCs, phones and tablets.

In any case, the console manufacturers are definitely not giving up: Nintendo releasing the Wii U, in November 2012, Sony announcing the PS4 in February 2013, and Microsoft expected to announce the new XBOX during the year as well. Some predict that those would be the last generation of consoles as we know them but 2013 would be most likely an exciting year for the industry with such large announcements. It would be very interesting to see how these companies are planning to regain their relevancy and maintain their market share. If their strategy turns out to be successful, we could expect an even larger growth in the industry in the coming years.

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Part II
Antecedents of Asia's Competitiveness

Chapter 13
Investigating Leadership Barriers in South-East Asia

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Abstract This paper explores barriers impacting on leadership in Singapore, Malaysia and Thailand. The rise of the Asian Century is bringing global implications which are driven by leadership. However, what leadership is remains unclear and appears to be many things to many people. The unique contexts of Asia are not adequately explained by the 'Western' centric positivist psychological and social-psychological frames of the extant literature. This study brings a 'macro' country perspective within the emerging 'Worldly' view to investigate leadership through local practice and indigenous notions. Our results suggest that understanding barriers specific to country is important to develop robust leadership practice in the wider Asian context.

13.1 Introduction

Leadership is one of the most studied areas of management sciences and yet remains one of the least understood [1–3] and curiously uninformed Hackman and Wageman (2007) p. 43 cited in [1]. Drawing on Gallie's notion of an 'Essentially Contested Concept', Grint [4] suggests that leadership also is an Essentially Contested Concept noting that 'a consensus of the definition of leadership is unlikely, even in the long run' (p.i). Extending Grint's concept, Day and Antonakis [1] note that leadership is an evolving construct reflecting the dynamic and turbulent nature of the environment in which 'leader ship' is increasingly being called on to operate [5].

Despite the intense study of leadership, little is understood about: barriers; the effect of barriers on leadership actions; the context in which leadership is embedded; the influence of context in shaping effective leadership practice [2, 6–10]; the evolving dynamic of context [11]. Further, the study of leadership should not be confined to accepted boundaries and perspectives such as cross-cultural [12]; similarities (etic) or differences (emic) [12]; and national culture. Barriers that inhibit effective leadership need to be examined within the broad context of leadership actions. There are few studies investigating leadership in Thailand, Malaysia or Singapore [12].

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Therefore, an objective of this paper is to contribute to the increased understanding of barriers as they relate to leadership within a broad country context.

13.1.1 Western Perspective

Zhang suggests that 'Western' centric positivist psychological and social-psychological frames may have limited applicability to non-western contexts, thus leading to a difficulty in understanding leadership outside the contexts in which the theory has been developed. With the rise of Asia, the significance and importance of understanding leadership concepts within the context of Asia becomes paramount. However, Asia is not a homogenous entity. Local and regional indigenous contexts abound which may lead a thicker understanding and insight into leadership practices generally.

13.1.2 Worldly View

Gosling and Mintzberg remind us that the world in not uniform, 'life on this globe is made up of all kinds of worlds... and there are plurality of worldviews (p. 58). Turnbull et al., argues that any conceptualization of leadership needs to consider a 'worldly view' by embracing the diversity of 'deep-rooted indigenous perspectives from around the world'(p. 86). Viewing leadership from the worldly view opens up the possibility understanding leadership within context and the influence of such context on leadership.

13.1.3 Contextualisation and Context

Contextualisation is the act of placing [leadership] into a proper context that allows a rich dynamic portrait to be weaved. Leadership is to a large extent determined and shaped by the parameters and dynamics of context and influencing barriers. Gint argues that leadership involves a social construction of the context, rather than a dominant and proactive role of the 'leader'. Successful rendering of context legitimises the leader's actions while also limiting alternatives available. Thus, according to Grint, context is more than a particular situation as postulated by dominant contingency theories, leading to considering not 'what is the situation, but how is it situated'. Further, Grint suggests that 'context is not the framework in which leaders operate but part of the arena that they struggle to control'. Contextualisation, is the act of placing an event in its proper context- within the 'web of personalities, circumstances, and occurrences that surround it'.

Hutchins contends that context is not 'a fixed set of surrounding conditions but a wider dynamical process of which the cognition of the individual is only a part'. Hence leadership as a personal endeavour needs a physical and psychological context to be performed, as 'there is no creation without place'. However, leaders rarely do it

alone and that a dynamic interaction exists between the leader and the environment. 'By placing context centre stage, and explicating the practice of leadership as an inherently contextual performance, it offers a relatively untapped approach to the understanding of leadership work and suggests the value of this approach in providing a rich resource of data for the development of innovative theory'. Gummesson comments 'All management contexts offer different lookouts, which pave the way to different perceptions of what is going on'. This suggests that leadership is deeply rooted in context in which the 'leader' finds him or herself in. However, what are the barriers and contextual influences that shape and mould leadership in a particular context?

13.1.4   Barriers

Barber and Metcalf observe that there is a lack of consensus in the literature of a definition of what a barrier is, while writing about quality and management notes that research specifically devoted to barriers is still very scarce. Several studies do mention barriers in relation to leadership without providing an adequate definition relating to leadership context. Barriers have been defined as factors, events or phenomenon that prevent or control individuals from making progress' [10] or 'any obstacle, pitfall, drawback, limitation, or difficulty that arises'. Maskell-Pretz and Hopkins [9] make a case that barriers may be tangible or intangible, actual or perceived by the recipient. Further, Ismail & Ibrahim investigating barriers faced by women in a Malaysian oil company, identified family-related, societal and organisational-related barriers [10]. Yunggar found language to be a further significant barrier in Malaysia. McCarthy reviewing a number of studies on differences between British and German leaders suggests that distinctions seem to stem from educational and cultural differences. These act as barriers, particularly for German leaders, in movement between firms and within industries. Collinson reflecting on research mainly in UK organisations identified a recurrent theme of leadership 'distance' where leaders were seen as 'out of touch' with employees and everyday organisational practices.

13.2   Research Context

Two research questions are addressed. First, what barriers to leadership are evidenced by leaders in Thailand, Malaysia, and Singapore? Second, are these barriers different or similar in each country? This study is significant as it aims to contribute to the theoretical knowledge about barriers to leadership within broad country contexts to develop leadership capacity appropriate to the context in which leadership actions are being taken.

The study is important for four reasons: first, the paper engages the call for leadership studies in specific cultural contexts and from a worldly view. Second,

leadership models developed in a western context may not translate to non-western contexts such as Asia. Third, the rise of Asia has highlighted significant differences between 'East and West'. Organisational leaders need to be equipped with appropriate leadership and management frameworks to allow Asian leaders to more closely relate to their Asian counterparts. Finally, understanding leadership barriers contributes to enhanced leadership effectiveness. Leaders are able to develop greater understanding and appreciation of the barriers underpinning 'leader ship', and the value of resulting outcomes of leadership actions.

13.3   Research Method

Research data is drawn from Thailand, Malaysia and Singapore using a mixed method approach. Quantitative data from Singapore and Malaysia are drawn from survey responses while data from Thailand is drawn from a pilot study employing qualitative interview techniques. Participants were sourced employing a stratified randomised sampling approach from public and private business. Initially, interviews were conducted with organisational managers and leaders across all levels to gain an insight into three key areas; leadership context, barriers and issues. In total 25 interviews were conducted in Thailand, 35 interviews and six focus groups in Malaysia, and 29 interviews in Singapore. Interviews were recorded, transcribed and analysed to identify key themes. Questionnaires were developed for Singapore and Malaysia using a likert five-scale with space provided for respondents to write individual responses if they chose to. A questionnaire is yet to be developed for Thailand. Questionnaires for Malaysia and Singapore were pilot tested in-country, revised and then administered. Survey distribution and collection reflected the particular cultural and contextual peculiarities of each country identified during interviews and focus groups. Completed questionnaires were entered into SPSS for analysis. A total of 1600 questionnaires were distributed across two countries: 300 in Malaysia; and 1300 in Singapore. An overall response rate of 88 % was obtained after removing incomplete questionnaires from the sample. The country response was Malaysia 201, and Singapore 1213.

13.4   Results

Seven barriers coalescing into three significant themes of leader age, resistance to change and leader self-interest emerging were identified in Thailand. Fourteen barriers are identified in Malaysia centring on leader follower interaction, trust and relationship development between leaders and followers. Finally, eight barriers resulting in two themes of employee distance and cultural memes were identified in Singapore. Table 13.1 shows the barriers categorised as underpinning dynamics (external) barriers; contributing situational environmental (internal) barriers; or amalgamation combining both internal and external factors. Barriers are influenced by and influence leader actions and subsequent outcomes.

Table 13.1 Leadership barriers in Thailand, Malaysia and Singapore by category

Category of barrier	Thailand	Malaysia	Singapore
External	Leadership is discouraged by the take it easy attitude (Sabai Sabai) Younger people have difficulty getting new ideas accepted by elders – keang jai 'kills' strategy – young people need to serve at least 20 years in the organisation before they are considered for leadership	Lack of understanding between ethnic groups Lack of a common language throughout Malaysia	Leadership style is significantly influenced by a leaders culture, cultural values, traditions and religion
Amalgamation	Leaders being selfish Resistance to change by leaders and staff 'If it works, why change it?' 'Older generation' resist change and new ideas that break from the past Leaders not: – wanting to listen to 'bad' things – respecting and following Buddhist teachings – keeping promises – listening to staff – accepting ideas from staff when offered or sort Practicing traditional values, culture, and thinking in the workplace	Unwillingness of leaders to admit mistakes or that they may be wrong Leaders 'lacking people skills' Limited employee involvement in decision making Employees expected to follow leaders without questioning their decisions Lack of trust between leaders and employees Leaders not communicating effectively with employees Practicing traditional values, culture, and thinking in the workplace	Employees are not encouraged to think 'outside the box' Communication tends to be down rather than two way Organisations generally impose strict rules Leaders 'thinking' is culturally bound Employees are not encouraged to question the leaders decisions Employees are held at 'arms-length' Leaders are often selected on the basis of mature age, status, ethnicity or association

Table 13.1 (continued)

Category of barrier	Thailand	Malaysia	Singapore
		Leaders acting out of self-pride or self-interest	
		Leaders appointed on the basis of beliefs or relationships rather than qualification or merit	
		Leadership style based on leader's ethnic culture, values, traditions, religion	
		Leaders lacking respect for employees culture, traditions, language, religion	
		Lack of vision for the organisation	
Internal	Leaders and staff are comfortable with achievable 'SMART' goals and are reluctant to go beyond what is known to be achievable		
	Work processes (particularly in the public sector) are very formal and can slow the work		
	Leaders not: – knowing their own job – knowing or following the organisations mission		

Thailand. Two key external [cultural] barriers, Sabai Sabai and Keang Jai emerge to significantly influence leadership action. Combined with the number of amalgamation barriers leadership capacity is likely to be significantly influenced by cultural traditions, values and customs.

Malaysia. Two external, eleven amalgamation and one internal barrier were identified. Due to the likely combined effect of the number of amalgamation barriers and the apparent importance of the external barriers, this may suggest that foundational issues, particularly cultural traditions, values and customs may appreciably impact leadership capacity.

Singapore. The majority of the barriers are classified as amalgamation while no internal barriers were identified.

13.5   Discussion

This study contributes to developing our understanding of leadership barriers in an Asian context. Further, the paper adds to developing leadership capacity by addressing two research questions. First; responding to research question one, 'what barriers to leadership are evidenced by leaders in Thailand, Malaysia, and Singapore?', and supporting Amaral and Sousa's call for deeper understanding of barriers, a total 29 barriers have been identified that appear to impact on leadership. Considering research question two, 'are these barriers different or similar in each country?', external barriers in Thailand and Singapore appear to exert a significant influence on leadership and are culturally based. In the case of Malaysia, external barriers also appear to be culturally based from a perspective of division rather than unity as apparent in Thailand and Singapore. Across the countries an apparent common underlying theme of leaders expecting followers [employees] to follow without questioning the leader is apparent.

The research offers a lens to examine leadership barriers across three Asian country contexts. This research has demonstrated that the importance of barriers appears to be related to the cultural traditions, values and customs and possibly economic, linguistic and political development of the nation, adding support to McCarthy's, Yunggar's, and Collinson's findings. Singapore for example, is highly developed economically and politically, whilst demonstrating linguistic harmony when compared to Malaysia. Finally, within the limitations of this research, the identification and categorization of barriers within a country context seems important and contributes to our further understanding of leadership in South-East Asia.

13.6   Implications, Limitations and Future Directions

In a time of uncertainty brought about by the rise of Asia, the global financial crisis, climate change, and shifting of economic and political power from west to east, a universalistic simplistic view of leadership is appealing and very tempting.

This paper has attempted to identify leadership barriers without imposing western frameworks of analysis. Results suggest that dominant theoretical approaches are too 'situational' focused. Leadership is a complex dynamic blend of factors and elements that in some instances appear to bear little, if any, relationship to conventional leadership thinking. This serves to remind us that contemporary leadership study has been narrowly focused, compartmentalised suffering a western industrialised mindset.

It is important to bear in mind the limitations of this study. The research is exploratory, sample sizes are limited and reports pilot study results in Thailand. Further, data collection is restricted to the major commercial locations due to the logistical difficulties of accessing a broader population base. Future research could extend the reach of the study in an attempt to identify further leadership barriers and strength of the relationship, if any, between the various barriers identified. Such research, it is suggested, needs to first focus attention at the country level to shed light on the dynamic contextual issues at work. Further cross-country comparisons are also necessary, particularly in the emerging 'east' as the influence of western domination, and leadership, eases.

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Chapter 14
Australian Connection in Asia: Australians Working in Singapore

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Abstract There is a significant gap in the research literature on Australians working in Singapore. The aim of this paper is to make a contribution to the research evidence base by presenting the results of a survey of the Australian expatriate community working in Singapore. A mixed methods approach using both quantitative and qualitative data revealed that the average Australian working in Singapore was well educated and generally worked as a professional or in senior management position. Most saw that working in Singapore was a significant career opportunity, but also saw that one of the main benefits of working in Singapore was the low tax rate in Singapore compared to Australia. Many saw that building personal and professional relationships while they were in Asia was important to investment for Australia's connection with Asia in the future. The study provides recommendations for future policy and practice.

14.1   Introduction

The study addresses an information gap in the Australian expatriate community, and in particular, Australians working in Singapore. It considers both Australians who live and work in Singapore but return to Australia regularly and still regard Australia as home, and Australians who have emigrated to Singapore and now consider Singapore home. Demographic information regarding the Australian expatriate community in Singapore, including their work profiles has not been readily available from any known websites including the Ministry of Manpower Singapore, the Australian High Commission Singapore or from the Department of Immigration and Citizenship, Australia. Thus, the study sought to understand several key aspects of the Australian migrant community working in Singapore including their demographic and work profiles, remuneration packages and future aspirations. The study provides the background and context for the study, that is, Australian emigration to Singapore. A methods section then describes how the data was collected, followed by the study's findings and discussion. Recommendations arising from the research are offered followed by a brief conclusion.

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14.2   Background

While Australia may be better known as a country of immigration, it is also a country whose population has increasingly sought migration. Escalating globalization, along with advances in travel, technology and communications have generated increasing opportunities for Australians to live and work overseas, sometimes permanently. This section discusses the Australian global labour pool and its migration from Australia, increases in migration to Singapore and the future aspirations of Australian expatriates.

14.2.1   *Migration From Australia*

An increasing number of Australians are becoming "global commuters" due to the growing "internationalisation of labour markets and global demand for skilled workers". In 1979–80, 6, 986 Australian-born emigrants left Australia, but by 2008–09, this number had increased six fold to 41,249. Australian-born migrant destinations are also changing. The Department of Immigration and Citizenship distinguishes between Australian-born emigrants and overseas-born Australian emigrants as overseas-born Australian emigrants are more likely to return to their country of birth than Australian-born emigrants. Although most Australian-born emigrants (45.6 %) departed for the United Kingdom, the United States or New Zealand in 2010–11, an increasing number left to live and work in Asia. In 2010–11 alone, 9.4 % of Australian-born emigrants departed for Singapore. Australia's current emphasis on engaging more closely with Asia may see further increases in Australian emigration to Asia [1], [2].

According to the Department of Immigration and Citizenship, data collected in 2010–11 indicated that most Australians (63.8 %), departing permanently gained employment prior to leaving. This concurs with a study by Hugo, Rudd and Harris, which found that one of the more common reasons for Australians to migrate overseas, was for employment. Most Australian-born migrants are highly skilled or are professionals. The Australian Bureau of Statistics [3] states that Australian expatriates are among the most highly educated among OECD expatriate populations with 44 % of expatriates having a high level of education. Of the data more recently collected in 2010–11, 23,892 or 42.34 % of those migrating were professionals, while 11,825 or 21 % were managers. A further 33.9 % (including children) stated on their passenger cards that they were not in the labour force nor were they employed. Thus two thirds of Australians leaving permanently held highly skilled, professional or managerial occupations. The reasons more often given by Australians for migrating to another country relate to employment. Hugo, Rudd and Harris in discussing an emigration survey conducted in 2002, state that 43.0 % of people left Australia because of 'better employment opportunities', 36.0 % because of 'professional development' and 32.0 % left because of a 'higher income'.

14.2.2   Immigration to Singapore

While there is no publically available data on the exact number of foreigners in Singapore, including Australians, Wong indicates, "foreigners constitute 15 % of the population and over 20 % of the labor force in Singapore". The foreigner labour force increased fourfold from 1970 to 1999 and further doubled from 686,200 in 2001 to 1,157,000 in 2011. Included in the foreign labour force are both skilled and unskilled workers. Of the foreign labour force, Yeoh and Lin state that skilled workers and professionals account for 22.0 % (approximately 240,000) of Singapore's total non-resident workforce. According to the Ministry of Manpower, the professional and skilled foreign labour force is part of 7,000 multinational companies operating in Singapore. Singapore's goal to become a financial hub and a major player in the globalized world requires that a highly skilled global, labour force be attracted to working and living in Singapore. As the Ministry of Manpower promote, "global citizens will also feel right at home forging a career in Singapore".

Similar to the selective nature of migration worldwide, Singapore's labour force has been highly selected and regulated and includes 'foreign talent', drawn from Asia and Western developed countries including Australia. Kaur argues, "the current immigration framework has been progressively modified to attract those with higher qualifications, as well as business people and entrepreneurs". Singapore promotes itself to a potential, highly qualified migrant population as having a safe living environment, a low tax rate, and a thriving business hub where highly skilled workers, businesses and corporations can progress.

14.2.3   Future Aspirations of Australian Expatriates

Hugo, Rudd and Harris conducted a study that considered Australia's diaspora or migrant population. According to their study, although most of Australia's diaspora leave for career related opportunities, many, particularly younger Australians, consider Australia 'home'. However, while their study found that most indicated that they would return to Australia if they could secure a better job or higher salary, this motive decreased with age and when a partner was non-Australian. Almost 80.0 %) stated that overseas residency benefited their careers, families and lifestyle and also held benefits for Australia as well. The benefits for Australia included their promotion of "goodwill towards Australia" and their "skills" and "contacts" that could be taken back to Australia when they returned. This may be significant in forging future relations between Australia and Asia in the 'Asian Century'.

14.3   Data Collection Method

To effectively examine the views and profiles of the Australian expatriate population working in Singapore, the study adopted a mixed methods approach using quantitative and qualitative data. Data collection was through an online survey

developed jointly by the Australian Chamber of Commerce Singapore (AustCham) and James Cook University Australia (JCUA). Ethics Approval was sought from JCUA and received in March 2011; the online survey was launched in May 2011 and concluded in October 2011. The survey offered participations information about the project and required them to give their informed consent before commencing the survey. Participants (Australians working in Singapore) were then asked to respond to thirty-four (34) closed-end questions but were given the opportunity to add additional comments in open-ended questions. Key questions focused on the demographic profiles of Australians working in Singapore, their professional and/or business profiles, how well they are repatriated in Singapore and their future aspirations. The survey was emailed to AustCham members and other organizations in Singapore such as the Australian International School Singapore, United World College of South East Asia, the Australian and New Zealand Association (ANZA), Australian universities and other organizations where Australians working in Singapore might be recruited for the survey. Assurances were given to participants that their responses would be treated with strict confidence and individual responses could not be identified. The results of the survey, when completed, showed that 468 Australians had responded. Data analysis of the survey focused on the demographic and work profiles of Australians working in Singapore. Descriptive statistics and graphical illustrations were used in the analysis. Analysis of qualitative data, derived from open-ended survey questions, included coding according to themes constructed from the discourses upon which the participants drew and from the literature. The findings from the survey are presented in next section.

14.4 Findings and Discussion

The survey considered the demographic profiles, work profiles, remuneration packages and future aspirations of Australians working in Singapore. Each will be discussed in turn.

14.4.1 Demographic Profiles of Australians Working in Singapore

Of the Australians working in Singapore who were surveyed, most (42.2 %) were aged 40–49 years. The next most common age groups were 30–39 years (27.0 %) and 50–59 years (20.6 %). The survey showed that Singapore attracts a younger group of working Australians; almost three of four Australians working in Singapore (74.7 %) were aged 49 years or less. A trend for younger Australians to work in Singapore concurs with Hugo, Rudd and Harris' findings that Australian expatriates are generally younger. Many participants indicated that they hoped return to Australia for retirement. On the whole, more male Australians work in Singapore (59.6 %) than

female Australians (40.4 %), although in Australians aged 39 years or less the ratio of working men to women was almost equal. However, the ratio of men to women increased significantly with age. Among the 60 + age group, 83.3 % were men compared to only 16.7 % of women. The majority of working Australians surveyed were married (72.0 %), 15.6 % said they were single and 12.4 % indicated that they were in a committed relationship. A higher percentage of women indicated that they were single (22.4 %) compared to men (11.3 %), and a higher percentage of women indicated that they were in a committed relationship (14.9 %) compared to men (10.9 %).

Most participants in the survey (45.6 %) indicated that their highest educational qualification was a bachelor degree and a further 26.2 % said that a master's degree was their highest educational qualification. A small number had either a professional doctorate (0.5 %) or a Doctor of Philosophy (3.9 %). Thus more than 3 out of 4 Australians working in Singapore had at least one university degree. Hugo, Rudd and Harris found that "emigration from Australia is unquestionably selective of the more highly educated, more skilled sections of the population. Over two-thirds of all Australia-born permanent departures and Australian resident long-term departures are managers, administrators, professionals and para-professionals". While Hugo, Rudd and Harris' findings are similar to the findings of the current study; findings from both studies are higher than those from the Australian Bureau of Statistics [3], which found that 44.0 % of Australian expatriates had a high level of education. Macgregor, Leigh, Madden and Tynan similarly found that 43.3 % of Australian emigrants were "tertiary educated". Gaur found in Singapore that the proportion of foreign workers in managerial, professional and technical occupations was about 40.0 % in 1999. The much higher rate of tertiary educated working Australian in the survey may be the result of Singapore's more recent preference for highly educated foreigners.

14.4.2   Professional and/or Business Profiles of Australians Working in Singapore

While two of every five Australians (40.8 %) had worked in Singapore for five or more years, most (59.2 %) had worked in Singapore for less than five years suggesting that many Australians, in an increasingly global world, come to Singapore to gain international experience and as a career stepping stone. For more than half (53.2 %), Singapore was not the first overseas country in which they had worked overseas, confirming Hugo, Rudd and Harris' claim that Australians are becoming "global commuters". Of those who had worked in overseas locations before Singapore, almost one in six (14.1 %) had worked in the United Kingdom. Other more popular work destinations before coming in Singapore included Hong Kong, the United States, Japan, China and Thailand.

Approximately half of Australians working in Singapore (50.3 %) had only one working contract since coming to Singapore. Of those who have had more than one

contract since coming to Singapore, 17.1 % had a contract with the same organiza-
tion. However, 18.3 % secured a contract with a different organization and 14.3 %
had contracts with several different organizations. Thus almost one third (32.6 %)
of Australians had secured work contracts with different companies in Singapore
indicating there may be a significant amount of 'company hopping' by Australians
working in Singapore.

More than half of Australians working in Singapore (53.0 %) said they renewed
a work contract in Singapore because they preferred to live in Singapore. Several
respondents indicated multiple reasons; 26.2 % said that they renewed a work contract
in Singapore because there was an improvement in salary, 17.3 % said it was because
they could not get similar work in Australia, 10.9 % said it was because there was an
improvement in bonuses, and 9.4 % said it was because there was an improvement in
working conditions. A further 26.7 % had other reasons for renewing a work contract
in Singapore such as the lower tax rate in Singapore compared to Australia.

14.4.3   Remuneration Packages of Australians Working in Singapore

While nearly half (45.3 %) earned between Singaporean $ 10,000–30,000, more than
1 in 8 Australians working in Singapore (12.9 %) said that they earned more than
Singaporean $ 50,000 per month. In considering almost half of Australians work-
ing in Singapore who were surveyed (48.0 %) earned in excess of Singaporean
$ 240,000 per year (approximately Australian $ 190,000). Hugo, Rudd and Harris
found that Australian expatriate *incomes above Australian $ 200,000 per year were
over-represented . . . in Asia (24.4 %)*. While nearly twice this many Australians work-
ing in Singapore earn close to Australian $ 200,000 or more, it may be a reflection of
an increase in salaries over almost 10 years. For most Australians working in Singa-
pore (45.5 %), salary packages included salary plus bonus plus benefits; for 19.1 %,
it included salary only; for 18.7 % it included salary plus benefits; for 11.9 % it in-
cluded salary plus bonus and for 1.3 % it included commission only. Another 3.5 % of
Australians working in Singapore said that their salary package included other items
such as directors or professional fees. Of the 64.2 % of Australians working in Singa-
pore who said they received some salary package benefits, most (83.2 %) indicated
that the main benefit was health insurance. Other salary package benefits included
accommodation allowance (53.8 %), relocation allowance (43.7 %), superannuation
(34.4 %), annual return flight/s home for self/spouse/family (31.9 %), children's ed-
ucation assistance (23.7 %), annual return flights to home country for self (19.7 %),
general utilities e.g. electricity and phone (14.3 %), club membership (11.5 %) and
home helper (0.7 %). A further 5.7 % said they received other benefits as well such
as a car, phone and entertainment allowances. For Australians working in Singapore
who receive bonuses, most (76.4) received between Singaporean $ 10,000–50,000
per year. However, 4.1 % said that they received more than Singaporean $ 500,000
in their last bonus.

14.4.4 Aspirations of Australians Working in Singapore

Most Australians working in Singapore agreed that one of the main benefits of coming to Singapore was the low tax rate (62.2 %). Almost the same percentage (62.0 %) saw that the international experience they gained in Singapore was a good stepping-stone in their career. Reference similarly found that one of the reasons that Australians gave for emigrating overseas was 'better employment opportunities (43.0 %), and professional development (36.0 %). A large percentage (58.4 %) also saw that one of the main benefits of coming to Singapore was the broader cultural experience for themselves and in some cases, their families. For many (45.2 %), the higher income in Singapore was also one of the main benefits of coming to Singapore. The shorter the time Australians had worked in Singapore, the more likely it was that they saw the international experience as a good stepping stone career-wise as being one of the main benefits. The longer Australians worked in Singapore, the more likely it was that they saw the low tax rate in Singapore as being one of the main benefits of living in Singapore. It is likely that those who saw working in Singapore as being a good stepping stone career-wise were also very career focused and continued up the career ladder elsewhere.

Most (65.5 %) Australians working in Singapore said that family living in Australia was the main reason they would most likely eventually return to Australia while 64.2 % said they would eventually like to return to Australia because of the 'Australian Lifestyle'. This concurs with Hugo, Rudd and Harris' findings of their study of Australian expatriates that *lifestyle and family become overwhelming reasons for returning to Australia*. Hugo, Rudd and Harris similarly found that most Australians eventually return home although the desire to return to Australia declines with age. Australian expatriates living in Asia were more likely to eventually return to Australia than those living in other places such as the United States or Canada.

14.5 Conclusion

This study has given some insights into Australians working in Singapore. Specifically the study has considered the demographic and work profiles, remuneration packages and future aspirations of this group of Australians. Findings of the study show that the typical Australian working in Singapore is well educated, holds a professional or high managerial position more often in the financial industry, is married, male and relatively younger (aged 40–49 years). More than half had at least one other overseas posting before coming to Singapore and saw that working in Singapore was a good stepping-stone career-wise. While the majority of Australians working in Singapore had a working contract with no fixed term, most renewed their contracts because they prefer to live in Singapore. Australians working in Singapore are generally well remunerated, with almost half receiving a salary package, which included salary plus bonus plus benefits. Although most indicated that they would prefer to continue working in Singapore because of the lower tax rate compared with

Australia, most aspire to returning to Australia to retire eventually. To further support Australians working in Singapore, as well as Australians in other overseas locations, it is recommended that a register of Australian expatriates be created; further research be undertaken to identify ways in which working expatriates and their families can be better supported while working overseas; and how barriers such as the current Australian tax rate might be re-evaluatedin an effort to attract this valuable group of Australians back to Australia.

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Chapter 15
Analysis of Key Factors to Develop an International Trade Policy of Thailand for Joining the Asean Economic Community (AEC)

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Abstract Thailand is planning to join the Asean Economic Community (AEC). With the goal to open the market to reduce or quit regulatory or various measures to control the trade, which it is barriers to services and investment between the members of the 10 ASEAN countries. Thailand, thus, needs to know her strengths and weaknesses completely in order to make policy adjustment for the next five years. Problems that may be caused by participating the AEC to Thailand such as the labor shortage, particularly workers from Burma who might be moving back to Myanmar, the exports of Thailand may lose a lot of volume due to the opening of the ASEAN countries together, and lose of market share in domestic form importing goods from ASEAN countries. Based on the concerns mentioned above, this study is aimed to find the key factors affecting economic growth of Thailand and to provide suggestions to the Thai government in international trade development. LISREL model will be used for examining the relationship among economic variables, such as labor, foreign investments, export and import volume, government spending, tariff rate, and the influence of specific variable effects on the economic growth of Thai's agriculture sector. Data for analysis are separating by the year (1997) of the Asian financial crisis in order to compare with the results in changes of international trade policy. The factors that significantly influence the growth of the Thai economy in each of the periods are expect to be identified from the LISREL results, which may help the Thai government making better decisions for negotiation under the AEC rules.

15.1 Introduction

As an open economy, Thailand has been increasingly dependent on international trade; according to the ratio of the value of international trade that this value consisting of exports and imports of gross domestic product (GDP). The national average

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increased from 38 % in 1957 to 69 % in the year 1996, which reflects the Thailand's economic dependency on economic world rather and foreign trade playing an important role in the economic system of Thailand at the end of the last century. Due to the Asian financial crisis in 1997, the foreign investors lacked confidence in Thailand's economy at the beginning of this century, especially the lack of confidence on foreign exchange rate of the baht. Thus, making attack on the baht value and economy growth of Thailand is declined which resulted in the development international trade policy of Thailand. The Thai government had decided to focus on trade liberalization under the World Trade Organization (WTO) and regional economic integration, including the integration of different sub-regions of the country have agreed to cooperate with neighboring countries.

Thailand is a member of the trade group shall be affect either directly or indirectly by the international business. In order to protect commercial interests, increase the bargaining power to negotiate and create economic strength to members, it is essential to understand the essence of economic integration. Actually, Thailand's exports constitute over 75 % of the country's GDP in 2011, compared to only 45 % prior to the 1997 crisis. Therefore, the development of trade policy of Thailand raises the question whether Thai government has been sufficiently and consistently assessed the impacts of pursuing greater economic integration in the future or not? This study aims to identify the key factors affecting economic growth of Thailand to participate in regional economic integration, the Asean Economic community (AEC), and to provide further suggestions to the Thai government in international trade policy development.

A LISREL (linear structure relationship) model will be use for examining the relationship among economic variables, such as labor, foreign investments, export and import volume, government spending, tariff rate, and the influence of specific variable effects on the economic growth of Thai's agriculture sector. Data for analysis are separating by the year (1997) of the Asian financial crisis in order to compare with the results in changes of international trade policy. The factors that significantly influence the growth of the Thai economy in each of the period are expect to be identified from the LISREL results, which may help the Thai government making better decisions for negotiation under the AEC rules.

15.2   Reviews

15.2.1   The Key Factors Determining Trade Policy

At the macroeconomic level, the export-led notion explains how Thailand relies on export earnings to boost its growth. At the sector level, in a dynamic setting, it can be observe that the growth of the traditional sectors facilitates the industrial development of the country [1]. Another extension is the treatment of socioeconomic groups. Based on the neoclassical trade theory, trade expansion is expecting to increase the demand for relatively abundant, lower-skilled labor and reduce wage disparities among groups of workers. In other words, growth in international trade can entail

beneficial effects for workers in developing countries. Kim and Viporn [2] presented model is more detailed and algebraically more complex, as it disaggregates the matrices of both final domestic and import demands by different income groups. Another extension is the treatment of socioeconomic groups. Economic classes are defining not only by income levels but also with other attributes, such as skill level and type of work. A growing number of empirical studies have used partial-equilibrium approaches to estimate the impact of international trade-as measured by import penetration, exchange rates, protection rates, trade reform, and export orientation-on wage dispersion in developing countries [3]. In order to gain a deeper understanding of the effect of policy changes such as the liberalization of foreign trade and foreign direct investment (FDI), an examination of individual firms, both local and foreign, could provide insightful findings [4]. Prapha [5] suggests that Thailand would like to be a so-called "rich" economy, but its productivity remains low. To address this issue, it will need more advanced technologies and better training for labor force. In addition, the strong Thai Baht offers an opportunity for Thailand to import the essential innovation that will boost the country's long-term competitiveness. Moreover, Sussangkarn [6], a TDRI Distinguished Fellow, argues that Thailand has historically been dependent on its export markets. A weak exchange rate, which is kinder on exports, has been give high priority in the past and is still give that priority now. The dependence on exports of Thailand was heightening following the affect of the Asian financial crisis in 1997.

15.2.2 International Trade Policy of Thailand Before 1997

The report of Ichikawa [7] indicated that the Thailand Board of Investments (BOI) provided tax incentives to promote foreign investment, which has been a similar attempt to make the whole kingdom function like an export promotion zone. Then, the Thai government divided the nation into three zones with different tax incentive to reduce the heavy concentration of industrial activity and set up an export-processing zone to create specific promotional locations. Because of the pro-industry policy as well as political and social stability, Thailand is experiencing a boom in foreign investment particularly from Japan and Taiwan. However, some implicit policy biases had against the agriculture sector such as an export tax on rice, caused agriculture fall far behind the other sectors. In contrast, despite rapid increases in productivity for manufacturing products, the Thai government has protected import -substitution-manufacturing products through a high import tax and regulation of the number companies in the same field; this keeps prices for these manufacturing goods high. There are no similar measures for agricultural products.

15.2.3 International Trade Policy of Thailand After 1997

Thailand learned from the 1997 financial crisis, which are, firstly, domestic financial systems should has been liberalized before opening up to foreign capital and strict

bank regulation and supervision are necessary for financial liberalization to prevent the capital influx and investment in unproductive sectors. Secondly, the flexibility of exchange rate system is required as free capital movement and pegged exchange rate are a dangerous combination. Moreover, to rely on foreign capital, FDI is better than portfolio investment and loans since free capital movement, especially short-term, is difficult to control. Finally yet importantly, good governance in both public and private sectors is important. The corruption in the public sector and the irregularities in business practices lead to lack of foreign investors' confidence and create efficient loss [8].

15.3 Empirical Study

15.3.1 Appling the Linear Structure Relationship Model (LISREL) for Key Trade Factor Analysis

The study will apply the linear structure relationship model to formulate and analyze the effects of the critical factors on the performance of Thailand's trade policy. Because of The LISREL covers a wide range of models useful in the social and behavioral sciences, including confirmatory factor analysis, path analysis, econometric model for time series data, recursive and non-recursive models for cross-sectional and longitudinal data, and covariance structure models [9]. The structural equation model based on procedures have an advantage over those first-generation techniques such as principal components analysis, factor analysis, discriminate analysis, or multiple regressions because of the greater flexibility that a researcher has for the interplay between theory and data [10]. The LISREL model has several dominant features such as firstly, it allows for measurement of error in the variables. Therefore, it has preliminary agreement is less and it is possible that the data will be based on assumptions rather than general statistics analysis. Secondly, the LISREL model will provide information about the direct and indirect effects, the influence between dependent variable and independent variables, and other variables in the model. Thirdly, the LISREL can predict or evaluate the relationships among multiple variables within one single model, so lead to less error in forecasting. The last reason is the LISREL model consonant with empirical, which can provide information that will lead to generalization phenomenon and to create new important knowledge.

15.3.2 The Expected Sign

Before the Asian finance crisis 1997, expected sign effect between international trade policy and economic growth rate had a negative effect (H5a), wherewith Thailand has the highest wall tariff rate; it is influencing the foreign direct investment in Thailand. During this period, as begin the development of advanced technology in

agriculture sector, Thailand has a lot to inject capital to support this development. Household sector had a positive effect on international trade policy and economic growth (H1a&H1b) because the consumption expenditure had a positive effect on international trade policy according to Jörg Mayer [11] said that domestic demand could also expand other relatively large and rapidly growing developing countries and household consumption as a driver of global growth. Business sector had a negative effect on international trade policy and economic growth (H2a&H2b) because of in the business sector consists exchange rate, tariff rate, import, inflation rate and labor force which that the observed almost had a negative effect on observed variable of international trade policy. For example, Schuh [12] was the first to argue that the overvalued dollar caused the decline in agricultural exports due to their relative expense in other countries and argue that the over valuation of the exchange rate had a large negative effect on agricultural exports. The business sector likely the cost of developing country, so expected a negative effect on economic growth. Government sector had a positive effect on international trade policy and economic growth (H3a&H3b) because of the level of capital formation variations in the government sector is likely to influence FDI and economic growth as well. Neoclassical growth model postulates that developing economies that have a lower initial level of capital stock tend to have a higher marginal rate of returns (productivity) and growth rates if adequate capital stock is injected [13]. Supported this expected positive effect on economic growth by Soi [14], found that final government consumption had a positive effect on GDP growth rate. Foreign sector had a negative effect on international trade policy and economic growth (H4a&H4b) wherewith before Asian financial crisis 1997 had high tariff rate and the international trade policy would to protect domestic trade especially the product of the agriculture sector (Fig. 15.1).

After the Asian finance crisis 1997, expected sign effect between international trade policy and economic growth rate had a negative effect (H5a) wherewith Thailand has still developed conduct mega—project in infrastructure to support the openness in Asean market. For this mega—project, it is the high cost of the drive to the economic growth in Thailand, the return in this period still doesn't cover the cost of investment. Household sector had a positive effect on international trade policy and economic growth (H1a&H1b) that similar effect in before Asian finance crisis 1997. The business sector and government sector had a positive effect on international trade policy (H2a&H3a). In after Asian financial crisis 1997, the Thailand has strategies to join the Trade FTAs with several groups to reduce tariff rates of major import and exports of Thailand. As the expected sign of foreign sector were positive effects of international trade policy (H4a). The linkage between FDI variable in foreign sector, trade openness, and economic growth ought to be positive. Not only this, this nexus should be co-integrated in the long-run [13]. But the foreign sector had impact from the high competitiveness of Asian countries to reduce of tariff rate which market share of the export market of Thailand has less than the last time. Therefore, the expected significant effect on economic growth had a negative (H4b). The government sector had a negative effect on international trade policy and economic growth (H3a&H3b) because of Thai government have to use many the
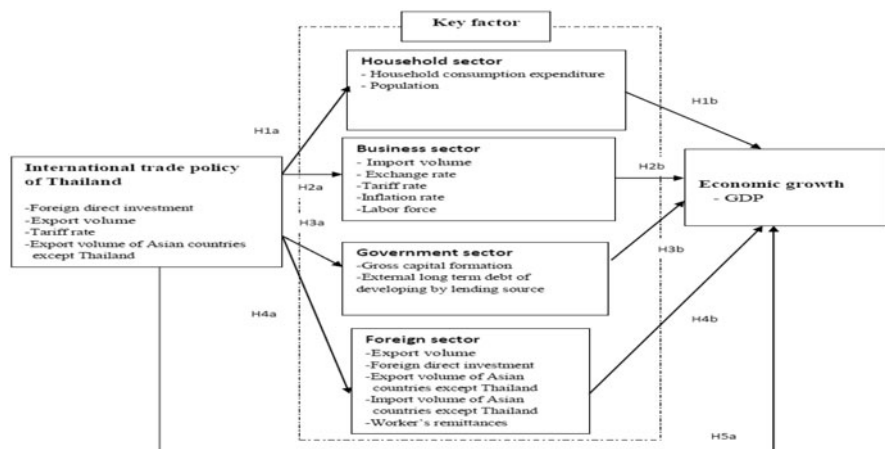
Fig. 15.1 Framework of hypothesis Thailand's trade policy effects

external long—term debt for development about infrastructure to support the transportation agricultures product each region of Thailand such as double track railway. A higher level of Thailand's public debt had a negative effect on economic growth (Fig. 15.1).

15.3.3 Data Sources

The dataset of this study comprises 448 observations, which include 32 annual observations (1980–2011) for fourteen economic variables represent the key factors affecting economic growth of Thailand. Because of data for analysis in this study has small size, it might cause problems about sample size effect and not be identified variable of the model. This study used the generated data method to decreased sample size effect by means of added data to fifteen times of amount of parameter. The this method used the function random data 0 to 1, defined scale to be equal to the desired volume, and determined probability of random data equal 1/number of annual. Therefore, the dataset of this study comprises 2,940 observations for fourteen economic parameters.

   The observed variable data between 1980–2011 were sourced from World Bank's World Development Indicators database (WDI) and the United National Conference on Trade and Development (UNCTAD) statistics. The details are as follows:

   The agricultural raw material export, agricultural raw material import data, agriculture labor force and the tariff data were source from The World Integrated Trade Solution (WITS) database.

   The variable is measured as the weighted average tariff rate. Exchange rate data were source from WDI (2005). The exchange rate is measured as the period average

exchange rate—the number of local currency units that can be traded for one US dollar.

The household consumption expenditure, gross capital formation, general government final consumption expenditure, the external long-term debt of developing economies by lending source, migrants' remittances, and inflation rate were sourced from the UNCTAD'S statistics.

The FDI stock levels as obtained from OECD Statistics and Printed issues of UNCTAD's World Investment Report (WIR).

The GDP data measure gross domestic product is endogenous talent variable data between 1980–2011 as sourced from the World Bank's World Development Indicators (WDI 2005).

15.4   Results

15.4.1   Finding Key Factor in Before Asian Financial Crisis 1997

Before the Asian financial crisis, evaluating the fit of the entire model has a chi-Square = 27.77, degree of freedom = 24, probability level = 0.26982, and the root mean square error of approximation (RMSEA) = 0.026. The chi-square is not significant at the 0.05 level and RMSEA value under 0.05, It means the model fit is good. Because of the model has condition number indicates severe multicollinearity, so need to cut the observed variable for the model good fit. Observed variables were eliminated from the study of this period is the import volume of Asian countries except Thailand, worker remittance, external long-term debt, and population. The AGFI tends to increase with sample size. As with the GFI, values for the AGFI also range between 0–1 and it is generally accepted that values of 0.90 or greater indicate and value for the SRMR less than 0.05 with well fit model [15]. Thus, the null hypothesis of this model are accepted and directional hypothesis for test relationship between talent variable and observed variable are accepted in H2a, H4a, H4b, and H5a reject in H1a, H3a, H1b, H2b, and H3b (Fig. 15.2).

The correlation between international policies of Thailand, economic growth and a key factor have concluded as follows, the business sector and foreign sector had correlated significantly in a negative with international trade policy. The key factor had a direct effect on business sector was tariff rate and labor force, which the both key factors had a negative effect and positive effect respectively. The export volume of Asian countries except Thailand had a positive effect on foreign sector. However, only the foreign sector had correlated significantly in a negative with economic growth that accord to the hypothesis of expected sign effect between variable in basic concept. Caused form has only exported volume of Asian countries except Thailand had direct effect significant that another variable not significant. So the key factor had indirect effect on economic growth was an export volume of Asian countries except Thailand. Wherewith the foreign direct investment had a direct effect to international trade policy, including labor force and tariff rate had an indirect effect
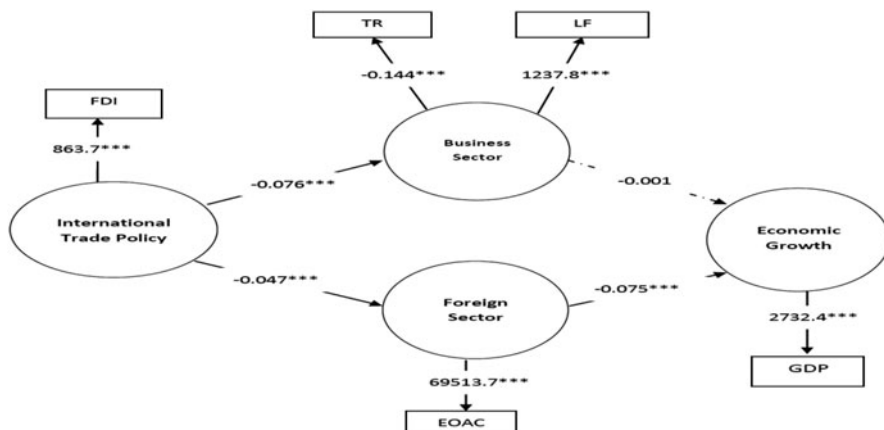
Chi − Square= 47.60, df = 45, p–value = 0.3675, and RMSEA = 0.016.

Fig. 15.2 The result of LISREL model before Asian financial crisis

on international trade policy, resulted in the international trade policy had a negative effect on economic growth. This results according to the hypothesis of expected sign effect.

15.4.2 Finding Key Factor in After Asian Financial Crisis 1997

After the Asian financial crisis, evaluating the fit of the entire model has a chi-Square $= 47.60$, degree of freedom $= 45$, probability level $= 0.3675$, and the root mean square error of approximation (RMSEA) $= 0.016$. The chi-square is not significant at the 0.05 level and RMSEA value under 0.05, It means the model fit is good. The model of this period has a same problem with before the Asian financial crisis, the model has two observed variable were eliminating is the import volume of Asian countries except Thailand and population. The AGFI has a value greater than 0.90 indicate and value for the SRMR less than 0.05 with good fitness model. Thus, the null hypothesis of this model are accepted and directional hypothesis for test relationship between talent variable and observed variable are accepted in H3a, H4a, H4b, and H5a reject in H1a, H3a, H1b, H2b, and H3b (Fig. 15.3). The correlations between a key factor and international policy of Thailand have concluded as follows, the foreign sector had correlated significantly in a positive that agrees with the hypothesis of expected sign effect in basic concept. The government sector had correlated significantly in a negative with international trade policy. Because of the key factor had a direct effect on foreign sector were exported volume of Asian countries except Thailand and worker remittance, which had positive effect and negative effect respectively. The key factor had a direct effect on government sector was external long-term debt and gross capital formation, which the both key factors had a negative effect on the
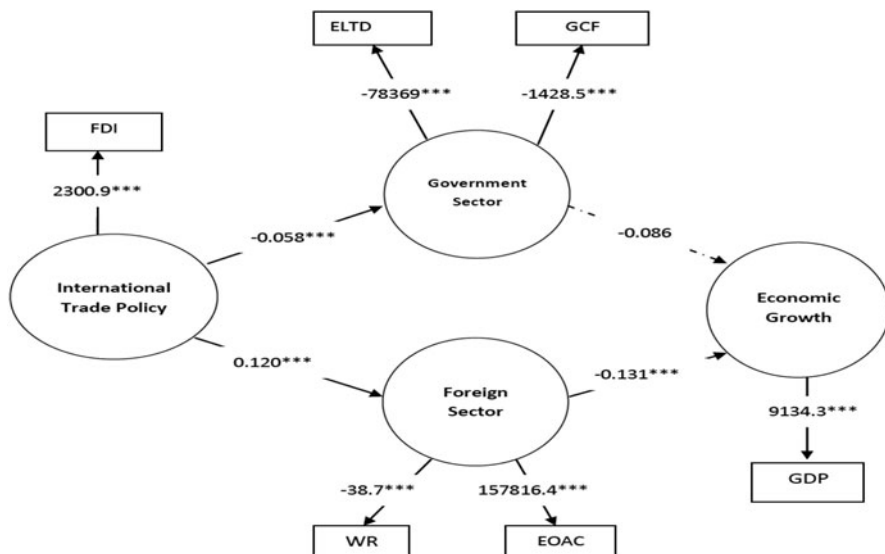
Chi − Square= 47.60, df = 45, p-value = 0.3675, RMSEA = 0.016.

Fig. 15.3 The result of LISREL model after Asian financial crisis

government sector. During this period, has only foreign sector correlated significantly in a negative with economic growth, which not accord to the hypothesis of expected sign effect in basic concept, due to the same reason at before the Asian financial crisis. Thus the key factor had indirect effect on economic growth was an export volume of Asian countries except, worker remittance, and FDI which it had a direct positive effect on international trade policy.

15.5   Conclusion

The correlation between key factor and international trade policy estimate from the LISREL model has a different key factor in before and after the Asian financial crisis 1997, which key factor different in the business sector, foreign sector, and government sector. The international trade policy has correlation with worker remittance in after an Asian financial crisis period but in before the Asian financial crisis period has not. The tariff rate not significantly in after the Asian financial crisis, because of has negotiated free trade both within and outside the Asian region after an Asian financial crisis period. In addition, provide to foreign direct investment have increased coefficient value in this period. Interesting issue found in the result is the worker remittances are having correlation to international trade policy in after an Asian financial crisis period. The causes of the worker go to work aboard increased because of economies in Thailand declined from the Asian financial crisis. The labor force

had an indirect effect on international trade policy in the both periods that according to the actual condition of agriculture sector in Thailand, which the labor intensive has influence to this sector. Therefore, the correlation between the international trade policy and a key factor from the estimate of LISREL model could be reflect to Thailand's economic situation in before and after Asian financial crisis periods. Thus, finding the key factor from relationship with the international trade policy, it is a suitable factor for estimate effect on economic growth of Thailand. The key factor has a correlation and indirect effects on economic growth in before the Asian financial crisis were labor force, tariff rate, FDI, export volume of Asian countries. The key factor has a correlation and indirect effects on economic growth in after the Asian financial crisis period were worker remittance, FDI, export volume of Asian countries, external long—term debt, and gross capital formation. Form the result found that the effect of the key factor in economic growth, it is reflected in the change in international trade policy of Thailand had an effect on economic growth. The development of international trade policy of Thailand, the government should be focused on foreign direct investment and market share in Asian countries, which these variable has an influence on international trade policy and economic growth. Thus, the government should develop the international trade policy for suitable for foreign direct investment. For the tariff rate, the Thai government should consider to the tariff wall each of product in agriculture sector before negotiation under the AEC rules, which it could protect loss of volume of market share in the Asian market.

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Chapter 16
Antecedent Analysis of Indonesia's Creative City: The Case of Bandung

Adiwan Aritenang

Abstract Decentralisation in Indonesia has brought different impacts to regions following its development path dependence and institutional arrangements. This study aims to understand the role of both path dependence and institutional arrangements in the process of developing a creative city. This paper studies the city of Bandung development to unfold the system that supports its role as a creative city. The paper found that path dependency as historically centre of creative studies and emerging creative class has accelerate the city's new economic activities.

16.1 Introduction

The rise of local economic development begins with Indonesia's politics that shifted from centralized regime to democratic reform between 1997 and 2000 [1]. There are various theories and concepts of developing creative cities and other supporting theories on urban and regional planning, institutions and economic geography. However, these literatures originate from the western and advance countries. Thus, it is the interest of this paper to study an empirical case of creative city in a developing country.

The research found three important results first, institutional and political change has introduced new administration on the city's economic development. Second, the establishment of numerous universities provide both research and creative-class society. Third, the role of geographic proximity to market that accelerates trade and actor networks.

The following section overviews the existing literature in the development of CCI in cities. The next sections discuss the lineage of creative city and analysis of the elements of Bandung as a creative city. The last subsection draws the paper's conclusion and policy implications.

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16.2   Literature Review: Decentralisation and Creative City

The end of centralized regime begins with the industrial deregulation of post-oil boom economy and financial crisis. While the industrial deregulation introduced new private entrepreneurships, industrial openness and trade liberalization, the financial crisis causes high inflation and violent social movements. The result of combination of these social rearrangements ended the centralized regime and opens democratization of regional autonomy.

However, the implementation of decentralization has been link to increase regional disparities [2]. As devolution gives authority to district governments who are lack of talent and experience bureaucrats, local economic development might be depend on the local government's capacities [3]. Moreover, divergent economic structure and activities might increase economic disparities among regions. This is particularly concerning in the fiscal administration as districts only have authorities on limited number of taxes and levies. On the other hand, as globalization progressed, economic growth engine shifted from manufacturing to knowledge and creative-based economy. This new economic development has been widely investigated the relationship and importance of cultural economy and human creativity [4] and [5]. Overall, it can be summarised conclude that the contribution of CCI can be seen by four models, which are the welfare economy, competitive, growth and innovation models [6].

Institutions and path dependence play important role in the development of city as a centre of CCI. Studies of CCI emphasises endogenous development that recognized the local endowments and institutions [7], [8], [9], [10], [11]. The endogenous growth model emphasises the role of regional policy by promoting localities that acknowledges differences in local endowments and development policies. Thus, the CCI contribute significantly to regional development and this depends on regional potentials. The creativity and culture notion has moved towards the centre of urban policy literature following the emergence interest in "creative cities" and "urban generation through art and culture" [12]. The basis for this type of city development is creativity on artistic and technological creativity. The literature of creative city can be analysed through three critical elements that emphasis the place, production system, and networks of stakeholders [11].

16.3   The Lineage and Institutional Reproduction of Creative City

Historical Overview   Since the Dutch colonial period, Bandung has strong link and economic dependence with Jakarta. In 1888, the first railroad between Bandung and Jakarta (then it was called "Batavia") was built to link both cities. This road development has boosted economic activities in Bandung due to the proximate distance. Furthermore, the city's elevated landscape attracts the European as holiday destination and became an exclusive resort area for plantation owners and business people from Batavia. This introduces the first wave of cultural industry in the city with the

European lifestyle cafes, restaurants, shops, and art-deco hotels. There were also large ballrooms and theatres that made Bandung named as "Paris van Java" [13].

In the 1980s to 2000s, economic growth forces Jakarta citizen to widen consumption activities. Bandung began to attract Jakarta citizen with local brand foods that become must-visit locations such as Yogurt at *Cisangkuy* Street and *Kartika Sari*, and fashion shops such as Jeans clusters on *Cihampelas* street, factory outlets and distribution outlets (*distro*) locations in the city centre. In the late of 2000s, following the political and institutional shift of decentralisation, the emergence of governance and openness on networks, a new wave of cultural movement raise with the collaboration of artist, local government and international agencies such as the British Council. These actors actively promote CCI that relies on the emergence of technology and highly skilled creative graduates, which established the notion "Bandung creative city". This shift certainly lays the future path for Bandung as the creative city in Indonesia.

Decentralisation of administrative and political change Following the financial crisis in 1997 and the fall of the New Order regime, Indonesia begins the decentralization political period. Devolution has bought the local governments to develop their respective regions local and knowledge based. The role of governance is an important factor in the development of creative industries. Population and economic activities are both spiky that is concentrated only in several regions. These regions have ecosystems of leading edge universities, high power companies, flexible labor markets, and attained to the demand of commercial innovation [14].

These conditions are slightly visible on the case of Bandung city. The rise of creative class of highly educated and creative people in Bandung is clearly shown as agents of change that replace and supports local governments as the engine of local development. The creative class of Bandung fits with the characteristic that Florida described which are: their preference of location choice is rich in cultural diversity, enjoy appealing amenities, and comprising new systems for technological creativity and entrepreneurship [5]. This is seen at the *Helar Festival*, a creative industry festival, initiated by the Bandung Creative City Forum (BCCF) that attempts to integrate 15 creative industry actors and business within the West Java province.

16.4 The Lineage and Institutional Reproduction of Creative City

The "Jakarta Effects" Since its early days in the colonial period, Bandung has been a gateway for the westerner from Jakarta. The distance between both cities is approximately 123 km (76 miles) with a travel time less than 2 hours by road. There are several advantages that Bandung has with its distance proximity with Jakarta. First, Jakarta's wealthier and populated citizen means abundant consumer for Bandung's CCI. Since the operation of highroad between Jakarta and Bandung in 2004, the number of Jakarta vehicles and people has overwhelmed the Bandung city

every weekend. Whilst in the city, visitors from Jakarta are attracted to Bandung's CCI such as local foods and fashion outlets. A specialize community also attracted to music activities, performing arts, and art galleries that are spread across the city.

Second, Bandung has been the location for pilot projects of central government's research and development (R&D) activities. The proximate distance enables central governments R&D agencies, which based in Jakarta, to operate the activities nearby. Third, the city also enjoys an intensive knowledge and network exchange from Jakarta's metropolitan society. This society enables higher level of creative activities with the existence of western-import lifestyle but with local adaptation such as steak house restaurants, music concerts, and mixed-use café-bookshops.

The Production System of Creative Industry This section provides an example the creative industry production system using the fashion industry as an illustration. The study on *Suci* and *Binong Jati* area shows the difference of development of specific industry [15]. The study shows that that *Suci* area, which since 1982 has been famous for T-shirt production, is produce by order, not produces for business commodity. However, several big productions start to design, produce, and selling their unique T shirts and related items, such as the C59 production. The area became the birthplace of the Distribution outlets (distro) concept that relates fashion and music indie labels. *These distro* places can be seen as a physical hub for music communities for information on music and music related activities such as concerts, rare music products and recording [13].

As a result, the distro reflects a high producer-consumer relationship with a medium-high variation of products. On the other hand, Binong Jati area is concentrated with knitwear fashion homemade producers. The nature of the production system enables local households to produce thee without tight producer-consumer relationship such as found in the Suci area. The area is low quality of infrastructure, highly populated and low qualities of spatial settlements. Despite these conditions, the products are export across the country and abroad.

The CCI Networks in Bandung Actor networks have been widely acknowledged as an important factor in the CCI. In Bandung, networks among CCI actors are in presence and have contributed significantly to the growth of the industry. The Bandung Institute of Technology (ITB) has been known as the initiator of CCI in Bandung. For instance, ITB's Faculty of Arts and Design since 1972 has held the art market (*pasar seni*) for almost every five years, which includes art and cultural product exhibition, music and street dance performances, and culinary[1]. Hence, the market has been routinely held long before the BCCF and creative city notion introduced in the city. The city and art society has been fortunate by the long presence of the faculty until now. The faculty also has the most complete and integrates courses and degree on CCI. Another contribution of ITB is the creation of Artepolis, a committee specifically formed to held international conference and design competition, under the architecture program[2].

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[1] Kompas Newspaper, Transaksi Pasar Seni ITB Rp 4 Miliar, June 8th 2010, Accessed May 30th 2013.

[2] http://www.arte-polis.info.

The BCCF is a community forum consisted of representatives of various creative industry communities including traditional arts, clothing and fashion, music and visual arts, urban enthusiast, and urban heritage society[3]. Furthermore, the forum has also attracted non-*artisan* actors to support their activities such as local and national journalist, intellectual property lawyers, and urban planners. The forum becomes a hub for creative and cultural communication among the actors. There are almost weekly intellectual discussions and shows programs in the forum that cover debates on culture, education, gender violence, and sociology impact of nuclear development.

Finally, referring to present European-style creative cities, networks can be identified through the psychical presence of cultural and arts centre. Creative cities have large sum of funding for the creation of such cultural and arts centres. For example, the Guggenheim Museum in Bilbao (Spain), Tate Arts gallery in London (UK) and Kanazawa Citizen's Art Centre in Kyoto (Japan) were built specifically as the landmark of creative cities. Furthermore, in the UK, lower tier cities also have followed this landscape development such as Tuner Contemporary gallery at Margate and Creative Quarter at Folkestone. This physical modern, specific-purpose built cultural and arts centre symbol is absence in Bandung. However, if one look closer, the cultural and creative symbol is spread across the city such as Sasana Budaya Ganesha (for music concerts, indoor art exhibitions), *Gedung Sate* Park (helarfest, food bazaar, and traditional market), and numerous art galleries. The lack of budget and absence of such CCI landmark can be replaced by traditional spaces in the city, which successfully supports Bandung as the hub for cultural and creative economy.

16.5   Research Conclusion

Devolution has forced local government to shift administration and political agenda from government to governance that incorporates local stakeholders including civic societies, universities, and core to the creative industry, the artisans' community. The national political shift to devolution has empowered local endowments and embedded local institutions to emphasis development according to local path dependence in the context of CCI in Bandung. Furthermore, while Jakarta provides market and hub of technological sources, the presence of universities and higher education with CC courses also has provides the city with a pool of creative and highly skill cultural young people. These young people become the generator of CCI through their unique networks and art competencies, and perfectly fit with the creative class characteristics as proposed by [10]. This study also has highlights the network-define place making that replaces symbolic cultural and arts landmark, and tourism attraction, as found by [16]. Overall, the combination of cultural traditional activities and external roles of devolution, universities, and distance proximity to Jakarta has accelerated the development of CCI

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[3] Website and information regarding the actors of Bandung creative city is available at http://commonroom.info.

Considering the current condition of CCI in Bandung, there are two ways to optimize the momentum. First, the local governments should be more available and adjust to the community's networking characteristics. The shift of local government mindset on their position in the city and roles in the network will increase their capacities and capabilities in local CCI development. Second, the city should also intensify the role of external networks such as the British Council and Ministry of Trade. Both institutions have international and national experiences, agenda and policies that the city could gain benefit. Despite CCI in Bandung are develop naturally from embedded cultural activities from past period, the presence of external forces and path dependence has transform the industry and city to a national and global recognized creative hub. Hence, development concept of CCI in Bandung should be carefully examined to ensure the industry's and city's sustainability in the future.

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Chapter 17
Work-Life Interventions: A Review on Balance, Harmony, and Creativity as an Indicator of Policy Effectiveness

Ong He Lu Calvin and Senthu Jeyaraj

Abstract The purpose of this article is to examine the literature streams relevant to the constructs of work-life balance and work-life harmony, and to explore the current approaches in measuring the efficacy of work-life initiatives in organizations. Conceptual differences between work-life balance and work-life harmony were found and based on knowledge gaps identified within the literature, a cognitive dissonance approach to quantify the differences was proposed. Second, the review indicates there is a lack of evidence demonstrating the strategic value of work-life initiatives in organizations. Hence, an approach adopting creative work performance as a measure of the efficacy of work-life initiatives is suggested. Implications addressing these research gaps are discussed.

17.1 Introduction

Employees in contemporary societies are constantly faced with challenges associated with conflicts between work and life roles. Studies have found that work-life issues impact everyone irrespective of individual demographics, social economic status, or family structure. In addition, stress resulting from work-life conflicts affect employees' general well-being, and impedes individual job performance. For these reasons, cumulative interest in the nexus between work and life has generated substantial attention to approaches directed at attaining congruence between work and life in the literature. In addition, a growing base of research suggests that work-life stressors, when not adequately dealt with, leads to negative organizational outcomes. In response, organizations invest significant amount of resources to implement work-life

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initiatives targeted at alleviating work-life stressors. However, despite the associated costs, measures of the efficacy of work-life initiatives have rarely been aligned with key business strategies of contemporary organizations.

Hence, the purpose of this review is twofold. First, the paper aims to examine the literature streams relevant to two work-life approaches, work-life balance (WLB) and work-life harmony (WLH). A cognitive dissonance approach to corroborate evidence of differences between the constructs will be considered based on the identification of knowledge gaps in the literature. Second, a new measure—based on creative work performance—that sheds light on the relationship between key business strategies with work-life initiatives is proposed.

17.2 Defining Balance and Harmony

In the conceptualization of WLB and WLH, it is important to note that both constructs share several similarities that expand and shape our understanding of the work-life interface. First, the dimensions of work and life assume a reciprocal bidirectional cross-domain influence where experiences in one domain can positively or negatively affect the outcomes in the other domain. Second, the interface between work and life is dynamic and complex and includes affective, social, and behavioral dimensions. Third, an understanding of two related work-life constructs—work-life conflict and work-life enrichment—is essential in conceptualizing balance and harmony. Work-life conflict occurs when demands and responsibilities from work and life domains are mutually incompatible resulting in a form of inter-role conflict. In contrast, work-life enrichment arises when experiences in one role supplement the functioning of the other role.

17.2.1 Definition of Work-Life Balance in the Literature

Traditional definitions view WLB as the absence of conflict between work and life domains or the frequency and intensity in which work interferes with family and vice versa. For example, Frone proposed that WLB is achieved when there is minimum conflict between work and family. He further suggested that conflict represents only a single component of WLB and included a second component, *work-life enrichment,* in his approach. Building upon the notion of bi-directionality of work and life, and the components of conflict and enrichment, Frone proposed a model of balance based on the type of interaction (enrichment versus conflict) and direction of influence (work to family versus family to work). He contends that balance ensues when low levels of inter-role conflict and high levels of inter-role enrichment are present.

Diverging from the traditional views, contemporary schools of thought have emerged in the approach of WLB. For instance, Clark proposed a new theory of WLB known as the *work-family border theory*. Central to this theory is the view work and life are distinct domains, each with its own borders defining where domain-specific behaviors begin or end. In this view, people are seen as daily border-crossers,

transitioning between both spheres. Therefore, work-family border theory is a theory, which explains how individuals manage and negotiate between the domains of work and life in order to attain WLB. Based on this theory, Clark described WLB as the achievement of satisfaction and good functioning in work and home domains with minimum conflict. More recently, Greenhaus and colleagues, influenced by the work of Marks and MacDermid defined WLB as "the extent to which an individual is equally engaged in—and equally satisfied with—his or her work role and family role". This definition combined the prominent emphases of engagement and equality in the study of WLB. They argued that the definition offers a more comprehensive classification by including both positive and negative balance. In addition, Greenhaus and colleagues proposed three components of WLB: (a) time balance (i.e. equal amount of time spent between roles); (b) involvement balance (i.e. equivalent level of psychological involvement in both roles); and (c) satisfaction balance (i.e. same level of satisfaction gained from both roles). In this view, balance is perceived on a continuum where each end is anchored by extensive imbalance in favor of a particular role (i.e. work or life).

17.2.2   Definition of Work-Life Harmony in the Literature

In a recent review, McMillan, Morris, and Atchley, introduced a new conceptualization of work and life known as *work-life harmony*. It is defined as a pleasant, harmonious arrangement of work and life roles that is integrated into a single narrative of life. The approach postulates that harmony results when resources gained through work-life enrichment are positively aligned with, and serve to alleviate stressors raised from work-life conflicts. Hence, harmony entails a sharing of role responsibilities and is negatively related to role inequities, which results from work-life conflict. There are two distinct characteristics of WLH. First, WLH can be applied at the levels of both individuals and organizations. Individually, harmony can be examined by the levels of conflict experienced and enrichment gains achieved through implementation of work-life initiatives. At the organizational level, these individual markers can be accumulated across departments or across the organization, and the aggregated tallies can then be used as indicators of the general 'well-being' of the organization. McMillan and colleagues argued that this approach can determine if additional interventions are required to increase employees' resources to reduce work-life conflict and in turn, lead to increased perceptions of harmony. Second, it should be noted that the integration of work and life in the approach is not a zero-sum game. Hence, it is possible to attain a surplus of gains through work-life enrichment, which cumulates positive perceptions of WLH and ultimately increasing organizational performance.

There are several predecessors to the notion of WLH. For example, a large scale qualitative study by Hill et al. found numerous complementary aspects between the domains of work and life and proposed a paradigm shift which focuses on harmony rather than balance. They contend that work-life interventions targeted at realizing

harmony will achieve greater success compared to initiatives implemented in hopes of attaining balance. Similarly, in adopting Maslow's Hierarchy of Needs for employee commitment, Stum proposed that WLH represents the pinnacle of employee needs in the modern-day work-force. Lastly, Wiley and colleagues created a program titled "Intentional Harmony: Managing Work and Life" in an effort to address a perceived gap in work-life management training programs.

17.3 Differences between Balance and Harmony: Perspectives on Work and Life

It is evident in the aforementioned literature that a major difference between WLB and WLH lies in the perspectives of the work-life domains. Often, research in WLB, adopt a conflict based outlook where work and life are perceived as separate and individual domains constantly competing for an individual's resources. This was clearly illustrated in the work-family border theory by Clark who contrasted work and life as two separate worlds with different purposes and cultures. He argued that it is precisely this segmentation of domains that created the prospect of producing a synergy between them. Further, Greenhaus and colleagues proposed that achieving balance entails committing equivalent amounts of time and psychological involvement, as well as attaining identical levels of role-related satisfaction in both work and life roles. Hence, the concept of balancing work and life is a zero-sum game where committing resources to one domain is perceived as taking away resources from the other, resulting in constant contention between the domains.

In contrast, WLH adopts an integrative approach where work and life are perceived as complimentary rather than conflicting domains. This was highlighted in Hill et al.'s work, which identified complementary aspects between the work-life domains. Based on these findings, Hill et al. argued that the traditional approach of WLB is limited in its conflict-based approach as it disregards the complimentary aspects between the work-life domains. In addition, McMillan and colleagues posited that WLH involves successful integration of work and life where both domains move in tandem with minimum conflict. The emphasis of the approach, therefore, focuses on enrichment rather than conflict. Furthermore, the concept of integrating work and life in the approach is not a zero-sum game where a surplus in enrichment gains between the domains is possible.

Despite the apparent conceptual differences between WLB and WLH, there remains to be a lack of empirical evidence to validate differences between these constructs. Moreover, with the exception of Hill et al.'s work, predecessors of the notion of WLH have adopted the term harmony, even though their work was conceptually based on balance. For example, although Wiley and colleagues titled their program "Intentional Harmony: Managing Work and Life", the main objectives of the program—to promote positive role-balance and reduce role-conflict—were more reflective of a balance approach. Further, Stum defined WLH as "the drive to achieve a sense of fulfillment in balancing work and life responsibilities". Subsequently, ambiguity in the way harmony is defined with the word balance can lead to confusion in construct development that aims to measure WLB and/or WLH.

Furthermore, due to the fact that WLH is a relatively new construct in the literature, measurements have largely been dedicated to quantifying WLB. For instance, traditional measures of WLB were based on individual's self-report assessment while contemporary approaches have attempted to measure WLB as a dependent variable using a composite score of multiple items measuring an individual's ability to balance work and life demands. Nonetheless, there is currently no measurement that can be applied to measuring both WLB and WLH, and efforts pertaining to quantifying the differences between these constructs remain absent in the literature. For these reasons, it is imperative to provide a valid measure of the differences between these constructs in order to address this research gap.

17.3.1 Cognitive Dissonance as an Indicator of Difference between WLB and WLH

Cognitive dissonance theory postulates that conflict in an individual's thoughts, emotions, and behaviors creates an aversive emotional state called dissonance, which motivates efforts to restore consistency. As noted earlier, the work-life interface is multifaceted and it encompasses affective, social, and behavioral dimensions of an individual. For these reasons, it is possible to suggest that a lack of harmony or balance between work and life produces conflicts in the comparable dimensions of an individual's thoughts, emotions, and behaviors, and hence, generates dissonance. In this view, individuals' attempts to attain WLB or WLH can be perceived as efforts to reduce the unpleasant state of dissonance.

Therefore, it can be argued that measuring an individual's level of dissonance while adopting a balance or harmony approach to work-life issues can offer an indication of the conceptual differences between the constructs of WLB and WLH. Based on this framework, individuals adopting a WLB approach will arguably experience greater levels of dissonance due to the conflicting nature of work and life domains in its approach while individuals adopting a WLH approach will generate comparatively lower levels of dissonance.

In sum, the cognitive dissonance framework provides a plausible solution in quantifying the conceptual differences between WLB and WLH. Such an approach addresses the above-mentioned research gap in providing empirical evidence to delineate both constructs.

17.4 The Importance of Work-Life Initiatives and Measures of its Effectiveness

Research has repeatedly found that work-life stressors, when unresolved, impede employees' job performance and are often associated with negative organizational outcomes such as decreased job satisfaction, increased absenteeism and turnover

intentions, and so on. In response to these findings, progressive organizations attempt to assist employees to relieve these stressors by implementing work-life initiatives. Work-life initiatives are organizational policies, practices, and benefits that are deliberately designed to lessen the bidirectional stressful demands and conflicts between the spheres of work and life while promoting balance, enrichment, harmony, and facilitation between the domains. These initiatives are often considered to be a major concern to the executive management and organizations invest a considerable amount of resources into implementing these policies. For instance, Fegley estimated that the implementation of work-life policies costs organizations approximately 38 % of an employee's annual salary. Therefore, given its significance and associated expenses, cost-benefit analyses of work-life initiatives represent an important consideration to both organizations and scholars in the field.

Existing efficacy measures of work-life initiatives have largely adopted organization outcomes as indicators of policy success. For example, studies have examined the impact of work-life initiatives by tracking employee absenteeism, turnover intentions, organization commitment, and staff retention rates. While other studies have assessed the correlation of the implementation work-life initiatives with firm productivity and employee job satisfaction. However, by adopting these indicators, the existing measures do not sufficiently demonstrate the strategic value of work-life initiatives in contemporary organizations. It is apparent, therefore, that there is a lack of research assessing the relationship between key business strategies and work-life initiatives.

17.5 Creativity and Innovation: A Key Business Strategy in Contemporary Organizations

Rapid technological advancements, market instability, and increased market demands from global markets are hallmarks of the conditions under which 21st century organizations operate. Under these conditions, contemporary organizations continue to realize the importance of creativity and innovation in organizations, and increasingly depend on these qualities to sustain a competitive edge in the dynamic and fast-paced present-day environment. Studies have found that market instability and demands serve as a dominant force in stimulating innovation in organizations. In addition, technological capabilities enhanced the accessibility of domain-relevant knowledge, and employee discretion and autonomy both of which, facilitates creative work performance. Creativity and innovation also plays an integral role in the profitability of organizations, and are positively related to other key aspects of organizational functioning, such as organization's ability to respond to crisis, improved planning processes, increased employee job satisfaction, and enhanced teamwork, collaboration, and organizational citizenship behaviors.

17.5.1 Differences between Creativity and Innovation

Creativity can be broadly defined as the production of novel or original ideas that are appropriate and applicable in any given domain while innovation is the production of new products or services through successful implementation of creative ideas within an organization. In this view, creativity is seen as a product of human cognition where innovation is the behavioral outcome of the preceding cognition. Hence, individual creativity offers the basis for innovative behaviors and serves as a determinant of innovation in organizations. As a result, employees' ability to be creative in their work plays an integral role in the success of contemporary organizations and it is for this reason, that individual creativity has become an increasingly valuable asset to organizations today.

To summarize, evidence from the current literature suggests that creativity and innovation are essential aspects in many organizations today. Given that creativity acts as a pre-cursor to innovative behavior, it can be argued that individual creativity alone can serve as a key indicator in the strategy approach of quantifying the efficacy of work-life initiatives.

17.6 Implications and Conclusion

Two significant research gaps in the field were identified in this review. First, although there are apparent conceptual differences between WLB and WLH, there is a lack of empirical evidence validating the differences between these constructs. Based on the differential views on the work-life domains, adopting a cognitive dissonance process to provide empirical evidence of dissociation between both constructs appears to be a promising approach, and one that has yet to be considered in research. Second, measures quantifying the efficacy of work-life initiatives have rarely been aligned with key business strategies of most organizations. Nonetheless, current literature suggests that a key business strategy in contemporary organizations involves maintaining a creative workforce. Therefore, it is possible to suggest that individual creativity provides a plausible approach to align the quantifying of the efficacy of work-life initiatives with key business strategies of contemporary organizations. Moreover, although both work-life initiatives and creativity are major concerns in contemporary organizations, no research till date has attempted to examine the relationship between the two. Therefore, it can be argued that such an approach can prove valuable to both organizations and scholars in the field.

17.6.1 Implications

There are several implications worth noting in addressing the identified research gaps. First, providing empirical evidence of the dissociation between WLB and WLH can

expand and shape our understanding of these concepts. An improved understanding of the concepts can enhance attempts at construct development aimed at measuring these constructs. In addition, conceptual clarity into work-life approaches can aid HR professionals to strategically develop effective work-life interventions targeted at alleviating work-life stressors. Second, by offering evidence of the strategic value of work-life initiatives, organizations can evaluate the degree to which these initiatives can enhance the organization's key business strategy. This in turn, influences organizations' willingness to implement work-life initiatives in the workplace. Furthermore, if an organization's key business strategy is to enhance creativity in the workforce, then with a better conceptual understanding of the concepts of WLB and WLH, future studies can investigate the relationship between these two concepts to creativity. This can in turn, determine if an approach is a more conducive interface for creativity and innovation than the other, or if both are conducive.

In sum, the current review proposes two plausible approaches that can help address the identified research gaps in the literature. Research adopting these approaches need to be conducted to develop a more complete understanding of these work-life constructs and the strategic value of work-life initiatives in contemporary organizations.

Chapter 18
The Impact of I.T. Development Outsourcing on Worker Dynamics in Vietnam

Anna Shillabeer

Abstract Information technology (IT) is a key employment sector in Vietnam and has experienced huge growth over the past decade. Given the low wages and operating costs in Vietnam it is an attractive location for international IT outsourcing companies and is currently ranked 13th in the world. This new business model has changed the attitudes and dynamics of the available workforce and has implications for the growth and competitiveness of the Vietnamese IT industry. This paper will discuss the background of the IT industry in Vietnam and the resultant impact of outsourcing on Vietnamese culture, education, local industry development and growth, and workforce attitudes.

18.1   Introduction

Outsourcing has become as integral a part of the IT industry as collaborative teams or overtime. It is difficult to talk about the current IT development environment without using these terms. Some of the world's largest IT companies and employers, including IBM, Apple and Intel, are riding on the outsourcing trend [1]. A background understanding of the history of outsourcing is provided here as it is important to define the contextual foundations of the current phenomenon. Outsourcing was believed to have been conceptualised in the 1880's when the textile industry in New England, America began to move its production mills to the Carolinas to take advantage of lower production, taxes and human resource costs [1, 2]. This led to prolonged debate regarding the appropriateness of the model. There were concerns raised about the use of child labour, racial segregation, loss of jobs in the home state and a lack of worker protection. Often generations of families were employed at a single mill and there was a trend of families relocating from the north to follow the mills and chase opportunity. After the Great depression in 1929 many lost their jobs and whole families became unemployed. Without transferrable skills they could not find employment elsewhere [3]. Prior to the passing of the 1933 National Industrial Recovery Act employers could each autonomously set and regulate their

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own working rules and standards [3]. The passing of the act led to national guide-lines on industrial relations and better working conditions for most. Investigating the current outsourcing environment and particularly in the IT industry reveals many parallels between events of 150 years ago and the present day. Some may argue that little progress has been made in terms of managing and implementing this business model.

This paper will provide a global perspective on IT outsourcing and will identify the barriers and opportunities in play. It will focus upon the Vietnamese context and will discuss the impact of outsourcing on local workers and the working environment. It will conclude by highlighting the lessons that can be learned and how outsourcers looking to enter Vietnam can avoid the more negative impacts whilst taking full advantage of the positive potential.

18.2   The Global Context

In 2012 as Barack Obama and Mitt Romney were contesting for the position of US President for the next 4 years, outsourcing became a topic of hot debate. Romney considered outsourcing to be one answer to fears over rising unemployment by both keeping industries alive, and therefore maintaining jobs in the country, and expanding skilled employment options in locations most in need of assistance [1]. In contrast Obama was reported to be against outsourcing as it essentially represented the export of jobs from America. In practice it was alleged that both supported financially or conceptually those who practice outsourcing [1, 4]. Any topic that provides debate in the American presidential election process is considered a global issue. Outsourcing has become a source of global debate well beyond the US election. The following discussion provides an overview of the debate.

18.2.1   Outsourcing criticisms

There are many criticisms of outsourcing with the following most commonly presented:

- It is a method to avoid unions and hence the requirement to involve the work-ers in decisions and address their workplace needs [1]. There are many ethical arguments presented against outsourcing on the grounds that it results in worker exploitation especially in locations where there are minimal industrial relations laws or protections. For example, there are suggestions of child labour in some parts of Asia and long working hours with few breaks [5].
- Low-cost workers are exploited resulting in significant gaps between wages paid in the home country and that of the country being outsourced to [1]. The argu-ment comes both from displaced workers and outsourcing employees. Displaced workers object to being replaced by cheap labour when they had potentially been

loyally employed for a company for many years and had become highly proficient in their job. Outsourcing workers know that the company had previously been happy to pay significantly more than they are being offered but they are unable to negotiate due to insufficient workplace agreements or fear of losing their job which may be supporting more than one generation of family members.

- Outsourcing leads to a loss of jobs for those most disadvantaged in the home country and exacerbates the unemployment problem [1, 6]. The loss of jobs is often long term with reports of up to a third of outsourced persons not finding employment within 3 years [6]. Where jobs are found they are frequently at a lower level of pay. Chronic unemployment can become endemic in families with subsequent generations relying on government benefits. Unemployment means low income which in turn leads to lower education and then employment opportunities for children and the vicious cycle continues. This cycle is exacerbated as the children have no employed role models to advise on career choices or provide access to education especially at the post high school level.
- There is a danger of entire industries being 'hollowed out' [1]. This results in industries that are fragmented with the seat of decisions being in one country and the actual production work in another location. This can present significant cultural issues with decisions being made without consideration of the environment they are being made for and resentment or non-compliance resulting. Management at a distance presents new business risks. Communications often occur through a translator with a loss of meaning and misunderstandings being common. This can mean costly delays in decision implementation and operational schedules. This clearly defeats the purpose of outsourcing to reduce costs.

18.2.2   Outsourcing Advantages

- Outsourcing presents an opportunity to create new, more skilled opportunities or employment where there was little previously [1]. It provides a significant number of jobs in very poor populations and can result in improvement of living standards for thousands of people through employing several hundred people who can then support their families. In countries where skills are low, outsourcing can provide an opportunity for improved training and up skilling as supervisory, management and more technical roles become available over time. This provides long term improvement for the whole population and a sustainable future for the country.
- Many large corporations have employed outsourcing to minimise their costs and maintain more profit in their home. The cost of IT development is $400-$1,000 a month per employee in India or Vietnam. This is several times lower than in Europe or the U.S. [5]. As a result outsourcers can facilitate improvement in living standards for local employees that would not have been possible without the profits realised through off shore production [5]. Employees are also able to access significant non-financial benefits including medical and personal accident insurance, subsidised food and transportation, supported accommodation, personal health care, education benefits for themselves and families, flexible salary

benefits and maternity leave. Health benefits in particular are of immense value in countries where there is little or no healthcare insurance and low accessibility to high quality healthcare as a result. Many employees working in an outsourcing capacity experience untold lifestyle changes and wealth and their families and often whole towns and villages benefit as a result.

18.2.3 Outsourcing Drivers

- Transportation, coordination and operational costs have been lowered significantly through improved communication technologies and faster transport options. This has provided efficiency gains in travel and enabled management teams to commute greater distances with relative ease and to be able to remotely manage and monitor operations of external suppliers, contractors and production locations [1]. The opportunity to reduce operational costs and optimise business processes, whilst maintaining production quality is fundamental to the drive towards increased outsourcing.
- Customers want cheaper products without lowered quality and outsourcing is an obvious business choice to meet this demand.
- Investors want greater profits. By saving money through reducing human resource costs without reducing the product cost or value, organisations have an opportunity to provide sustained improvement in investor returns.
- In the software industry the time to market is a critical success factor in determining the viability of a product, or even a whole company when there are so many competitors in the market place. Similarly the time taken to address security risks or provide updates is equally important in retaining market share. Having access to a 24 h working day by outsourcing to teams in different time zones is a key facilitator of rapid delivery [5].

18.2.4 Outsourcing Around the World

Currently the United States and India are the biggest players in the outsourcing market, with the USA on the demand side and India on the supply side. American companies paid over $ 17.6 billion for offshore outsourcing serviced in 2005 with India exporting over $ 23 billion in that same year and increasing to $ 50 billion in 2008. China, is a major competitor for India in the general offshore manufacturing market, but is not yet a significant threat to the IT-services market. Their revenue from software and IT-enabled services is a fraction of that from India but their position on the market is increasing rapidly. Their major advantage is that the labour costs are considerably lower than in India. This gap is expected to increase due to the labour costs in India increasing quickly [5]. The global top 10 outsourcing countries are shown in Table 18.1 [7].

Table 18.1 Top 10 outsourcing destinations

Rank	Country	Overall	Operating cost	Resources & skills	Business environment	Avg
1	India	7.1	8.3	6	4.2	6.2
2	Indonesia	6.7	8.6	4.3	4.4	5.8
3	Estonia	6.6	7.5	5.2	6.9	6.5
4	Singapore	6.5	6.4	5.7	9.4	7.2
5	China	6.4	7	5.6	5.6	6.1
6	Bulgaria	6.4	8.8	2.9	5.2	5.6
7	Philippines	6.3	9	2.8	3.9	5.2
8	Thailand	5.9	8.2	2.3	5.9	5.5
9	Lithuania	5.9	7	3.9	6.5	5.8
10	Malaysia	5.8	7.9	2.2	6.9	5.7

Whilst India is ranked in first place there are 3 strong contenders for the position; China, Singapore and Estonia. Singapore is a significant threat due to its very high skills and resources, and business environment rating however its operating cost rating is higher and reduces a key opportunity presented by outsourcing. Estonia and China are a similar threat but fall behind in terms of cost and skills availability. With attention to these points they could be strong contenders for the top position especially in the US for off shore production. In a trend that began in the late 1970s and picked up speed in the 1990s, with the opening of trade with China, India and Eastern Europe, competition from foreign imports forced U.S. firms to find cheaper and better ways of doing business [5]. India clearly took best advantage of this opportunity but the others are not far behind.

18.2.5 Downward Trend in Outsourcing

Information technology and IT-enabled services employed approximately 4 million people in 2008 and accounted for 7 % of GDP and 33 % of India's international business influx. The cost advantage for offshoring to India has recently reduced from 1:6. to, at best, 1:3. Given the narrowing of the pay rates and reduced cost advantages there is an alarming level of attrition occurring in outsourcing organisations [8]. India's $ 30bn IT service industry, is gradually losing its competitive advantage. It is predicted that by 2015 the 1:3 cost advantage will be closer to 1:1.5 and it will then be inefficient to use Indian labour. This will potentially trigger a massive shift away from India and to other countries. South East Asia would seem like a rational choice given its proximity and cultural similarity to India. Relocation costs could be minimised and operational logistics and management budget only minimally affected. There would also be an opportunity to relocate Indian resources to assist with start-up. Vietnam would be in a strong position to take advantage of this shift if it acts now to overcome a number of barriers and build on its strengths.

18.3 The Vietnamese Context

Whilst Vietnam is gaining in socio economic and commercial maturity it is still experiencing significant social issues. The World Bank reports that the poverty headcount is at 20.7 % and unemployment was at 2.4 % in 2008 and 2 % in 2011. What this obviously suggests is that while there is little unemployment, rates of pay are very low. This is an ideal scenario for outsourcing companies; a willing workforce that would be easily attracted by financial incentives. Given that Vietnam's per capita income was just $ 1,270 in 2011 the incentives could include doubling this amount and still represent an insignificant cost to a major IT outsourcing company.

Whilst a 2 % unemployment rate seems very low as compared to many western countries, this still represents millions of people given Vietnam's population of close to 100 million. In HCMC alone, the centre of the IT industry, 143,600 people claimed unemployment benefits in 2011. Whilst the unemployment rate in rural areas is similar to that of urban areas, those who are employed on average experience a lack of work for 25 % of each year [9].The overall unemployment figure is further diluted by the fact that seasonal workers, workers with labour contracts of less than one year and employees of companies with under 10 employees cannot claim benefits if they lose their jobs and hence are not counted in the numbers. To claim benefit, all other employees have a compulsory insurance levy that takes a significant proportion of their monthly salary. This salary deduction contributes to the poverty trap for many low paid workers. Vietnam has recently undergone an economic slowdown that has contributed to an increase in unemployment costs for the state and greater numbers of people looking for work. This again provides an impetus for outsourcers to look at Vietnam and engage the skilled but unemployed workforce that is available.

18.3.1 Workforce Characteristics

The U.S. war in Vietnam ended in 1975 leaving a significantly skewed population. It is estimated that up to 12 % of the population was lost with most being men. Since the end of the war there has been a focused rebuilding effort. As a result of this, the Vietnamese people are characterised by being resourceful, entrepreneurial and willing to take risks. This again serves the needs of outsourcing companies well as they are working with a population not afraid to do something different and learn new skills.

The Vietnamese people are hard working with some in the hospitality industry anecdotally revealing they work up to 16 h a day, 6 days a week for what they consider to be the good wage of $ 400 USD per month. Although they would appear to be an ideal workforce there are some characteristics that need to be understood by those looking to use Vietnamese labour. They are a sensitive people that do not react well to criticism or close scrutiny of their work. The Vietnamese workforce is heavily unionised. Workers are not afraid to demand their rights and do not appreciate being asked to do something outside of their contract. Strikes are not uncommon and union or Government mediators are frequently used to resolve issues. These strikes most frequently occur over pay or overtime.

The skew towards a younger workforce means potential longevity in terms of worker employment however it is not without its own inherent issues. The availability of world class higher education options for young people is recent and although growing, their family centred culture presents a constraint to the western concept of leaving home and moving to the city for University study. This is especially true for daughters. As a result of this cultural barrier, less than 15 % of young workers undertake any technical training, and very few have a high level of work ready skills [9]. Of those that do gain a tertiary education, only a small number have an opportunity to learn English or another language and this can present a considerable communication barrier for overseas employers.

With considered management the Vietnamese people are a dedicated, skilled and dependable resource but a deep understanding of the cultural landscape and employment laws is required for any level of success to be achieved.

18.3.2   Outsourcing Engagement in Vietnam

Vietnam's outsourcing sector is benefiting from the rising costs and growing problems in the Indian and Chinese business environments. A number of US companies are showing increased interest in Vietnam as a potential outsourcing destination in light of trade tensions with China and lowered cost effectiveness of dealing with India [7]. Vietnam has proven to be an effective base for smaller-scale IT operations, but lacks the numbers of skilled workers necessary for larger initiatives. The lack of key skills is a result of the nation's previously poor technical education system. The biggest obstacle that Vietnam faces is the lack of English speakers as noted earlier. This is a key barrier to the Vietnamese IT sector becoming a major global competitor [7].

Vietnam has tremendous potential to become an IT outsourcing hot spot. Salaries of junior employees are only 23 % of similar positions in the US and senior or highly skilled employees earn 32 % of that collected by their US counterparts. The country has already gained the endorsement of some of the top companies in the world, including Intel, which built a USD 1 billion computer chip plant in the country [7].

It would appear that the time is right for Vietnam to become a significant outsourcing option for major overseas companies however there is a potential hurdle on the horizon. For the first time there has been policy consideration of the outsourcing sector by the Vietnamese Government. A new labour code was released on May 1st, 2013 and while its direct impact is as yet unknown, section 5, articles 53-58 present much to consider by potential outsourcing companies. Of particular note is article 56.5 as discussed following in a recent news briefing:

> the outsourced employee's salary [should not be] lower than that of the outsourcing party's employees at equal levels, doing the same or equivalent job, and further on in article 58.3 this right is codified. The issue of equality between outsourced and regular employees is reiterated in article 57.2 which states that the working conditions of outsourced employees cannot be worse than the working conditions of the non-outsourced employees of the same company doing equivalent jobs.

Prior to this new code being released, Vietnam was ranked 13th in the world with a cost competitiveness index of 7.4 which is in the top 10 [7]. Whilst the cost of real estate and taxes are competitive, the very low human resource cost makes Vietnam most attractive. The effect of the labor code may be to throw Vietnam out of contention for consideration as an outsourcing option in the future given that there are other barriers in terms of business and political environment issues and poor infrastructure [7]. The ramifications of the implementation will be closely watched by employers and employees alike.

18.3.3 The Effect of Outsourcing on Vietnamese Workers

For many young Vietnamese the opportunities provided by outsourcing companies are very attractive. The opportunity to earn (relatively) high wages and have a 40 h week upon graduation from an IT or computer science degree together with the social status afforded by working for an international company cannot be measured. This is a very desirable goal. Many are willing to pay the higher education fees to attend an English speaking university to further increase their potential to secure this type of work. The effect of this is to change the education platform and give young people aspirations that are way beyond what previous generations could even dream of. They are becoming more westernised in their attitude towards money, material goods and workplace quality. Whilst this is a positive step forwards it also means that the traditional values of being family centred, having a connection to the past and building Vietnam rather than the individual are being lost. The workforce is becoming more mobile and urban migration is increasing as young people seek opportunities in major cities or overseas. Outsourcing provides these young people the chance to live a very different life than their parents and will set a precedent for all that follow.

Outsourcing offers all workers the chance to change their lives through increased pay and working conditions. Many companies are targeting the more highly skilled workers to reduce training costs and lag time and there is an expected increase in demand of at least 60 % for technical and managerial staff over the next 3 years [9]. The effect of this has been to drain Vietnamese companies of their most skilled people who have often been with the company for many years. Vietnam is following the path of India and Sri Lanka who now both have double-digit attrition rates. This lowers the potential for Vietnamese companies to be able to compete with overseas companies as they cannot pay the higher wages or maintain skills within their teams. They constantly have to recruit but find the pool contracting as competition for human resources increases in an industry where skill demand already far outweighs supply [9]. The stability that used to characterise the Vietnamese workforce is being eroded and the skills maturity in local businesses is also being lost. Local businesses train and develop their young employees then lose them when an international company offers to double their pay. This is a natural event, we would all be attracted by this, but the impact upon the IT workforce is highly detrimental.

Companies such as IBM are investing heavily in Vietnam and are developing links with local universities to access the best graduates and influence a curriculum that suits their needs. Whilst the investment of millions of dollars is a welcome boost to the technology landscape of Vietnam these initiatives raise questions of longevity. India followed a similar trajectory, a rags to riches story for its workers but we now see that dream fading as higher costs and the attraction of cheaper and easier business environments in near neighbours becomes a strong driver for change. The future of millions of outsourcing employees is of concern. If Vietnam does become the next big thing in IT outsourcing, what would become of its technology workers if companies move offshore or change their skill requirement? There is already evidence of worker retrenchments after major projects with specific skill sets are completed. Vietnamese workers would not be willing to go back to their old jobs and conditions and pay level [6]. They will, as seen in other countries, potentially become a significant burden on the Government or their families if they were not eligible for unemployment benefit. This would be of most impact on younger Vietnamese who had never experienced anything but the international context. We must also be cognoscente of the fact that local businesses are already struggling and many will simply not be there to return to.

18.4   Conclusion

In Vietnam outsourcing is creating a whole new attitude in its young people entering the workforce. They are moving their interest away from local businesses and are willing to sacrifice family, stability and culture to work for an outsourcing company. This trend however is likely to be transient as demonstrated by many other countries and the end result for Vietnam may be increased unemployment, loss of skills and experience that could have driven Vietnam towards international competitiveness and potentially a long term deterioration in the technology industry as a whole.

The new labor code has the potential to protect Vietnamese workers from some of the more negative impacts seen in other countries however the impact is not clear. The Vietnamese Government should make every effort to resolve ambiguities as outsourcing parties must understand in advance which specific regulations apply to them. It is also important to ensure that it actually provides the safeguards it intends to. The unemployment insurance regulations for example could easily be exploited and leave Vietnamese workers with little recompense if they are retrenched after a short term project is delivered. The new code could guide and streamline IT outsourcing by overseas companies and benefit the Vietnamese and global economies but it could also kill the potential for Vietnam to be seen as an attractive location for outsourcing. Only a retrospective analysis will reveal the true impact.

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Chapter 19
Development of an E-Health Strategic Framework for Vietnam

Anna Shillabeer

Abstract Vietnam has a population of 91.5 million with 70 % living in rural areas. Much of the population is not well serviced by infrastructure of any form that would support e-health. There is no defined e-health infrastructure or management strategy, however Vietnam does have a number of population health issues that could be somewhat addressed by e-health initiatives as has occurred in so many other similar geographies. The key problem is how to develop and manage a sustainable e-health strategy and implementation framework. A number of significant barriers have been identified including a lack of infrastructure to enable e-health delivery, poor strategy development, a lack of co-ordinated effort towards defined goals, skills shortages in critical areas including health information management, mobile technologies and security and a lack of cultural sensitivity by current research groups and funding bodies. Breaking down these barriers is critical to any future progress towards an e-health platform. This paper discusses the Vietnamese health environment, the e-health barriers, drivers and opportunities in Vietnam and outlines a framework for future progress towards a time where e-health is an integrated part of the healthcare system.

19.1 Introduction

The trend in modern healthcare is towards making health ubiquitous to enable equity in accessibility and delivery of quality healthcare services. By providing sustainable, standardised primary healthcare options to whole populations there are considerable benefits to be realized. Enabling centralized data collection and analysis, integrated patient management and evidence based clinical and operational decisions are unfamiliar concepts and beyond the ability of the current healthcare system in Vietnam to envisage.

The very nature of e-health initiatives call for a ubiquitous solution and there has been huge success in such technology applications around the world. The healthcare environment in Vietnam and South East Asia as a whole however is highly fragmented

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Table 19.1 Comparison of healthcare environments

Context	Vietnam	Thailand	Laos	Indonesia	Philippines	Australia	U.S.	Norway
Urbanisation %	30	34	33	44	49	89	82	79
Health workers per 1000	1.22	0.3	0.27	0.29	1.15	3	2.7	4.1
Maternal deaths per 100k	59	48	470	220	99	8	24	7
Child mortality per 1000	19.61	15.41	56.13	20.06	18.19	4.55	5.98	3.5
Health spend as % of GDP	7.2	3.9	4.5	2.6	3.6	8.5	16.2	9.7
Hospital beds per 1000	3.1	2.1	0.7	0.6	0.5	3.82	3.1	3.52
Years of education/literacy	10/94	12/92.6	9/73	13	12/92.6	21/99	16/99	17/100

Statistics from [5]

and presents a number of unique issues that have to date prevented any real progress towards implementation of e-health solutions. Given the advancements in technology training and investment in healthcare by the government and health insurance providers in Vietnam the time is now ripe to start developing such solutions.

A current project by the Health Research Group (HRG) within RMIT International University Vietnam is investigating the potential for e-health solutions in Vietnam and is working towards development of a strategic framework for e-health implementation in the country. The first milestone for this work was in identifying if there is a feasible mobile technology and transmission foundation upon which to launch e-health solutions. The ability to transmit data over some communications channel is a critical requirement for most e-health systems and without this capacity any further work would be futile. This paper presents the current state of understanding in this area and presents early findings that will inform future work.

19.2 The Vietnamese Health Environment

Vietnam has a long history of traditional medicine. Seventy percent of the population live in rural areas and represent a number of separate cultures each with their own beliefs, some of which are very isolated such as the Hmong people in the northern hills area. Many have little or no access to modern healthcare facilities or clinicians so the traditional ways are retained for those people. Healthcare provision and knowledge across Vietnam is frequently received through community elders and family. This results in fragmented populations and practices. A significant proportion of these people are also very poor (Vietnam's per capita income was just $ 1,270 in 2012) and cannot afford high quality treatments or insurance policies or most significantly for this project, technology. A comparative overview of the Vietnamese context against other locations is provided in Table 19.1.

Fig. 19.1 The 4 tiered Vietnamese healthcare structure

Table 19.1 identifies a number of foci for healthcare improvement in Vietnam. The most obvious is maternal and child health where according to the CIA [5] Vietnam is doing better than many other Southeast Asian countries but is well behind the rest of the developed world. Viet Nam News on July 11th, 2012 reported that while the statistics had improved dramatically over the past 12 years there was still a significant difference between urban and rural rates of maternal and newborn deaths. This is believed to be due to limited access to healthcare and far lower rates of trained obstetricians in rural areas compared to cities. This is identified as an area for greater investment by government and presents a viable area of focus for research in this country.

The formal healthcare system in Vietnam has a four tiered healthcare model as shown in Fig. 19.1. Patients are usually diagnosed within a commune level healthcare institution and are then referred up through the tiers until they reach a National Hospital which specialises in the treatment of a particular serious or chronic illness such as late stage renal failure, AIDS or cancer. These National Hospitals also provide some palliative care support but this is not a common practice. Some patients may move several times

from their rural homeland until they are admitted for treatment. This can take months and cover great distances resulting in dislocation and isolation. Vietnamese culture is very strongly family oriented and hence the potential for dislocation in particular is a significant deterrent to accessing healthcare services even if available.

Unfortunately even when a patient is diagnosed and admitted for treatment often their situation does not improve. Hospitals are very overcrowded and under staffed across the country in both rural and urban locations. There are several reports that suggest patients cannot even assume basic rights as there are not enough beds to allow for one for each patient and doctors see on average 100 patients every day and hence often do not have time to even inform patients of their diagnosis or treatment options. Recent work by the HRG with the Ho Chi Minh Cancer Hospital revealed that there were up to 300 new diagnoses per day, an average of greater than two patients per

bed, 10,000 outpatients to be managed, long queues waiting in hot buildings or sitting on floors outside or in stairwells and most alarmingly, less than 60 % of patients are told their diagnosis. These observations are common around the country.

The healthcare system has at best a tenuous ability to adequately meet the needs of the people it is designed to serve. This presents a very complex and unconstrained environment in which to introduce any new population health initiative.

19.3 The Vietnamese Technology Environment

19.3.1 Capability

Vietnam has approximately 1,000 software outsourcing and IT businesses with most being small-sized businesses of 10–30 employees. There were 120,000 employees working in software and IT services in 2011 which was a twenty-fold increase compared to 2002 [3]. "In developed economies like the U.S. and European nations, IT accounts for some 7 % of gross domestic product (GDP), while the figure in Vietnam is less than 2 %" [4]. Although behind the world figures for GDP the annual growth rate was reportedly 25–35 % over the past 10 years for this industry segment [3]. Due to this growth, the demand for IT specialists by outsourcers including IBM, Intel and Apple in particular has far exceeded the supply. Many outsourcing companies have been involved in global e-health technology development. These companies are gathering the best graduates and experienced staff available in Vietnam and hence have the experience, knowledge and skills to provide healthcare solutions for Vietnam. The question is whether there are sufficient numbers of qualified Vietnamese to fill the need.

To meet the need for skilled professionals the number of universities and colleges offering a computing focused program has grown over the past 10 years. There are currently 277 institutions with a total enrolment of 169,000 students, with 56,000 fresh students enrolling annually [3]. Whilst skills are becoming available, especially in the area of mobile technologies, there is currently no identified opportunity to specialise in health systems development or informatics. This is an obvious issue that needs to be addressed if Vietnam is to take and maintain control of this important public service sector.

19.3.2 Technology Adoption

Research suggests that mobile phones are the most widely adopted form of technology in the world, including in developing countries. Data from Vietnam showing that there are 143 mobile phones per 100 people clearly supports this claim. Of those using mobile phones 30 % use their phone to access the internet and 35 % use it for

Table 19.2 Mobile technology adoption [2]

Metric	Value
Total domestic connection bandwidth	425,538 Mbps
Users per capita	35.58 %
Users	31,304,211
International connection bandwidth	346,997 Mbps
Domestic connection bandwidth	460,374 Mbps
Total VNIX network traffic	134,850,152 Gbytes
Dot VN active domain names	229,815
Allocated IPv4 addresses	15,551,232
Allocated IPv6 addresses	73,015,820,288/64
Total broadband subscribers	4,325,995
3G phone subscribers/100 people	8.5
3G service coverage	30 cities and provinces
Number of 2G/3G cell sites in the south west	7,100

social networking [1]. Data for fixed line internet access shows that only 8/100 people across the world are connected and in Vietnam the level is much lower at 4.3/100. There is a significant skew towards younger users with a reported 95 % of those aged 15–24 having internet access of some form [1]. This is an important statistic in the context of the research presented here as it has already been identified that most health information comes from older members of the community and family members, especially parents. The data on technology adoption suggests that these are the people least likely to have access to current, clinically accurate (if the correct sources are accessed) and appropriate information to counsel others with. Table 19.2 provides an overview of mobile technology adoption in Vietnam.

The reliability of Vietnamese networks has been evaluated as 'suitable'. Testing shows that metrics such as successful call rate and service availability achieve over 99 % and complaints are measured at less than 0.1 % with 100 % response rate within 24 hrs.

There are a number of government initiatives that aim to strengthen the mobile/Internet technology context in Vietnam by 2015 including:

- The licensing of 4G services
- Ensuring 40–45 % of households have a telephone and Internet access
- Providing mobile coverage to 90 % of the population

Since becoming officially connected to the global internet network in 1997 the industry has grown significantly to currently support 19 Internet service providers, 1,064 licensed websites and 335 social networking sites. 3G Internet users account for 18 % of the population.

Vietnam is a good fit for the application of e-health technologies given that it has reasonably good literacy rates as shown in Table 19.1, the number of University technology graduates in the workplace is growing and there is a high level of technology uptake and reliability of infrastructure is good. Most importantly Vietnam is experiencing a strong drive towards technology adoption and social equity with other countries in the health domain.

19.4   Barriers to E-Health

Given that early findings suggest that the foundations in terms of skills, technology and connectivity are all either well developed or being developed, the question arises regarding why we are not seeing e-health implementations in Vietnam. The reason is a number of significant barriers including Vietnamese culture, lack of coordinated international interest and investment and the physical geography of Vietnam.

19.4.1   Vietnamese Culture

As discussed in the section on the Vietnamese healthcare environment, there are significant cultural differences to be considered when looking at any new healthcare initiative especially one as innovative as e-health. Given the reliance on traditional medicine and the low level of technology adoption by older Vietnamese there is little prospect for successful implementation of a public e-health solution. Many Vietnamese have little or no contact with the healthcare system or technology during their lives so expecting a high level of buy-in is unrealistic. There is a similar story with clinicians who have little in terms of formal IT training or experience. Clinician input is critical to the development of any technology driven health system. Informed input is the only way to have any confidence in a successful outcome. Untrained or novice users cannot hope to fully engage or be able to influence technology design decisions.

The Vietnamese culture, political system and history have led to a people who do not feel comfortable questioning anyone in a perceived position of power, doctors included. The following quote by a doctor in the cancer hospital is both a reason for concern and a clear demonstration of the lack of empowerment patients accept.

> If the patient is diagnosed with cancer, the doctor generally keeps it a secret from the patient. The family is told first, and it is the family's decision whether or not to tell the patient. . . . Patients sometimes undergo treatment for prolonged periods of time without knowing the real cause of their illness.

This leads to some significant barriers to the use of e-health solutions. If the patient never knows what their diagnosis is, how do they know what questions to ask? How do they find information to inform themselves? How do they comply when they have no knowledge of what is being done and why? If they are not made aware of the seriousness then expecting them to comply with an at home solution for example will not succeed. Their first instinct will be to return to their family and care for them in their usual manner, either nurturing or working. The extra burden of monitoring or learning new technologies will not be integrated into their already busy lifestyle.

19.4.2   International Interest and Investment

There has been little investment in e-health in Vietnam. The RICE project is definitely the exception. Most projects have been concerned with preventing disease,

vaccinating children and providing basic necessities such as clean drinking water. Vietnam is a country that is evolving and in some respects is still third world and raising the status of the country has taken precedence over other initiatives. These foundational improvements are not questioned but they have been fragmented, urban focused and not whole of population initiatives. Without a level playing field the divide between rural and urban healthcare may grow leaving rural areas even further disadvantaged.

Until the early 1980s there was little open access to Vietnam and there are still some perception problems from foreigners regarding access, business operations, investment processes and research potential. There are also barriers with the Vietnamese who are a proud people who want to maintain control over their country and also do not understand how to attract overseas investment or work with western attitudes and processes. This presents a critical barrier to progress in many fields, health included.

19.4.3   Geography

Many large areas of Vietnam are inaccessible due to rough terrain and insufficient transport infrastructure. Installation and management of mobile technologies and relay stations is an almost insurmountable problem where the only access is by foot. The key barrier to e-health implementation in this context is therefore infrastructure enablement. Most infrastructure projects are managed and financed by external investors used to working in far different geographies. Little local expertise is used or developed thus removing control from the Vietnamese people, increasing expenses and lowering sustainability.

These barriers are not unique to Vietnam and have been met and addressed in other locations such as Africa and Korea however they are not currently being managed in Vietnam. These barriers must be reduced or removed before any investment of time, people, technology or finance to e-health. Any strategy must ensure that these issues are managed at the outset and consideration is given throughout the lifespan of a healthcare reform program. Failure to do this will result in fragmented, divisive solutions that cannot be implemented to solve the population health issues that they could provide most benefit to.

19.5   E-Health Drivers and Opportunities

Although there are a number of barriers there are also many opportunities available and a number of important drivers that provide motivation for developing a focused research effort towards e-health solutions in Vietnam. These opportunities and barriers will require input from internal and external stakeholders to provide momentum and sustained progress.

19.5.1 Opportunities

- There is a growing technology maturity and increased training options will build skills capacity required to build e-health solutions. Vietnam needs help to realise a higher state of maturity in health management and technologies and this will require significant international expertise on the ground in the medium to long term. This presents a number of opportunities for training providers and healthcare technology mentors.
- The government is ready to invest and there is sufficient demand to ensure that action will be taken, but it needs to be guided, cost effective, culturally sensitive and sustainable.
- There is a government awareness of mobile solutions and technology driven initiatives and there is a realization of the potential for technology solutions to overcome several of the biggest health issues facing Vietnam now and into the future. The Health Ministry and clinical stakeholders will need expert input to design and deliver measurable solutions.
- External investment and interest in the region and Vietnam in particular is increasing. There are millions of dollars being invested in technology and health projects. There is however a need for an integrated, unified approach to prevent fragmented solutions and repetition as has been seen in the past. There is also a need to have a defined focus on e-health strategies and technologies as they offer a feasible solution to a number of endemic issues.

These opportunities demonstrate that Vietnam has likely reached a tipping point for e-health. There is investment potential and key stakeholders are realizing there are solutions to critical health issues but there is currently no roadmap or strategy to progress.

19.5.2 Drivers

- The current healthcare model is clearly failing and some method of providing broad scale health improvement programs, chronic disease management outside of the hospital system where possible and public health monitoring is critically important.
- Internal migration from rural to urban areas means that there are condensed populations that have open access to technology and broadband connectivity. It also means extra pressure on urban health services leading to a pull for innovative solutions given that real estate is limited in terms of an ability to expand but greater service provision is demanded.
- There is a defined government policy direction towards equity in healthcare but the current situation is one of great disparity. Any solution that aims to create more equitable access to healthcare and health information must be broad scale to ensure that the gap between rural and urban healthcare services does not become more endemic.
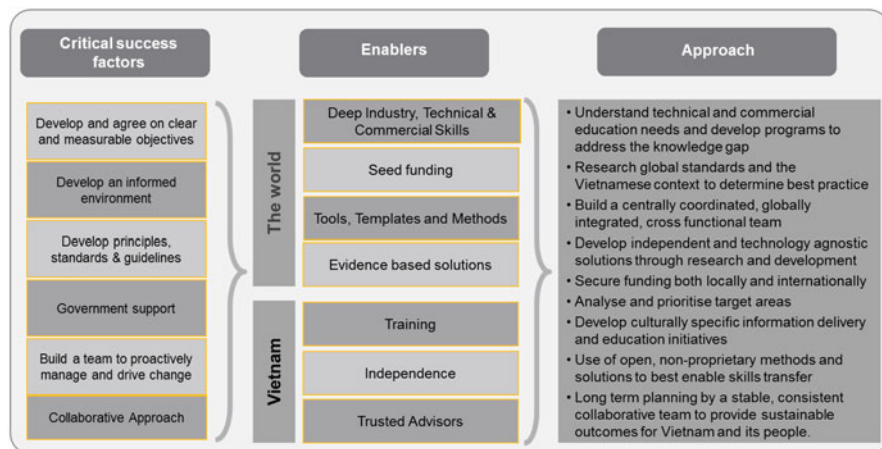
Fig. 19.2 Strategic framework for e-health in Vietnam

The healthcare system in Vietnam is not sustainable in its current form and while there is limited opportunity to expand hospitals or provide more beds, e-health provides a proven tool to take advantage of a number of these drivers and improve healthcare provision for all Vietnamese as a result. E-health has been demonstrated elsewhere to be able to outsource some treatment to community health providers and to be an important tool in preventative health programs to reduce the burden on an already overstretched system. These opportunities and drivers should inform any future national e-health strategy.

19.5.3   Strategic Framework

A number of success factors and enablers have been identified that will influence and guide future progress in Vietnamese e-health research and developments. These constructs are the foundations upon which a strategic framework for e-health solutions in Vietnam have been built. This strategic framework is shown in Fig. 19.2. Standardisation, sustainability, education and funding are the most critical factors to consider and must be the measures of success for any initiative. These measures can only be achieved by a collaborative, international engagement by experts across a number of domains including technology, commerce, public health, government and education. Whilst international collaboration is vitally important it must include Vietnamese representatives at all levels to ensure long term support and sustainability.

As discussed in this paper, any solution must be implemented within the specific cultural and political environment that Vietnam presents. Achieving, sustainability and population support will require large scale education from three angles:

- To inform the general Vietnamese population on the technology, benefits and personal impact of e-health
- To increase the skills and knowledge of Vietnamese technology developers and managers
- To inform external parties of the Vietnamese environment and technology landscape.

Only with empowerment of the Vietnamese people through education can there be an accepted, comprehensive, sustainable solution to any issue in any domain.

Vietnamese technology and health graduates are trained in global skill sets. Vietnam is at a level of low maturity, however for change to be sustained they must adhere to global standards for health and technology developments. The Vietnamese are a proud people that are ready to move forwards and embrace the best the world has to offer however they have generally had little opportunity to demonstrate what they have to offer or be exposed to standards and healthcare technologies. Any external collaborator must be ready to be open and transparent in all communications and be ready to enforce global best practice and standardized tools and methodologies to ensure long term maintainability.

Significant funding will be required to provide a solid base upon which to develop wide scale solutions. Too often small projects have been implemented with minimal impact then have no strength to be maintained or extended overtime. The healthcare issues raised in this paper are widespread and require national attention. Little will be achieved in terms of population health or e-health acceptance by further small, localized attempts at proving the concept is of value. For real progress to be made it must be a focused approach with collaboration across geographic boundaries and skill sets with local and international funding.

19.6 Conclusion

Vietnam is a country experiencing a period of economic and social transition following a time of prolonged unrest and stagnation and its embrace of the technology age where its people are learning to live with new found freedom, peace and comparative wealth. It is a country offering many opportunities both to its own people and overseas interests. It has a complex cultural context that informs everything that occurs, including healthcare. There is a trend is towards greater investment in Vietnamese Health initiatives and technology but little expertise in actually delivering innovative, technology driven solutions. Collaboration between internal and external stakeholders is seen as a critical factor for the future of e-health as it is not a well understood concept in Vietnam.

This complex environment presents both barriers and opportunities and significant investment has been made in both research and infrastructure projects although there has been little directed towards e-health research. A major limitation to progress is that there are no national solutions, no consensus on direction and little local expertise, strength or strategy. A high level strategic framework has been developed

that highlights the following critical activities to promote progress and facilitate future success:

- Develop and promote a centralised, co-ordinated effort to identify research opportunities rather than follow a fragmented, narrow focused approach.
- Have a coordinated internationally funded strategic approach. This will reduce the reliance on a single source of funding and ensure program longevity.
- Implement and manage a structured, strategic approach to solutions development instead of a trial and error, isolated attempt by those who enter the country, test an idea and leave or do not gain the support they require for continued research and hence have their work curtailed.
- Apply and monitor internal control and external collaboration. The Vietnamese must be an integral part of any project team at all levels and must be empowered to ensure projects are implemented, championed and sustained in a culturally sensitive way. External collaborators are required to ensure rigor, global standards and sufficient expertise is applied.
- There should be a ubiquitous solution to health research. Too much work only solves part of a problem or benefits a very small subsection of the population and little measurable value is delivered. This creates reluctance for further investment and leaves projects with an unfinished or low impact outcome.

The building blocks required for successful e-health implementation are available and have been tested around the world. The technology platforms, skills and infrastructure to support e-health are available in Vietnam. It is now time to create a positive environment and develop global collaborations in which to plan to build and test broad scale e-health solutions in Vietnam for the benefit of all Vietnamese people and South East Asia as a whole.

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Chapter 20
Chinese Companies Enter the German Market; But are the Germans Prepared?

Rainer Lisowski

Abstract Germany is Europe's most populated country and it is actual locomotive for growth. The Germans have a positive image in China. However, this appreciation is not mutual. Various polls indicate that Germans are reserved concerning China's rise; some even dislike outward foreign direct investment (OFDI) from Chinese Companies flowing to Germany. Nevertheless, Chinese investments in Germany will accelerate in the near future; already it increased from 600 million € 2 years ago to more than 800 million €. Experts predict a further massive increase. Asian OFDIs in Europe will be an integral part of the Asian Century, transforming the host countries, just as western OFDIs changed Asia during the last decades. This article analyses the German "China readiness" in the field of public economic policy at a local level.

20.1 Dynamic Asia—Sleepy Europe

Asia is growing. It is quite simple to track this development, if you take a look at Asian Cities. Shanghai's Pudong for example just 21 years ago was a peripheral suburb with buildings that seldom rose beyond four or five stories. Less than a generation later large skyscrapers mark the scene, visually engraving a vivid history of economic success and large sums of money pouring into the country from all over world. Massive funds from everywhere have been attracted by a prosperous outlook on the future in Asia. Not only in Shanghai, also in Singapore, Kula Lumpur and other Asian Cities.

In Europe we will not find such a development. Even countries and cities that are doing extraordinary well (like London or Barcelona) cannot match the pace of their Asian sisters. If we take a look into the IMF-statistics, the picture becomes even clearer: Germany—Europe powerhouse right now—contributed to World-GDP-growth in 2012 with 0.3 %. China in contrast contributed to stunning 37.4 %. Given the assumption that no disruption occurs, the next century truly will be the "Asian one".

Is this a new development? Probably not so much. The late economist Angus Maddison from the University of Groningen (Netherlands) calculated that for more

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than eighteen of the passed twenty centuries, a combined China and India have contributed with more than 50 % of the world GDP. So, "the past two centuries of Western domination of world history are exception, not the rule, during 2000 years of Global history."[1]. So maybe the world is just swinging back into it's 'natural balance' after two centuries of unexpected Western predominance.

However, this development will have a large impact—on Asia, as on the West as well.

20.2 Asian Investments will Change the West

Western Investments have changed Asian Countries during the last three decades. The impact of this development can be seen across Asia, not only in cities like Singapore or Shanghai, where a multi-national, western influenced atmosphere and business culture has developed.

The "Westernization" of different cultures has been an academic topic for years. Buruma and Margalit worked out, that fear about the "westernization of culture" (often a homonym for 'Americanization') has been a topic for years around the globe.

What we will observe in the near future is the impact of the Asian Century on western countries. A large part of the original 'Westernization' of Asian culture has been introduced by foreign investments: Western products, western Management styles, Western culture and soft power. During the next 10–20 years, we will experience a development into the opposite direction. As more and more Asian companies go out and become global players, they will export their values and culture with them as well.

A good example is China: Although large parts of the country remain underdeveloped, more and more Chinese companies become economically involved abroad, buying foreign companies or founding foreign bases. The Chinese Central Government supports and fosters this development, proclaiming the 走出去 zou chu qu ('going out') strategy. Only recently a Chinese official in a conversation with me coined this development to a good phrase: "Right now, whole Europe is on sale. And we will buy."

Chinese Investments in Germany already expanded massively during the last 20 years. From 1990 to 2009 they rose from 70 million € to more than 600 million € in 2009. This equals a steady increase of 14 % a year. Concerning to experts, Chinese OFDI in Germany will rise above 2 billion € within the next 7 years.

20.3 How German Cities Prepare for the 'Asian Century'

In the end, all *investments* are local. Each company has to evaluate any given micro-location regarding it's strengths and weaknesses. And in international—even more in cross-cultural—investment decisions support for investors by local government is one important indicator that has to be checked first. So, we wanted to know, if German Cities show any kind of effort to prepare for and to attract investment from the Middle Kingdom. The results are quite interesting, see Fig. 20.1

Table 20.1 Chinese OFDI in germany (1990–2009) (Source: German Federal Bank 2011)

Year	OFDI from China in Germany		
	OFDI in million €	Change in million €	Change in %
1990	70	–	–
1991	79	9	12.9
1992	106	27	34.2
1993	144	38	35.8
1994	123	− 21	− 14.6
1995	124	1	0.8
1996	125	1	0.8
1997	186	61	48.8
1998	148	− 38	− 20.4
1999	129	− 19	− 12.8
2000	157	28	21.7
2001	177	20	12.7
2002	153	− 24	− 13.6
2003	156	3	2.0
2004	191	35	22.4
2005	235	44	23.0
2006	328	93	39.6
2007	444	116	35.4
2008	564	120	27.0
2009	613	49	8.7
Average change in % from 1990 to 2009			*14*

Asia became the second most important region for sistership agreements, straight after Europe. We discovered that sixteen out of Germany's fifty biggest cities employ a special 'China Desk'; 54 % of these employ at least one person working full-time
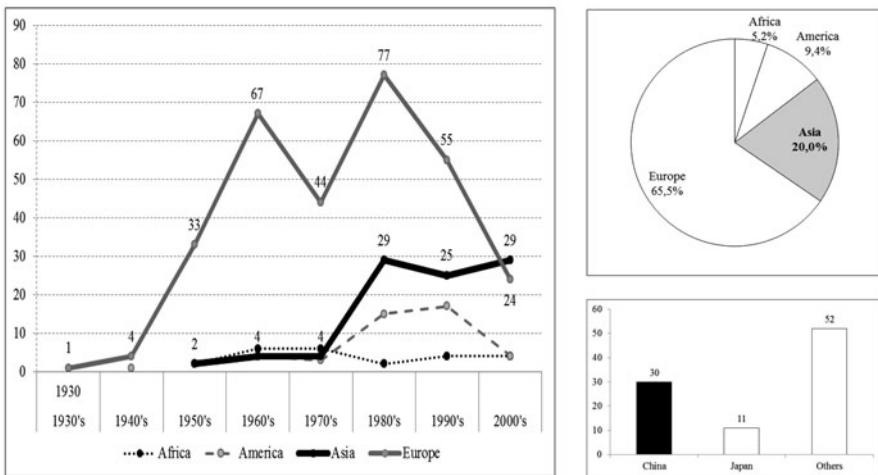
Fig. 20.1 Twinning Agreement of Germany's fifty biggest Cities. Development and status-quo 2013

on China-related issues. And German cities also developed a new kind of 'strategic partnerships'. We analysed several cities in detail. Among the most interesting cases was the relative small City of Oldenburg (奥尔登堡市), who's Mayor Gerd Schwandner recently has been awarded honorary citizen of Chinese city, an honour given only to half a dozen German people. Oldenburg's China Desk, headed by native Chinese Wei Zuo developed a so called 'four track' strategy, using science, culture, economy and exchange on an administrative level to create ties between themselves and six Chinese Counterparts.

To sum it up, our impression is that the administrative branches of German Cities are quite active to connect themselves with China and thus prepare for the Asian Century yet to come.

But what about the political branch? German cities traditionally are self-governed ("*Kommunale Selbstverwaltung*"), which means, that a directly elected Mayor—who generally is the most powerful political figure because he directly controls the administration—is checked by a local parliament. Parliament seats are usually taken by voluntary politicians ("*Hobbypolitiker*"), meeting once a month or less frequently. Nevertheless, they play a vital role in formulating municipal policies.

We wanted to know: What do party politicians and members on a local level think about Chinese Investments and China in general?

20.4   The case of the Christian Democratic Union (CDU)

The Christian Democratic Union is the predominant party in Germany's electoral system. Except two elections (1972 and 1998) it has been the strongest party in all elections to the German Federal Parliament (Bundestag). For 44 out of 64 years the German Chancellor was a Christian Democrat, this means more than 2/3 of the history of the Federal Republic of Germany has been ruled by Chancellors from the CDU. Reason enough for us, to start our analysis with this party in Spring 2013.

20.4.1   *Acknowledging the Asian Century to Come—But Disliking it*

First of all, we asked CDU party members if they think that China will become more influential in the future. Of our participants, 99 % think so. Almost 40 % even believe that in the near future China will become the most important country of the world (Fig. 20.2).

Anyhow, only 16 % have a positive perception of China. Almost half of the participants of our survey regarded China's image as negative.

This gloomy picture becomes clearer, when we go into more details.

Fig. 20.2 China's image within the CDU-survey

China's image is negative

38%

16%

□ positive

■ negative

46%
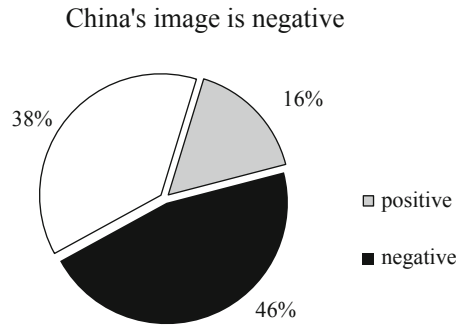
N = 191
Question: "Your personal estimation of China's image is..."

Fig. 20.3 China's image in comparision to the United States

Comparison: China and USA

symapthetic

trust worthy

Nation with culture

egoistic

good reputation

influential

innovative

N = 186 (188)

Rating-scale:
1 = to no degree
2 = rather no
3 = partly, partly
4 = rather yes
5 = absolutely yes
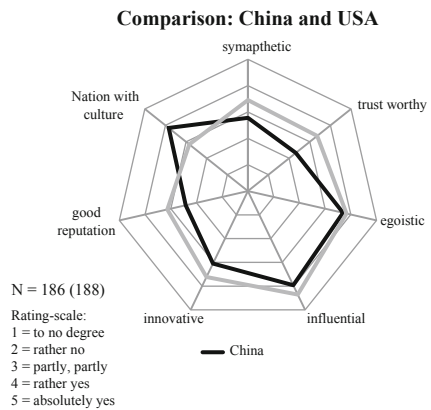
— China

20.4.2   China vs. the U.S.: The lack of Trust Worthiness

What if China was a person? What would her perception be like within the CDU?

We asked our participants to rate China concerning these items: Sympathetic, trust worthy, egoistic, influential, innovative, good reputation, Nation with culture (Fig. 20.3).

To get a more meaningful picture, we asked participants to do exactly the same for the United States. The reason is quite simple: The CDU under it's first chancellor Konrad Adenauer established the deep-rooting ties modern Germany has with it's Western Allies ("*Westbindung*"), especially the United States.

Interestingly, both large powers are regarded as similar in aspects as "influential" or "egoistic" (as if Germany was not)

20.4.3   Sceptic About Chinese OFDI

Does this general perception have an influence on the way CDU party members see investments from an Asian country?

Fig. 20.4 Perception of
Chinese Direct Investments

What do You think about Chinese
Investments in Germany (in %)

N = 190

Question: What do You think about Chinese Direct Investments in Germany?
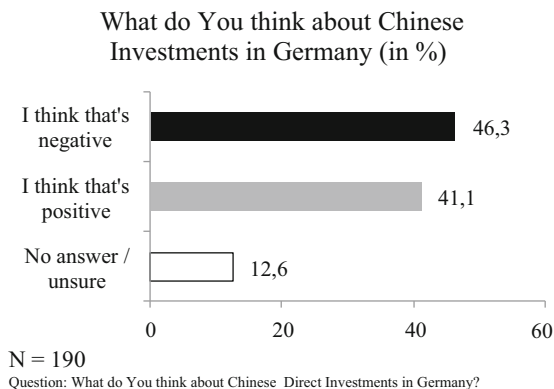
Presumably yes. At least the question whether Chinese investments are positive or negative splits the entity of all participants into two halves: 46.3 % regard this trend as being negative and 41.1 % think this is a positive development (Fig. 20.4).

In other words: Chinese companies generally invest almost 30 million € each year in Germany. These investments help to save or increase jobs and prosperity in Germany—but the 'help' from abroad is anything but welcome.

The situation within the CDU concerning a negative Chinese image heavily reflects the general situation in the German public. From representative polls we know that most Germans are sceptical towards China's (and Asia's) rise—and even towards Chinese investments in our country. What can be done to convince people—either party members or the general public—about the positive aspects of the Chinese and Asian rise?

20.5 What Can be Done to Better Prepare for the 'Asian Century'?

20.5.1 Strengthen Ties on a Municipal Level.

Our survey on the CDU indicates that party members expect their CDU-Chancellor to criticise China more often. However, they also believe that municipalities should strengthen their ties with Chinese cities for mutual benefit of the citizens. In other words: people seem to expect politicians on the national level to be critical against China but to do more to connect the municipality with it's Chinese counterparts. So, City-to-City liaisons could be a kind of "Trojan horse" to make people in Germany feel more comfortable with China (see graphics) (Fig. 20.5).
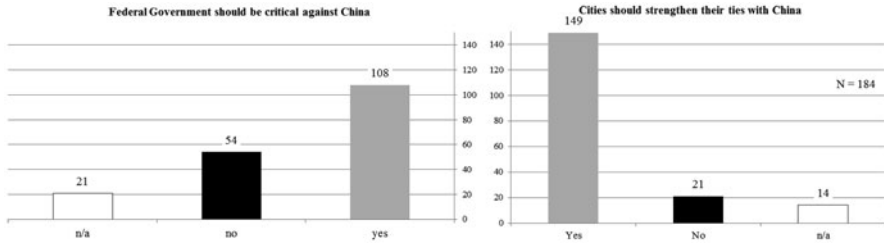
Fig. 20.5 How public Authorities should behave regarding China—on a national and local level

20.5.2   Communicate Contemporary Asian Success Stories—Apart from Culture.

As mentioned above, the CDU party members very well realise that China is a nation with culture. To promote a more positive view on China, the Chinese Embassy, as well as other official bodies very often highlight the 5,000 years of Chinese history. Our survey indicates this might be the wrong strategy: People already know about China's long and honourable history. Anyhow, this perception does not relate into a more positive view on China in general. We think that the time might has come to publish different stories on China in specific and Asia in general. Stories about successful transformation of Asian societies. From poor, rural societies to urban middle-class dominated ones.

20.6   Summary, Discussion and Results

During the Asian Century we will see more and more OFDI from Asia to Europe. This development will have a mutual benefit—and it will change Western societies exactly in the same way that western commitment has changed Asia.

Public authorities in Germany and elsewhere in Europe will do more to market investment opportunities and to attract OFDI from Asia, especially from China. Until now, responsible politicians fail to convince their own followers on the positive aspects of this trend. Public opinion in Germany still is quite hostile to increasing OFDI from China. Especially the media often depicts the Middle Kingdom negatively.

And politics? In the case of the CDU party members we have monitored that scepticism can be attributed to a lack of trust due to a lack of knowledge. Two necessary actions should be taken: (1) city-to-city liaisons between Asia and Europe should be fostered. Cultural aspects and exchange should be used in the future as they have been a bridge to mutual understanding in the past. Nevertheless, additional stories should be told to the European audience: About Asian values, about positive developments like rising wages and the massive growth of middle class households across Asia. Also political successes should be explained: Asian societies live in

relative personal freedom, stability and peace. The West should learn more about this. Maybe it will lead to more Asian 'soft power' in the world.

20.7 Our Methodology

In Spring 2012 we did some research on the "China Strategies" of Germany's fifty biggest Cities. The backbone of our research then were in-depth, qualitative interviews with officials representing some cities of the survey. From April to May 2013 we conducted an online-survey within three regional branches of the CDU in the state of Lower Saxony. Out of each branch, three local chapters were selected due to their spatial structure: Three urban branches, three suburban branches and three rural branches. 432 people opened the questionnaire, 192 people filled in at least one question. Until now, we only conducted our descriptive statistics.

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Part III
Emerging Trends in Banking, Finance and Accounting

Chapter 21
Lower the Interest Burden for Microfinance

Carrie Lui, Insu Song and John Vong

Abstract MFIs have a high interest rate burden due to the small amount per trans-action of microcredit and inevitably high operating cost per transaction. To ensure financial viability and to expand the depth and breadth of their operations, MFIs have to adopt cost recovery interest rates on microcredit, hence, MFIs have to charge interest rate high enough, usually substantially higher than the bank loan risk free interest rate. The major factors determining the interest rate on microcredit are the cost of funds, operating costs, loan loss cost and capital for business expansion. To illustrate the impacts of the above factors on interest rate, we present a summary of the current cost structures of microfinance institutes (MFIs) in three Southeast Asia countries, Cambodia, Vietnam, and Indonesia. Then, we review existing studies for the roles of mobile technologies for lowering the interest burden.

21.1 Introduction

Access to reliable and affordable financial services such as savings, credit, payments, transfers, and insurance are vital to manage daily lives in modern economy [1], yet over half of the world population are still unbanked. Chaia et. al. [2], CGAP [3] and Ardic et. al. [4] suggested that as at the end of 2009, 2.75 billion people (56 % of the global population) do not have access to formal financial services. A recent survey of 150,000 adults aged 15 and above in 148 different economies conducted by World Bank reported that over 50 % of the respondents did not have any account at any financial institutions. While 89 % of adults in developed countries have access to financial services, it is only 41 % in developing countries.

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For the unbanked, poverty (no cash on hand), relatively high costs associated with accessing banking services, and inconvenient locations (due to long distance) of branches are reported as the major reasons for not using any banking services. A third (approximately 800 million people) of the unbanked population in Asia, who are in the lowest income category (i.e. living on under $ 5/day), simply cannot afford the high costs of commercial banking services. For commercial banks, providing banking service in these low-income communities is very difficult. The main reasons are high fixed costs of banking systems and the costs for running banking activities (e.g., credit scoring and lending) required by commercial banks. Some commercial banks also hesitate to invest in these markets due to lack of confidence and to avoid supporting potential future competitors. The mechanism to provide a self-sustainable business model to serve these markets continues to be a challenge.

In the last few decades, many MFIs have emerged to provide financial services and microcredit to the unbanked sector. For example, solidarity lending and village banking pioneered by Grameen Bank [5] in Bangladesh, KWFT (www.kwft.org) in Kenya, WING in Cambodia (www.wingmoney.com) [6], and many others. It is believed that microfinance is an effective instrument to alleviate poverty by providing financial service, particularly microcredit and savings accounts to the low-income individuals and microenterprises [7, 8].

Even though microfinance began in Bangladesh in the 1970s, after 30 years, there are still half of the population in the world was still outside the reach of MFIs. Majority of existing microfinance solutions are operated on labor-intensive business models that involve posting transactions from one ledger to another manually with paper systems. These not only pose a substantial challenge for these MFIs to scale fast enough to serve the huge demand of the unbanked population, but also create difficulties to be accounted for legitimate activities and frauds. In particular, the substantial portion of operating costs is due to manual labor. Credit officers have to maintain frequent contact and close relationship with customers to enforce loan contracts and to control risk of lending as the MFI customers can not provide collateral or credit histories. Operating costs are inevitably high for each loan transaction as well. Therefore, MFIs charge much higher interest rates than banks to ensure the permanence and expansion of the services without ongoing needs of subsidies from donations. The global average loan interest rates of MFIs is around 35 % [9]. The high microcredit interest rates have been heavily criticized and a number of countries have legislated interest rate cap on microcredit. In summary, for MFIs to scale fast enough to serve the huge demand of unbanked population and maintain financial sustainability, they require new business models and innovations to lower the interest burden by (1) lowering the operating cost, (2) accounting for legitimate activities and frauds, (3) lowering or mitigating risks of microcredits.

This study aims to understand the causes of interest burden of MFIs and discusses the roles of mobile technologies and financial market innovations for MFIs to lower the interest burden. To illustrate the impacts of the different factors on interest rate, we present a survey of current cost structures of microfinance institutes (MFIs) in

Fig. 21.1 Interest income as percentage of gross loan portfolio for 2011
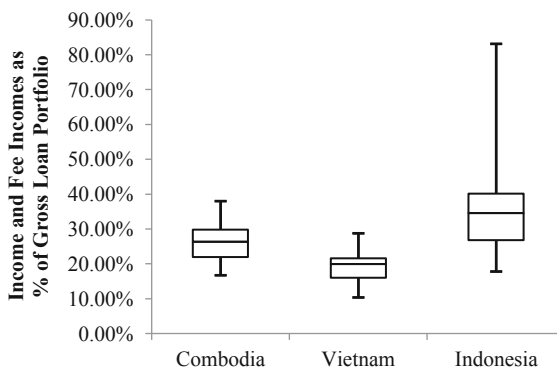
Southeast Asia. Then, we review existing uses of mobile technologies for lowering the interest burden.

21.2 Impacts of Costs on Interest Burden

For MFIs to be financial viable, they need to use their loan interest income to cover the operating costs which comprise of cost of funds, loan loss expenses, and other operating expenses (e.g., equipment and wages):

$$\text{Income} > \text{Cost of funds} + \text{Loan Loss expenses} + \text{Operating expenses} \quad (21.1)$$

Lowering interest burden would require lowering one of the three components on the right side of the equation. In this section, we will discuss how these components may affect interest income of an MFI. Financial information on MFIs is drawn from the database of the Microfinance Information Exchange (MIX). Not all MFI report to MIC, but those that do currently over 2000 MFIs worldwide in 110 countries. We use the adjusted financial information of these MFIs to compensate for the effect of any subsidies they receive and, thus, try to present a picture of what the industry would look like if they had to pay market costs for all of their resources. We present the cost structure of MFIs in three Southeast Asia countries: Cambodia, Vietnam and Indonesia. We collected a dataset that includes 58 MFIs that report their results to MIX for 2011. 9 out of the 58 MFIs have a negative net income after taxes and before donations; hence they are not financially viable. They are excluded from this analysis. Among the 49 financial viable MFIs, there are 15 from Cambodia, 21 from Vietnam, and 14 from Indonesia.

In looking at interest rates, we use percentage of income from loan on gross loan portfolio (GLP), which is the total amount that cash borrowers pay the MFI during a period for interest and fee from loan divided by the average outstanding GLP over the same period. Figure 21.1 shows the minimum, 25th percentiles, medians, 75th percentiles and maximum interest and fee incomes of MFIs as % of GLP. The values
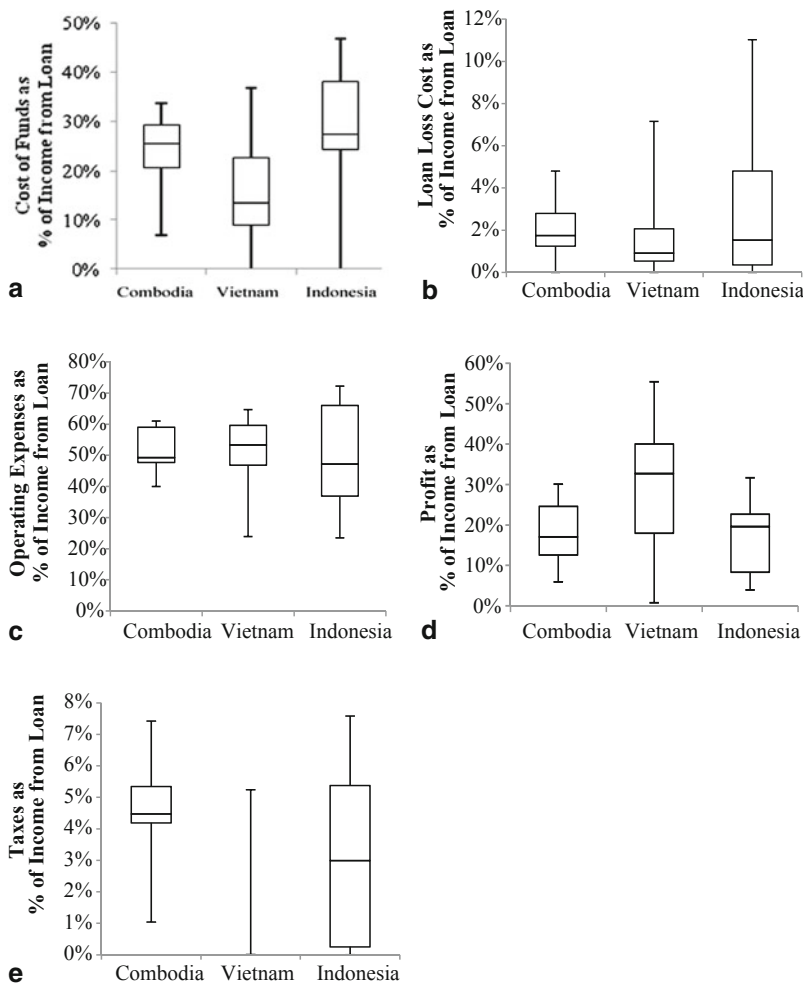
Fig. 21.2 Costs and taxes as percentage of income from loan for 2011

range from 16.7 to 37.97 % in Cambodia, 10.33 to 28.74 % in Vietnam, and 17.77 to 83.09 % in Indonesia. During the same period, the average risk free interest rates in these countries are 1, 9, and 6 %.

To investigate the factors related to the interest rate of MFIs, we look at the different costs and taxes of MFIs as percentage of income from loan. Figure 21.2 shows the minimum, 25th percentiles, medians, 75th percentiles and maximum (a) cost of funds, (b) loan loss cost, (c) operating cost, (d) profit and (e) taxes of MFIs as % of total income from loan during 2011.

The costs of funds as percentage of income from loan for the MFIs are relatively high with medians of 25.43 % in Cambodia, 13.4 % in Vietnam and 27.37 % in Indonesia. The high cost of funds as percentage of income from loan may due to

MFIs have to pay more expense interest rate to borrow capitals to fund their loan portfolios; however, compared with commercial banks, MFIs tend to have less of their loan portfolio funded by liabilities. Another possible reason for this may due to poor liquidity management for MFIs, MFIs may tend to keep more cash in hand for liquidity risks.

Loan losses due to microloan default have relatively little effect on MFI interest burden, loan loss as percentage of income from loan for MFIs have medians of 0.01 % in Cambodia, 0.76 % in Vietnam and 1.17 % in Indonesia. MFIs usually have default rate well below those of commercial banks in their countries. MFIs with too low loan loss rate may be too risk-averse in their selection of borrowers, which may dampen the reach of MFIs to the poor.

Substantial portion of MFIs income from loan goes to pay operating costs. This becomes the major factor of high interest burden for MFIs. Operating cost as percentage of income from loan for MFIs have medians of 49.28 % in Cambodia, 53.28 % in Vietnam and 47.21 % in Indonesia. There are a large range of factors that affect operating costs of MFIs, including loan size, scale of MFIs, client location and density, communication and transport cost, type of loans, office and equipment costs, and salary levels. Lower operating cost of MFIs will lower the interest burden of MFIs considerably.

Profit has a mild effect on interest burden on MFIs. Profits as percentage of income from loan for MFIs have medians of 17.06 % in Cambodia, 32.67 % in Vietnam and 19.61 % in Indonesia. Making profit from microfinance is controversial, as MFIs are viewed as a service to the poor, not as a profit making opportunity. However, one may argue that profit of MFIs can attract more investment in MFIs and allow more rapid outreach of MFIs to the poor with the capital to expand their operations.

Taxes have very little effect on interest burden on MFIs. Taxes as percentage of income from loan for MFIs have medians of 4.47 % in Cambodia, 0.00 % in Vietnam and 2.99 % in Indonesia.

In summary, to lower the interest burden of MFIs, efforts should be focus on lowering the cost of funds, lowering the operating cost and lowering the capital required for business expansion for MFIs.

21.3   Mobile Technologies for Microfinance

Innovations can bring significant changes in the ways people participate in banking services. In the past decade, the use of mobile phones to provide financial services across developing countries has been one of the most remarkable technology stories. The International Telecommunications Union (ITU) reported global mobile phone subscriptions accelerating from 2.2 billion in 2005 to over 5 billion in 2011 reaching 86 % of the total global population and 79 % of the total developing world population. This phenomenon is set to grow to 6.8 billion by end 2013 [10]. Mobile banking is believed to be one of the important drivers to enable large scale and sustainable microfinance for the poor [11].

Various terms have been introduced in the past for mobile banking, such as "Mobile Phone Banking" or "Mobile Money Services" [12, 13]. Examples mobile banking systems include Sybase mCommerce 365 by SAP [14] and DELL Mobile Banking and Payments [15]. Many studies regarding mobile phone-based banking have been done recently for developed countries for accessibility for people with disabilities [16], security and trust issues [17], public perception and attitude [18]. However, most of the existing banking systems supporting mobile phone-based banking, such as Sybase mCommerce 365 by SAP [14], DELL Mobile Banking and Payments [15] are targeted at developed countries and therefore would incur additional overheads on top of the existing banking systems. Either adopting these off-the-self solutions or develop their own, MFIs will need to have adequate bank-office information systems. In many cases, deploying the technical solution is time consuming and expensive. For examples, Opportunity Bank and XacBank, a micro-finance bank in Mongolia, invested even at least US $ 100,000 to upgrade their core banking system, before developing its own m-banking service [CGA 2010]. While most believe that mobile technologies could be used to reach more low-income customers at a lower cost, yet in majority of the developing countries, there is not yet a self-sustainable, low cost mobile banking solution that micro-banks can fully leverage.

21.4 Conclusions

In this study, we shows that among all costs of MFIs, operating cost is the most important determinants of interest burden for MFIs in Cambodia, Vietnam and Indonesia. In order to lower the interest burden for these MFIs, we believe that a new banking model integrating mobile technologies and financial market innovations is required. We illustrate that future research effort could using affordable mobile technologies to lower operating cost of MFIs considerably and help to increase the reach of MFIs to the poor with lower capital required.

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Chapter 22
Environmental Performance Measurement and Evaluation for Manufacturing Organizations: A Review and Reflection

Parag Sen, Pradip Kumar Ray and Sadhan Kumar Ghosh

Abstract Sustainability in manufacturing, being one of the key characteristics of any kind of manufacturing system, requires an approach of environmental management practices as a proactive approach for improving performance of processes and products. Establishment of an environmental performance measurement system in this context is essential for management and control of various kinds of resources and processes in use and their impact on external environment on a continuous basis. This ensures sustainable business performance in long term. In this paper, several existing approaches of environmental performance measurement systems are critically appraised which may be required to develop a comprehensive and integrated generic framework for evaluating the environmental performance of the manufacturing organizations.

22.1 Introduction

Sustainability has increasingly become important to business research and practice over the past decades as a result of rapid depletion of natural resources and concerns over wealth disparity and corporate social responsibility. To achieve sustainable development, environmental performance measurement has been the focus of considerable attention over the last few decades. The evaluation of environmentally conscious manufacturing programme is similar to many strategic initiatives and their justification methodologies [1, 2]. The manufacturing sector, which lies

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at the core of national economy of any country, must be made sustainable in order to preserve the high standard of living achieved by industrialized societies and to enable developing societies to achieve the same standard of living sustainably. The ecological and environmental issues play a key role in manufacturing sectors for sustainable engineering and management. Global and domestic environmental laws, rules and regulations are forcing many organizations to adopt green manufacturing and green supply chain management practices considering the aspects of recycling; reuse; environmental impacts of all functions, and business processes and products.

22.2 Existing Environmental Performance Measurement Systems in Manufacturing Industries

There exist many approaches of environmental performance measurement (EPM) which may be broadly classified under two categories: direct and indirect approaches. Whereas direct approaches are directly related to environmental pollution measurement and controlling the processes, indirect approaches are those dealing with controlled resource utilization and proper selection of methods and suppliers, indirectly leading to environment-friendly ecological performance.

22.2.1 Direct Approaches

The existing approaches in this category may be grouped under eight classes, viz. integrated pollution control; intelligent and information based environmental management; environmental innovation management and planning; life cycle assessment and remanufacturability; environmental impact assessment; strategic environmental assessment; environmental risk governance; and sustainability measurement.

22.2.1.1 Integrated Pollution Control (IPC)

Goldstein et al. introduce a new methodology using integrated pollution control (IPC) information generated European Union (EU)-wide, this approach should be capable of cross- country extension. The methodology is tested on a sample of Irish facilities in three sectors during 1996–2004. Preliminary results show its usefulness in exploring the determinants of environmental performance at the sector and cross sector levels.

22.2.1.2   Intelligent and Information based Environmental Management (IIEM)

Irish manufacturing SMEs are falling short of initiating formal environmental management systems and front of pipe technologies. Initial research by Burke and Gaughran have identified and developed multi-stepped architecture, which could be used to form an initial base for an EIMS. Kuo et al. presented IDEF (integration definition) tool set which is applied to describe the overall operational workflow. Butler contributes a theory building on the phenomenon of Green IT-enabled information systems (Green IS), through its articulation of empirically based theoretical propositions which employ conceptual mechanisms to explain how Green IS can support organisational sense-making, decision making and knowledge sharing and creation around the design and manufacture of Green IT.

22.2.1.3   Environmental Innovation Management and Planning (EIMP)

According to Sheng and Srinivasan integration of environmental considerations into the part planning process occurs at two levels: microplanning (intra-feature) and macroplanning (feature interaction). Microplanning involves the selection of processes, parameters, tooling and catalysts to generate a single geometric feature. Macroplanning involves feature interactions under resource constraints which may have significant consequences in energy and waste generation, including precedence relationships between features and clustering among common setups, tooling and catalysts. Eiadat et al. illustrate ways in which an environmental innovation strategy is itself influenced by significant environmental pressures, including government environmental regulation, perceived importance of stakeholder pressures, and managerial environmental concerns. Tseng et al. present the evidence of green innovation practices and implications for operations management research and practices developing the following hybrid method evaluating the weights of the aspects and criteria as by linguistic preferences and using an analytical network process with entropy weights to evaluate the proposed framework.

22.2.1.4   Life Cycle Assessment and Remanufacturability (LCAR)

Brent and Visser propose an environmental performance resource impact indicator (EPRII) to assess suppliers based on three simple operational parameters: water use, energy use, and waste produced. By translating EPRII results per economic value, it is shown that the operational expenditure on suppliers is not directly related to the environmental burdens associated with supplied components. Xiaoyana explores the design content for new products' re- manufacturability, and builds up the evaluation model of a used product's remanufacturability, in which the remanufacturability

index of a used product is the product of the technological index and the economical index. Chung and Wee investigate the impact of the green product design, the new technology evolution and remanufacturing on the production-inventory policy, and develop an integrated deteriorating inventory model with green-component lifecycle value design and remanufacturing. Branker et al. propose a machining microeconomic model that can optimize machining parameters and include all energy and environmental costs. A survey of microeconomic machining cost models is covered, with the result that a new cost model has been developed based on life cycle analysis (LCA) methodology. Theoretical and actual experimental results are used to illustrate the model's implications with respect to carbon emissions and cost sensitivity.

22.2.1.5 Environmental Impact Assessment (EIA)

An assessment methodology is developed by Choi et al. on the basis of the 'material balance' of a process and the relationship amongst different processes. A case study of the production of a toy train with twelve scenarios is performed to illustrate and examine the assessment model showing that the number of components, the selection of materials and processes, and recyclability are the essential factors to determine whether the products are environmentally-oriented.

22.2.1.6 Strategic Environmental Assessment (SEA)

Cheng and Sheu suggest a new research model to examine the factors influencing the quality of strategies developed and implementation in inter-organizational relationships in a green supply chain. Results show that opportunistic behaviour and dysfunctional conflict decrease the willingness and damage efforts to establish relationships to enhance the strategy

Quality for the green supply chain. According to Handfield et al., in order to be successful, environmental management strategies must be integrated into all stages of the value chain, which includes all of the processes spanning product design, procurement, manufacturing and assembly, packaging, logistics, and distribution.

22.2.1.7 Environmental Risk Governance (ERG)

Benn et al. (2009) developed a process-based approach by identifying five factors (namely 'sub- political' arena, key interests of and differences between stakeholders, creating the 'community of interest and dispute' network, negotiating the deliberative strategies and implementing the decisions) to governance of environmental disputes that allows for the evolving nature of stakeholder relations in a highly complex multiple stakeholder arena. Cong and Freedman conduct a study on the relations between

corporate governance and pollution performance and disclosure were examined. The primary findings of the study indicate that there is a positive relationship between good governance and pollution performance.

22.2.1.8   Sustainability Measurement (SM)

Jayal et al. present an overview of recent trends and new concepts in the development of sustainable products, processes and systems. In particular, recent trends in developing improved sustainability scoring methods for products and processes, and predictive models and optimization techniques for sustainable manufacturing processes. Ricoh Group Sustainability Report reveals Comet Circle which represents a sustainable society that recirculates resources. The Ricoh Group contributes to the development of a recycling-based society by focusing on the five activities (namely identifying and reducing environmental impact at all stages, putting priority on inner loop recycling stages, promoting a multitired recycling system, more economically rational recycling and establishing a partnership at every stage) to make the Comet Circle work effectively.

22.2.2   Indirect Approaches

Although these approaches essentially do not directly deal with pollution control methodologies and strategies, but results in environmental performance improvement by reducing energy consumption; selecting green supplier; green marketing and minimizing wastes. The existing indirect approaches may be classified into three categories: such as namely energy management and carbon footprint reduction; green purchasing and green marketing; and lean engineering and management practices.

22.2.2.1   Energy Management and Carbon Footprint Reduction (EMCF)

Fang et al. develop a new mathematical programming model of the flow shop scheduling problem that considers peak power load, energy consumption, and associated carbon footprint in addition to cycle time. Sundarakani et al. examine the carbon footprint across supply chains and thus contributes to the knowledge and practice of green supply chain management.

22.2.2.2   Green Purchasing and Green Marketing (GPGM)

Current studies indicate a need to integrate environmental management with manufacturing strategy, including topics like cross-functional integration, environmental

impact, and waste reduction. Dangelico and Pontrandolfo develop a Green Option Matrix (GOM), which characterizes green products and practices along different dimensions. Liu et al. propose a new hub-and-spoke integration model to integrate green marketing and sustainable supply chain management from six dimensions: product, promotion, planning, process, people and project (called the 6Ps). A model for evaluating green suppliers is proposed by Lee et al. The Delphi method is applied first to differentiate the criteria for evaluating traditional suppliers and green suppliers. A hierarchy is constructed based on the performance of green suppliers, considering the fuzzy extended analytic hierarchy process. With the proposed model, manufacturers can have a better understanding of the capabilities that a green supplier must possess and can evaluate and select the most suitable green supplier for cooperation.

22.2.2.3   Lean Manufacturing (LM)

Dües et al. provide evidence suggesting that Lean is beneficial for Green practices and the implementation of Green practices in turn also has a positive influence on existing Lean business practices. Yang et al. explore relationships between lean manufacturing practices and environmental management based on data from 309 international manufacturing firms. The findings suggest that prior lean manufacturing experiences are positively related to environmental management practices. Hajmohammad et al. propose a conceptual model and results indicate that supply management and lean activities provide means by which resources are invested in environmental practices. The empirical analysis also confirms that the impact of lean management, and to a lesser extent supply management, on environmental performance is mediated by environmental practices.

22.3   Critical Appraisal of the Existing Approaches

While critically appraising the existing approaches, the following merits and limitations (as given in the Table (22.1) of the existing approaches are worth mentioning:

22.4   Conclusions

In this paper, the existing methodologies of environmental performance measurement system have been classified under several criteria according to the available EPM literature. The existing methodologies are critically appraised with their potential merits and limitations. This may help to develop a comprehensive and integrated generic framework for evaluating the environmental performance of the manufacturing organizations.

Table 22.1 Merits and limitations of the existing approaches

Approach categories	Merits	Limitations
Direct	(i) IPC has the advantage of taking into account the effects of activities and substances on the environment as a whole, and the whole commercial and environmental life cycles of substances when assessing the risks they pose and when developing and implementing controls to limit their release. (ii) IIEM can store important environmental data and can retrieve as per requirement. (iii) EIMP helps to develop innovative ideas and planning to improve the environmental performance. (iv) LCA quantifies the emissions into air, water and land that take place in every life cycle phase and detects significant changes in the environmental effects between the life cycle phases. (v) EIA and SEA provide an opportunity for the public to comment on a strategic action before it is formally agreed.	(i) Integrated and intelligent manufacturing systems are very costly. (ii) Innovation management requires proper training among the employees. (iii) The accuracy of a LCA study depends on the quality and the availability of the relevant data, and if these data are not accurate enough, the accuracy of the study is limited. (iv) Experiments or tests for EIA may be expensive. (v) SEA has to deal with uncertainties from a local up to global level, which may occur throughout the course of the strategic action. (vi) To form a recycling based society for sustainable development may not be acceptable for all the manufacturing organizations
Indirect	(i) To reduce energy consumption is a very good approach which can be adopted by both large scale industries and SMEs as well. (ii) Green purchasing and green marketing lead to increase green competition which is very important for green manufacturing. (iii) Lean manufacturing helps to reduce the wastes which may lead to reduce the production cost.	(i) Green purchasing may not be very fruitful method for the SMEs because green products or raw materials may cost more. (ii) Lean manufacturing may not be suitable for low-volume manufacturers. (iii) Cost of implementation of lean manufacturing system is usually high. (iv) Very often lean manufacturing system is not found suitable in the process industries as there is no concept of unit manufacturing.

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Chapter 23
Impact of Microfinance on Gender Equality in Indonesia

John Vong, Song Insu, Rakesh Dhananjay Salian, Rui Xu, Rinu Kariath and Kritchawan Bunyong

Abstract The empowerment of women micro entrepreneurs is necessary for the holistic social-economic development of a nation. The aim of this paper is to address the gap in the study of formal financial access to rural women micro-entrepreneurs in Indonesia. This study will contribute further in the pool of academic resource for micro-financing organisations intending to create formal financial products for this niche market. Meta-analytic research methodology was employed to review relevant literature, in order to assemble supporting data relating to women's constraints for access to formal micro-finance for women. As a result, a hypothesis was devised that gender inequality is the underlying constraint for rural women entrepreneurs to access formal microfinance. Evidential data was reviewed for factors pertaining to gender inequality index, general and financial education status, and social-cultural norms of rural Indonesian women. In conclusion, the authors found that gender inequality issues require further attention by micro financers during the design process of successful micro-financial products. In addition, relevant recommendations were formulated such as aesthetic redesign of financial outlets, reduction in lead time and costs for micro-financial transactions, and micro-insurance. Further research is required to conduct a test of the generated hypothesis at the location under discussion.

23.1 Introduction

Microfinance has been a life-saving tool for many households and has enabled them to come out of poverty. It is said that almost half a billion poor people along with low income groups have access to microfinance services in the world. Microfinance is a "pro-poor" growth strategy where formal or informal financial services are delivered to those who lack access to credit and saving facilities. Microenterprises have provided 60–80 % jobs in the developing economies [1]. This activity empowers

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the low income household entrepreneurs in a society [2]. Especially, women owned enterprises play a vital role in societies far beyond contributing a job creation and economic development [3]. There is significant importance of financial access to women micro entrepreneurs. It has been statistically proven that there is positive impact on children's welfare from women micro-finance activities, than compared to male micro-finance activities, which recorded insignificant or even negative effect on the same subject [4, 5].

The development of microenterprises are considered to be instrumental in providing employment and raising the standard of living of poor people all over the world [6], however Tambunan [7] concurs with contrasting research literatures that high percentage of micro-entrepreneurial activity reflects high poverty 'distress', with reference to Indonesia. Indonesia has been noticed to still counter with its poverty levels in the rural areas. This may be evidential from the number of micro-enterprises undertaken by poor households as they are "pushed" to take on activities to incur their primary and secondary income. During Asian financial crisis in the year 1997, micro enterprise activity in Indonesia absorbed the laid-off workers and presently it represents 90 per cent of all Indonesian firms.

23.2 Literature Review

23.2.1 Women Micro-entrepreneurs

According to Tambunan [7], there is an up-rise in the positive international speculation to the concept of women's entrepreneurial participation. This has, especially in rural areas, invoked interest among policy makers, academics, and practitioners in Indonesia. It is essentially true in countries with higher levels of poverty that the women seemed more to be 'pushed' towards entrepreneurship, far more than 'pulled' [3]. Davis and Abdiyeva in 2012 [3] found women to be confined to managing very small enterprises, mostly microenterprise with less than 10 employees. This is further supported with the similar cases in many countries such as Jordan, Botswana, Kenya, Lesotho, Malawi, Swaziland, and Malaysia.

23.2.2 Banking Products and Services for Indonesian Micro-entrepreneurs

IFC offers Advisory Services so that financial institutions can reach out more effectively to women entrepreneurs. These services include: staff training, segmentation or market positioning, strategic planning and product repositioning. It trains women entrepreneurs in business management and planning, financial literacy, and elucidate credit/bank application process. In 2010, as a part of Banking on Women program

IFC had invested in Bank International Indonesia and has planned for many such investments in the coming years [8].

A study conducted by Johar and Rammohan [9] states that there are informational asymmetries in Indonesia. It states that before any discussion about the improvement of credit facility or financial services, it is important to test the financial knowledge and willingness of people to borrow. The analysis revealed interesting results—the tendency to borrow is higher for women from female-headed households. Moreover, a strong correlation was found between education level of women and the size of loan received. It also states that social network albeit increases the chances of women getting a loan, the education level decide the size of loan granted. During this study they also identified that women's borrowing activity is not affected much by money lenders' policies [9].

23.2.3   Constraints to Indonesian Micro- entrepreneurs

According to a 2009 report by United Nations Centre for Human Settlements (as cited in Narain [10]), it was found that 75 % of women in the world were discriminated in the formal and informal credit markets. It has been mentioned that there are various constraints faced by small entrepreneurs in Indonesia. This may alter according to region, sector or by the nature of enterprise. The constraints may enlist the lack of capital, access to supply materials, access to relevant business statistics, lack of marketing knowledge and product distribution [7].

23.3   Methodology

Literature search involved three keyword components. First, we searched over 60 electronic secondary data relevant to women entrepreneur, small business banking, SMEs banking, new micro finance product development, women in business, women literacy rate, gender equity index in Indonesia, women micro entrepreneurs in rural areas to discover published studies on the gender inequality women who were unable to access to formal financing in rural area, Indonesia. Second, we examined bibliography section from retrieved journals to find more study in the same context. Third, we examined statistics of WIN strategic action plan in Indonesia to analyze size of micro entrepreneur and propose micro financial products for women micro entrepreneurs. We identified forty research papers that exhibited inequality of women in Indonesia.

Meta-synthesis or qualitative meta-analysis was employed to envelop and synthesize a number of qualitative researches under a specific field of study to gain new knowledge [11]. As expected, majority studies showed that the inequity for Indonesian women can be evaluated in part as based on inputs where women and

men stand in regard to variable fundamental basic rights rather than outputs. Those variable factors are educational attainment and culture norms that involved in the gap between women and men. The evidence of data can conclude that the magnitude of gender-based disparities in Indonesia has limited women's opportunities to access formal micro-finance.

The various literature reviews has led the authors to devise a hypothesis of the following nature:

- Hypothesis A: Female Micro entrepreneurial activities in Indonesia have contributed to the increase in female literacy.
- Hypothesis A0: Female Micro entrepreneurial activities in Indonesia have not affected the female literacy statistics.
- Hypothesis B: Women Micro entrepreneurship has improved the female economic contribution to the Indonesian rural families.
- Hypothesis B0: Women Micro entrepreneurship has not affected the female economic contribution to the Indonesian rural families.
- Hypothesis C: The increase in women microenterprises in Indonesia has reduced the gender inequality gaps.
- Hypothesis C0: The increase in women microenterprises in Indonesia has not impacted the gender inequality gaps.

23.4   Recommendation and Implementation

There are various limitations in the ability of formal and informal sources of finance. These limitations can exaggerate further in reference to the women micro-entrepreneurs in Indonesia. Micro finance products would require relaxing the collateral criteria and developing more evaluative tools to analyze loans and character of the women micro-entrepreneur. Second necessity is to devise a system to prepare alternative plans if micro-loans were to default but nonetheless minimize the administration expenses during the process.

Most banks offer a good range of micro financial products and services. However, they still lack efforts in attracting women entrepreneurs from rural areas. Focus areas for banks and financial institutions in relation with women entrepreneurs in Indonesia:

1. *Financial inclusion*: provide easy access with minimum opportunity cost. Most importantly, banks need to provide full range of services as customers would like to deal with only one bank account for all their requirements. This can be followed by minimized documentation process, female oriented services, and products.
2. *Reduce informal finance dependency*: Mobile banking reduces operational cost by almost 50 %. Mobile banking created social inclusion among the rural population in four major dimensions: consumption behavior, participation in economy, political contribution and social network creations [12].

3. *Awareness of financial services*: Financial institutions need to collaborate with popular telecom services like Indosat and Telkomsel. For the payment and banking transactions, customers can use only the cellular network; no Wi-Fi is needed. This will provide access to majority of the rural women entrepreneurs as there are about 180 million mobile subscribers in Indonesia.
4. *Value added services*: Networking seminars and business education sharing workshops will provide an excellent platform for women entrepreneurs.

Micro women entrepreneurs' communication financial centre: the platform between micro women entrepreneurs and financial institution. Its purposes are change the way women think about money and loan, creating more secure for their families and future savings. Also, participant's centric approach can change perception of women's status from inequity problem. In addition, produce media can influence financial behavior. For example, the story based on low income women and topic of dealing with households financing and money management embedded in the traditional story lines of a soap opera. Hence, micro-financial institutions should provide service tailored to the need of women that are affordable, convenient, sustainable concerns.

23.5   Conclusion

This paper has shown that women micro entrepreneurs face multiple forms of constraints, but they all assimilate from an underlying gender inequality in their country of origin, Indonesia. With reason to believe that altering socio-cultural taboos is high on the government's agenda, the process will be time consuming and the rate of change will be comparatively slow. While working around this short coming, the opportunity for women micro entrepreneurs can be addressed by micro financiers. However, the gender inequality issues should be their focus of attention during the design process of successful micro-financial products. Therefore, there is potential for further research possibilities to conduct the field test at rural Indonesian locations to explore the hypothesis generated. This effort will empower the entrepreneurial success of a developing country and help to alleviate its poverty levels, irrespective of the various coercions from within the society.

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Chapter 24
Market Reaction and Investors' Behaviour to Earnings Announcement: Evidence from Indonesia Stock Exchange

Sandy Triady and Deddy P. Koesrindartoto

Abstract This study aims to evaluate the market reaction to the earnings, case in Indonesia Stock Exchange. It is expected that many uninformed and irrational trading happen around earnings announcement. Many studies suggest that the reason behind these biases is an impact of under reaction and/or overreaction of investors' behaviour. We examined market reaction and also examined the investors' trading behaviour; categorized by foreign and domestic investors. The findings are divided into type of earnings announcement, stocks with negative earnings announcements showed no abnormal returns around announcement day. Conversely, stocks with earnings announcement that have positive surprise showed the existence of abnormal activities around announcement day measured by significant cumulative abnormal returns (CAR). In this condition foreign investors have propensity to buy the stock after the announcement, in contrast domestic investors do the opposite behaviourand they tend to sell the stocks.

24.1 Introduction

In notion of efficient market hypothesis (EMH), market will react to any kind of information instantly without any delay. In this hypothesis, stock price will represent to all information right after the information is available [1]. Earnings announcement is one of the valuable information and in efficient market, price will adjust to the information quickly. Contrary with EMH, many studies had examined the effect of earnings announcement to trading behavior. It showed many uninformed and irrational trading around earnings announcement, which may create biases [2]. Many studies suggest that the reason behind these biases is an impact of under reaction and/or overreaction of investors' behaviour. Several studies suggest that stock price is under reaction to earnings announcement, otherwise several ones suggest the opposite results; the stock price is overreaction to earnings announcement. Even

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though there are two opposite results but the main point of this phenomenon brings the empirical proof to hold on the EMH.

De Bondt and Thaler [3] in their research suggest that investors have tendency to overreact to information. It means that investors react disproportionately to new information related to the corresponding stock. This will cause the stock price to change dramatically and this happen not for long period as the stock price will return back to its fundamental value over time. Besides that, one of well-known notion about abnormal pattern around earnings announcement is called Post-Earnings-Announcement Drift (PEAD), this is an condition when estimated cumulative abnormal returns continue to drift upward (downward) after the positive (negative) result of earnings announcement. Several studies showed that the drift is caused by under reaction. This study wants to examine the Indonesian market related to return pattern around earnings announcement and also investors' trading behavior around earnings announcement. Investors will be divided into foreign and domestic investors, by examining investors trading behavior it aims to find which investors cause the anomaly returns around earnings announcement. There is belief that foreign investor is superior to domestic investor in term of ability to absorb information.

To examine the data, we use abnormal return as the main proxy in proofing the existence of anomaly phenomenon around the earnings announcement and investors' buy ratio as the proxy to examine the trading behaviour. This paper is organized as follows: section 1 presents the introduction and also a short review of related theory and also previous researches. The data and methodology is presented in Sect. 2. Section 3 presents the main result, and the last section will present the analysis and summary of the research.

24.2   The Data and Methodology

The main datasets for this research are return of the stocks, announcements date, and volume transaction. All data are gathered from Indonesian Stock Exchange Data Centre. We used 20 sample stocks in this research, the stocks were picked from LQ45 index randomly in period of 2007–2011. From these stocks, we got 257 earnings announcements. The methodology used in this research is the standard event study. We used daily data in the event window at twenty (20) days before and thirty (30) days after the earnings announcement day. Day zero (0) is the announcement day.

Day
$-20, -19, -18, \ldots, -3, -2, -1, 0, +1, +2, +3, \ldots, +28, +29, +30$

This event study is used to examine the effect of earnings announcement on stock prices by using abnormal returns as a proxy to differ the normal condition and abnormal condition. To estimate these abnormal returns, we used market adjusted model. The abnormal returns are defined as the difference between the stock returns and the weighted-market-portfolio returns as Equ. (24.1).

$$AR_{it} = R_{it} - R_{mt} \qquad (24.1)$$

AR_{it} is the abnormal return of stock i on day t, R_{it} is the stock i return on day t, and R_{mt} is weighted-market-portfolio returns on day t. The daily abnormal returns do not explain a lot about the event of interest. Furthermore, these abnormal returns must be summed to get the aggregate for each event and it is called Cumulative Abnormal Returns (CAR) [4].This CAR represents the performance of an investor portfolio around the event window [5]. CAR is calculated using Equ. (24.2). $CAR(t_1, t_2)$ means the cumulative of abnormal returns over time period t_1 to t_2.

$$CAR_i\ (t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it} \tag{24.2}$$

Since this research wants to know the market pattern around earnings announcements, we need the date when the earning is announced. Quarter earnings announcement is used to represent the earnings announcement of each stock. This earnings announcement is divided into two categories based on the type of earnings surprise; positive surprise and negative surprise. To determine the type of surprise we used the three-day $CAR(-1, +1)$. If the three-day CAR is positive, it means the announcements have positive surprise, if negative, it means the opposite. From 267 earnings announcements, we get 124 earnings announcements with positive surprise and 133 earnings announcement with negative surprise. To examine the existence of abnormal returns, it needs to do statistical tests (t-test) to proof that the abnormal condition is significantly different with the normal condition. Besides abnormal returns, cumulative abnormal returns (CAR) is also tested to proof that there is no abnormal returns experienced by the investors because of trading decision made during the earning announcements.

$$Hypothesis\ 1: \quad H_0 : \mathbf{AR = 0} \quad H_1 : \mathbf{AR \neq 0}$$
$$Hypothesis\ 2: \quad H_0 : \mathbf{CAR = 0} \quad H_1 : \mathbf{CAR \neq 0}$$

To examine investors' trading behavior we used volume transaction. Volume transaction of investors is divided by four categories; foreign investors' buy volume, foreign investors' sell volume, domestic investors' buy volume, and domestic investors' sell volume. Using Equ. (24.3) adapted from Booth, we calculate the buy ratio of each investor to know the propensity of their trading behavior, if the score of buy ration is higher than 0.5, it means that the investor tends to buy the corresponding stock, meanwhile if the score is lower than 0.5, it means the opposite action.

$$Buy\ Ratio_{xit} = \frac{BUY_{xit}}{BUY_{xit} + SELL_{xit}} \tag{24.3}$$

BUY_{xit} ($SELL_{xit}$) is a buying volume of investor type x (foreign or domestic) for stock i on day t and then we use term of FBR as foreign buy ratio and DBR as domestic buy ratio. Therefore, these two buy ratios will be test using *paired-t test*. There is no significantly different between foreign and domestic investors' behavior if FBR and DBR have same value, hence we can form the hypothesis as follows.

$$Hypothesis\ 3: \quad H_0 : \mu FBR = \mu DBR \quad H_1 : \mu FBR \neq \mu DBR$$

Abnormal Return (AR)

Fig. 24.1 Abnormal Return (AR)
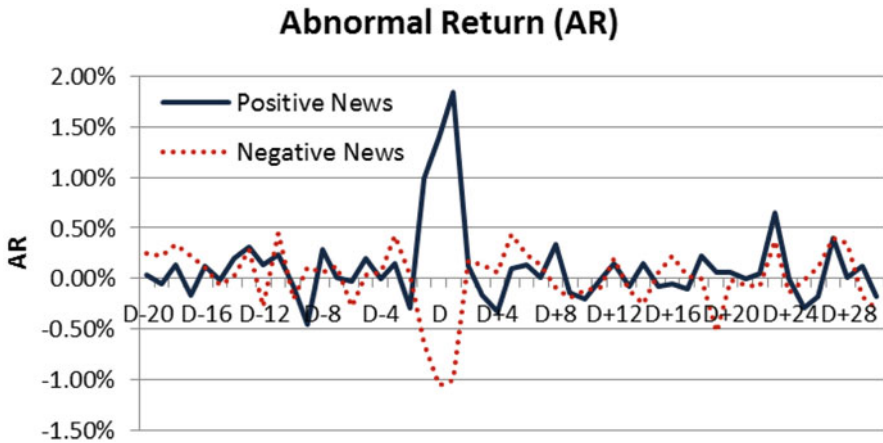
Cumulative Abnormal Return (CAR)
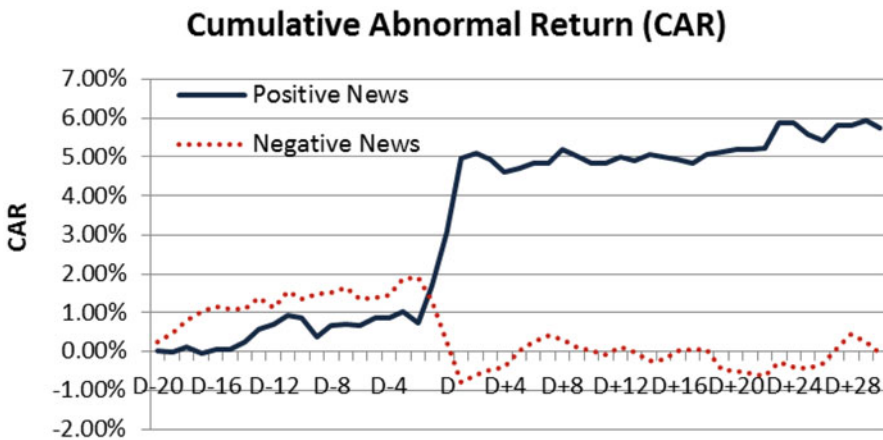
Fig. 24.2 Cumulative Abnormal Return (CAR)

24.3 Empirical Results and Analysis

After examining the AR and CAR, we plot those variables to show visually the reaction of Indonesian Stocks market to earnings announcement in event windows of day -20 to day $+30$. Figures 24.1 and 24.2 shows the result.

From Fig. 24.1, it shows that there is a dramatical change of abnormal returns in period around day -3 and day $+3$ both for positive news and negative news. Therefore, Fig. 24.2 shows that the CAR also changes with the same direction with the surprise before the announcement day and for positive news, it shows the CAR still go upward after the announcement day indicating there is a post-earnings-announcement drift but it seems the negative news To determine the reliable results, we examined the statistical test and Table 24.1 shows the results. Based on the results, we rejected

Table 24.1 Abnormal Return (AR) and T-test result

Day	Positive news AR	Positive news Sig.	Negative news AR	Negative news Sig.	Day	Positive news AR	Positive news Sig.	Negative news AR	Negative news Sig.
D−20	0.031 %	0.882	0.249 %	0.186	D+6	0.140 %	0.526	0.242 %	0.311
D−19	−0.057 %	0.752	0.223 %	0.414	D+7	0.009 %	0.968	0.139 %	0.643
D−18	0.139 %	0.473	0.335 %	0.051***	D+8	0.336 %	0.120	−0.085 %	0.759
D−17	−0.169 %	0.600	0.229 %	0.257	D+9	−0.139 %	0.507	−0.188 %	0.258
D−16	0.124 %	0.649	0.112 %	0.535	D+10	−0.201 %	0.212	−0.112 %	0.567
D−15	−0.016 %	0.934	−0.061 %	0.716	D+11	−0.015 %	0.926	−0.091 %	0.608
D−14	0.196 %	0.390	0.020 %	0.941	D+12	0.153 %	0.458	0.198 %	0.295
D−13	0.311 %	0.237	0.282 %	0.180	D+13	−0.073 %	0.705	−0.119 %	0.463
D−12	0.134 %	0.539	−0.273 %	0.210	D+14	0.154 %	0.452	−0.255 %	0.132
D−11	0.240 %	0.324	0.444 %	0.030**	D+15	−0.079 %	0.774	0.060 %	0.758
D−10	−0.082 %	0.670	−0.206 %	0.380	D+16	−0.049 %	0.824	0.227 %	0.283
D−9	−0.459 %	0.108	0.116 %	0.511	D+17	−0.096 %	0.588	0.018 %	0.924
D−8	0.292 %	0.229	0.055 %	0.795	D+18	0.228 %	0.281	−0.003 %	0.984
D−7	0.014 %	0.953	0.122 %	0.548	D+19	0.062 %	0.712	−0.527 %	0.012**
D−6	−0.024 %	0.915	−0.283 %	0.161	D+20	0.057 %	0.775	−0.013 %	0.937
D−5	0.199 %	0.334	0.031 %	0.880	D+21	−0.006 %	0.972	−0.067 %	0.776
D−4	−0.001 %	0.998	0.057 %	0.760	D+22	0.046 %	0.804	−0.082 %	0.699
D−3	0.151 %	0.533	0.430 %	0.023**	D+23	0.653 %	0.008**	0.370 %	0.076***
D−2	−0.290 %	0.168	0.032 %	0.884	D+24	−0.004 %	0.983	−0.138 %	0.460
D−1	0.993 %	0.000*	−0.636 %	0.000**	D+25	−0.293 %	0.190	−0.021 %	0.910
D	1.399 %	0.000*	−1.060 %	0.000**	D+26	−0.172 %	0.424	0.114 %	0.511
D+1	1.845 %	0.000*	−1.005 %	0.000**	D+27	0.396 %	0.079***	0.404 %	0.045**
D+2	0.117 %	0.654	0.178 %	0.384	D+28	0.009 %	0.969	0.347 %	0.176
D+3	−0.159 %	0.544	0.137 %	0.457	D+29	0.118 %	0.590	−0.175 %	0.289
D+4	−0.331 %	0.248	0.055 %	0.789	D+30	−0.177 %	0.439	−0.302 %	0.052***
D+5	0.103 %	0.661	0.435 %	0.040**					

*significant at the level 1 %, **significant at the level 5 %, ***significant at the level 10 %

Table 24.2 Cumulative Abnormal Return (CAR) and T-Test Results

Panel	Day	Positive news		Negative news	
		CAR	Sig.	CAR	Sig.
A	(− 20,− 1)	1.73 %	0.055***	1.28 %	0.138
	(− 15,− 1)	1.66 %	0.057***	0.13 %	0.867
	(− 10,− 1)	0.79 %	0.264	− 0.28 %	0.637
	(− 5,− 1)	1.05 %	0.039**	− 0.09 %	0.837
B	(− 1,+ 1)	4.24 %	0.000*	− 2.70 %	0.000*
C	(+ 1,+ 5)	1.58 %	0.006**	− 0.20 %	0.681
	(+ 1,+ 10)	1.72 %	0.013**	− 0.20 %	0.754
	(+ 1,+ 15)	1.86 %	0.021**	− 0.41 %	0.591
	(+ 1,+ 20)	2.06 %	0.021**	− 0.71 %	0.370
	(+ 1,+ 25)	2.46 %	0.011**	− 0.65 %	0.507
	(+ 1,+ 30)	2.63 %	0.014**	− 0.26 %	0.813
D	(− 20,+ 30)	5.75 %	0.000*	− 0.04 %	0.975

*significant at the level 1 %, **significant at the level 5 %, ***significant at the level 10 %

the null hypothesis 1(H_0: Expected abnormal returns (AR) = 0) for the period day − 1 to day + 1 for both of news with the highest significance level (1 %). It means that the expected abnormal returns are not same as zero. It is considered as the market reaction to the earnings announcement and this reaction follows the earnings surprise direction. For the positive surprise, the AR (− 1, + 1) will have positive AR, so does the negative surprise. The returns direction after earnings announcement looks different for two surprises. The returns direction of positive surprise tend to still upward until day + 7, it indicates that the market under reaction to the news because of the delay in absorbing the positive news. Otherwise, the returns direction of negative surprise after the announcement days is in opposite direction for an upcoming week, it indicates that the market is overreaction to negative surprise, therefore the price will up as an price adjustment process.

We examined four mains event windows to capture abnormal or unusual activities before, around, after earnings announcement, and all period as in Table 24.2. Panel A shows the period of pre-announcement since 20 days before the day. It shows no significant result of CAR for negative surprise, it means that there is no any unusual activity before earnings announcement. Otherwise, pre announcement in positive surprise shows significant results of CAR in same direction with earnings surprise, it indicates news leakage about the information of earnings announcement before the day because the CAR already started to increase since day − 20 and even more significant in day − 5 with 1 % significance level. It means investors already take some anticipation actions to get the expected abnormal return.

Panel B shows the reaction of market around the announcement day with significant CAR for both of surprise. Positive surprise results up to 4.7 % of returns at the 1 % significance level and negative surprise results − 2.7 % of returns at the 1 % significance level. The price impact occurred in these event windows in the strongest impact of market reaction and it indicates that the market is efficient in a way to impound the new information into the stock prices.
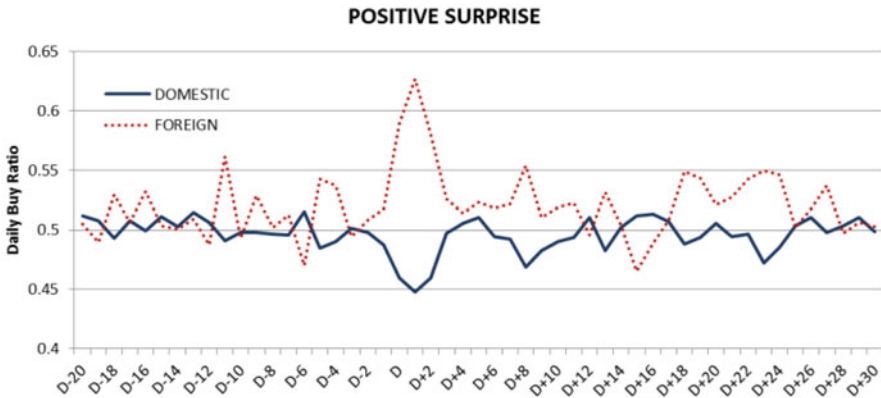
POSITIVE SURPRISE

Fig. 24.3 Investors' buy ratio in positive surprise

Panel C, the post announcement event windows, show significant results for positive surprise but not for negative results. The CAR in positive surprise is predictable to go upward and indicates the existence of the drift that caused by the under reaction as in the pattern of AR. The CAR will increase over the time; 1.6 % in the first five days up to 2.6 % at day $+30$. It support the previous analysis of the AR that market is under reaction after the earnings announcement day. These abnormal activities do not happen in negative surprise since there is no significant result, it indicates that the negative surprise is faster tin price adjustment process after the CAR around announcement day.

Panel D shows the whole period of event windows started in day -20 to day $+30$ and it results the existence of CAR for positive surprise as 5.7 % of CAR and it is a quite big number for the market return over 50 days of trading. Conversely, the negative surprise shows insignificant results with CAR only -0.04 %. Furthermore, the impact of surprise positive is persistent in these empirical tests but for the negative surprise, it seems to be more efficient since the price will adjust right after the announcement day.

Investors' trading behavior We examined the investors' behaviour around earnings announcement using buy ratio as the proxy. Divided into two type of investors; foreign investors and domestic investors. Since it was not found any indication of significant abnormal activities measured by the CAR in negative surprise. This section will only shows the result of investors' behavior in condition of positive surprise. Figure 24.3 shows the daily buy ratio of foreign and domestic investors. The buy ratio of two investors type looks different a lot at period of day -4 to day $+4$, the foreign buy ratio (FBR) is higher than domestic buy ratio (DBR). It means that foreign investors already started to buy stock that indicated will have positive earnings announcement before the announcement days.

Table 24.3 shows that there is no significantly different between the foreign and domestic investors' behavior in pre announcement day (Panel A). The significant

Table 24.3 Investors' buy ratio in event windows

Panel	Day	Positive Surprise	
		DBR – FBR	Sig.
A	(− 20, − 1)	− 0.0139	0.342
	(− 15, − 1)	− 0.0129	0.410
	(− 10, − 1)	− 0.0227	0.170
	(− 5, − 1)	− 0.0323	0.113
B	(− 1, + 1)	− 0.1335	0.000*
C	(+ 1, + 5)	− 0.0757	0.000*
	(+ 1, + 10)	− 0.0623	0.000*
	(+ 1, + 15)	− 0.0506	0.002**
	(+ 1, + 20)	− 0.0476	0.001**
	(+ 1, + 25)	0.0046	0.762
	(+ 1, + 30)	− 0.0476	0.001**
D	(− 20, + 30)	− 0.0354	0.003**

*significant at the level 1 %, **significant at the level 5 %, ***significant at the level 10 %

difference occurred around the announcement day (Panel B), it shows that DRT-FRT is in negative sign, it means that the buy ratio of foreign investors is significantly higher than domestic buy ratio. It indicates that the foreign investors buy the stock with positive earnings announcement, otherwise the domestic sell the corresponding stocks. This trading pattern continues in post-announcement period (Panel C), foreign investor keep buying the corresponding stock even though the ratio slightly decreases in period day + 10 to day + 15 (see Fig. 24.3), in this period the domestic investors start to buy more the corresponding stocks. This result show that foreign investors and domestic investors have different perception in understanding the information about earnings announcement.

24.4 Conclusion

We examined Indonesia Stock to see the market reaction and investors trading behavior around earnings announcement. Using cumulative abnormal return (CAR) calculated by market adjusted model as the proxy of market reaction and buy ratio as the proxy of investors trading behavior, we divided the earning announcement into two categories; earnings announcement with positive surprise (good news) and earnings announcement with negative surprises (bad news).

Our empirical results showed that stock with negative earnings announcement did not show any cumulative abnormal return. It indicates investor is more aware to negative information and they would react instantly right after the information is available. Conversely, the market will under react to positive earnings announcement showed by the positive drift of CAR after the announcement days. We also documented the indication of information leakage of earnings announcement since the CAR started to increase before the announcement day.

The trading behavior of investor also showed different pattern in reacting to the result of earnings announcement. The foreign investors will buy the stock with positive earnings announcement even before the official results is announced. It indicates that the foreign investors have better access to the information and this trading pattern continues after announcement day, foreign investors keep buying the stock with positive earnings announcement and domestic investors do the opposite one, they sell the corresponding stocks. It indicates that the foreign investors will gain higher cumulative returns by buying the stock with positive earnings announcement, we documented that in a whole period the stock with positive earnings announcement would have up to 5.75 % of CAR.

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Chapter 25
Corporate Governance, Financial Distress, and Voluntary Disclosure

Christina Yuniasih Surya Dharma and Paskah Ika Nugroho

Abstract This study examines the mechanism of good corporate governance and financial distress conditions on the voluntary disclosure in the annual report. Implementation of good corporate governance by companies, proxied by several indicators such as managerial ownership, institutional ownership, board of commissioners, and audit committees. The sampling method used in this study was purposive sampling. The sample consists of 53 manufacturing companies listed on The Indonesian Stock Exchange. The results showed that the board of commissioners have significant effect on the voluntary disclosure. While managerial ownership, institutional ownership, audit committees, and financial distress does not significantly influence voluntary disclosure.

25.1 Introduction

Reference [1] stated that the relevant information is needed by various stakeholders towards the financial statements to meet their needs in making economic decisions. Therefore, companies should provide the information which is more than required. Reference [2] defined a voluntary disclosure as disclosuring items which are carried out voluntarily by the company without any force or requirements by the recent regulations.

As it is known, a company not only has good news but there are also some unpleasant news. For example, a financial distress condition experienced by the company. Logically, the company will strive to keep the information as well as possible, so that it will not be revealed to public.

In addition to the financial distress condition, the breadth of voluntary disclosure can not be separated from the good corporate governance mechanisms within the company. The applications of certain corporate governance mechanisms are reported to improve the quality of financial reporting in general, including the transparency

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of disclosure, as well as the wide of voluntary disclosure [3]. Moreover, the theory of positive agency also provides a framework which links the behavior of disclosure towards good corporate governance [4].

In principle, good corporate governance mechanisms can give a guarantee towards the quality of accounting information through a set of institutional arrangements [5]. Audit committee has an important role, because the audit committee is related to the establishment and the accounting process monitoring to provide relevant and credible information to the stakeholders [6]. DeAngelo (1981) in [7] suggested that a good and independent public accounting firm will be able to identify the various accounting errors and exert pressure on the clients to justify those errors and report the accounting information.

Average managers of the companies that are experiencing financial distress will improve the quality of their disclosures [8]. Reference [9] suggested that the high-quality firm will not disclose bad news, as well as an extremely low-quality firms will choose not to disclose anything except the good news. Furthermore, [10] found that the companies which are in a state of financial distress tend to disclose less information compared to healthy companies.

The discussions about the good corporate governance mechanisms and financial distress conditions are becoming an interesting thing to study, but still few researches done in this regard. The aim of this study is to analyze whether the good corporate governance mechanisms and financial distress conditions have influences towards voluntary disclosure on the manufacturing companies listed on the Indonesian Stock Exchange (BEI) by using [1]'s model. Reference [1] measured the implementation of good corporate governance by the company, which is proxied by independent commissioners, auditor committee, and quality auditor indicators while we measured the implementation of good corporate governance, proxied by several indicators such as managerial ownership, institutional ownership, audit committees, and the boards of commissioners [11].

The contribution of this research in the field of accounting and finance is that it is expected that the result of this study can serve as a reference for the development of the science of accounting and finance about applying voluntary disclosure on the annual reports. For the investors, it is expected that they can provide inputs for the investment decisions.

25.2 Theoretical Review and Hypothesis Development

25.2.1 Voluntary Disclosure

The information in the financial statements are important in the decision-making activity. However, not all of the information presented in the financial statements, such as non-financial information that may be required by the financial statement users in a decision making activity. Therefore, the non-financial information can be obtained from the information disclosure provided by the company [12].

Voluntary disclosure is a disclosure which is more than it is required by the recent regulation and is a free choice for the company management in providing accounting information and other information that is relevant for decision making activity by the users of the annual reports [13]. Reference [14] stated that the company should have the initiative to reveal not only problems that are required by the legislation, but also things that are important for decision-making activity by the shareholders, creditors, and other stakeholders.

25.2.2   Corporate Governance

Corporate governance is a key element in improving economic efficiency, which includes a series of relationships between the company management, board of directors, shareholders and other stakeholders [15]. The measurement of the implementation of corporate governance by the company can be proxied by several indicators such as managerial ownership, institutional ownership, audit committee, and board of commissioners[11].

Reference [14] revealed that managerial ownership is a form of the principles of good corporate governance transparency. Management should be transparent in managing the company to avoid conflicts of interests with shareholders as the owners. Reference [10] proved that managerial ownership affects the width of voluntary disclosure.

H1 Managerial ownership affects the width of voluntary disclosure.

Institutional ownership outside the company with a significant amount will cause the outside firm conduct a rigorous supervision towards the governance which is carried out by the management. The supervision from the outsiders encourage the management of the company to show better performance, and to manage transparently. Reference [16] proved that the higher the level of shares owned by institutional shareholders, the higher the level of voluntary disclosure.

H2 Institutional ownership affects the width of voluntary disclosure.

The audit committee is one of the organs in the corporate governance which can guarantee the quality of the accounting information [1]. The function of the audit committee is to give some views about issues related to financial policy, accounting and internal control [17]. The results of [10]'s research proved the opposite, that the existence of an independent audit committee can not be attributed to the width of voluntary disclosure.

H3 The audit committee affects the width of voluntary disclosure.

The Board of Commissioners is a mechanism to supervise and provide guidance and direction to the corporate governance or the management of the company [18]. The effectiveness of the supervision function of the board will be reflected in the composition, whether the appointments of board members come from within the company or from outside the company. The greater the percentage of members from

outside the company, the more effective the role of the board in supervising the corporate governance of a company, because it is considered to be more independent [19]. Reference [20] proved that the size of the board affects the width of voluntary disclosure.

H4 The Board of Commissioners affects the width of voluntary disclosure.

25.2.3 Financial Distress

The signs of a company which is experiencing financial distress conditions can be seen from the state of profits derived by a company in a certain period [21]. Logically, of course, the company will keep the discouraging news as well as possible. Reference [8] found that the average managers of a company that is experiencing financial distress will improve the quality of their disclosures. Reference [9] suggested that the high-quality firm will not disclose any bad news, as well as an extremely low-quality firms choose not to disclose anything except for the good news. Furthermore, [10] found that the companies who are in a state of financial distress tend to disclose less information compared to healthy companies.

H5 The financial distress conditions affect the width of voluntary disclosure.

25.3 Research Method

Based on the research and hypotheses which have been explained before, the model of analysis used in this study is multiple regression model. This study used secondary data drawn from the annual reports on the Indonesian Stock Exchange (BEI). The population used in this study is manufacturing companies that published financial report for the period January 1, 2011 through December 31, 2011. This study only used samples of manufacturing firms, because these types of manufacturing industries have a broader level of disclosure compared to other types of industries [22].

The equation model to test the hypothesis as a whole is:

$$VDEXT\,it = \alpha 0 + \alpha 1 MO + \alpha 2 IO + \alpha 3 AC + \alpha 4 BC + \alpha 5\,DISTRS + \varepsilon \quad (25.1)$$

Description:

VDEXT Voluntary Disclosure (Using instruments [10])
MO   Managerial Ownership (measured by the percentage of shares held by the management from the entire outstanding share capital of the company)
IO   Institutional Ownership (measured by the percentage of shares owned by institutional investors such as governments, investment companies, banks, insurance companies and property agencies and other companies)

AC   Audit Committee (measured by the number of audit committees that exists
          within the company)
BC   Board of Commissioners (measured by the number of commissioners that
          exists within the company)
DISTRS Financial Distress (The Company is considered as experiencing financial
          distress if the company's financial statements show negative net profit for
          2 consecutive years. If the company is experiencing financial distress, they
          will be given a value of 1, and the companies which are not experiencing
          financial distress will be assigned a value of 0 [1])

25.4   Results and Discussion

Based on the data obtained, it contained 148 manufacturing companies listed on the
Indonesian Stock Exchange (BEI) in 2011. There were 22 manufacturing companies
that did not publish any annual reports in 2011. There were 70 manufacturing com-
panies that did not have data on managerial ownership. There were 3 data that were
unreadable. Thus, we obtained samples from 53 companies.

25.4.1   Descriptive Statistics

In this study, the descriptive statistics were used to provide information about the
research variables, such as: voluntary disclosure index, managerial ownership, insti-
tutional ownership, audit committee, board of commissioners, and financial distress.
Descriptive statistics for those variables are as in Table 25.1.

25.4.2   Hypothesis Test Results

Multiple regression is used to demonstrate how far the influence of independent
variables towards the dependent variable individually (Table 25.2).
    The Board of Commissioners has a significance level of 0.003. It can be con-
cluded that the board of commissioners affects the voluntary disclosure. This means
that hypothesis 4 is supported. Managerial ownership, institutional ownership, audit
committee, and financial distress does not affect voluntary disclosure.

25.4.3   Discussion

Based on the test results, it is showed that managerial ownership has no significant
effects towards voluntary disclosure. It does not support [10]'s research which found

Table 25.1 Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std.dev
VDEXT	53	0.6875000	1.0000000	0.8455189	0.0595503
MO	53	0.0000001	0.7000000	0.0527593	0.1140368
IO	53	0.2207000	0.9645700	0.6701144	0.1899052
AC	53	2.0000000	4.0000000	3.0566038	0.3047757
BC	53	2.0000000	11.0000000	4.1509434	1.9941860
DISTRS	53	0.0000000	1.0000000	0.0943396	0.2950978

Table 25.2 Hypothesis Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	0.820	0.087	−0.046	9439	0.000
MO	−0.024	0.081	−0.056	−0.300	0.765
IO	−0.017	0.046	−0.026	−0.377	0.708
AC	−0.005	0.027	0.436	−0.188	0.852
BC	0.013	0.004	0.007	3.153	0.003
DISTRS	0.001	0.028		0.049	0.961

Adjusted R-square = 0.104, F = 2.205, Sig = 0.069

evidence that managerial ownership affects voluntary disclosure. Using the agency theory, that firms with high managerial ownership will reveal less information to shareholders through voluntary disclosure. This is due to the companies which provide lower incentives to voluntarily disclose information to meet the needs of the shareholders [16].

Institutional ownership has no significant effects towards voluntary disclosure. The companies whose the majority of stocks owned by the public in large numbers do not necessarily provide broader disclosures. This is caused by the public shareholders are generally small investors, so that they do not have any authority over the financial and non-financial information that people want and can not affect the width of voluntary disclosure.

The test results for the audit committee variable support [10]'s research which stated that the audit committee had no effect towards voluntary disclosure. Though the company has an audit committee, but if the members do not have any expertise in the financial field, then most likely they will not be able to deal with the complexity of financial reporting. Or in other words, the audit committee is ineffective [1].

The test results for the board of commissioners variable shows that the board of commissioners has a significant effects towards voluntary disclosure which indicates that hypothesis 4 is accepted. The results of this study support the previous research held by [20] which stated that the commissioners affect voluntary disclosure.

Financial distress variable does not have any effects towards voluntary disclosure which supports the previous research held by [9]. Management will disclose information if the benefits are more than the costs of the disclosure. Probably, the negative

earnings in two consecutive years can not be used as a benchmark that companies are experiencing financial distress.

25.5 Closing

This study examined the influence of managerial ownership, institutional ownership, audit committee, board of directors, and the financial distress towards the voluntary disclosure. The conclusions of this study is partially, only the board of commissioners that significantly influences voluntary disclosure. In making decisions, the investors should consider the number of commissioners. The company is expected to increase the number of commissioners in order to widen voluntary disclosure. Voluntary disclosure can assist investors in understanding the business management strategies, so that it can increase the credibility of the company.

By looking at the adjusted R-square which is only 10.4 % which means that other variables (other factors) that are not included in this study had a greater influence towards voluntary disclosure. This study only held 1 year observations towards the companies' annual reports, so that voluntary disclosure practices which were observed were not enough to describe the actual conditions.

In the subsequent study, it is expected to consider the details of the disclosures of information which are done by the companies, so that the resulting values are not equal to the disclosure of information with different levels of detail. Future research may include other factors that may affect the voluntary disclosure, i.e the size of the company, the age of the company, leverage ratio, profitability, and liquidity. Subsequent research can use the stock-based and flow-based to condition a company that is experiencing a financial distress. In addition, future research may extend the years of research, so that it can describe the actual voluntary disclosure better.

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Chapter 26
The Strategic Focus of Management Control Systems: The use of Innovative and Organic Processes

Chris Durden

Abstract There is limited knowledge about the practices organisations utilise to link their strategic focus to the development and operation of management control systems (MCS). The literature suggests that traditional MCS have limitations in this context. This paper reports the findings of a case study designed to observe and codify MCS practices and their interface with strategy within the natural setting of a consumer foods organisation. The findings provide evidence of an organic approach in the development and support of a strategic focus to MCS. This suggests an innovative style of organisational performance management in a contemporary organisation.

26.1 I. Introduction and Prior Literature

Reference [3] highlights how the field of management control (MC) continues to develop and evolve and that it is important to understand its operation within a modern organisational context. The authors point out that: Contemporary organizations display flexibility, adaptation and continuous learning, both within and across organizational boundaries, but such characteristics are not encouraged by traditional [MC] systems. There is considerable anecdotal evidence to suggest that organizational practices are beginning to reflect these needs, so a key task for MCSs [management control systems] researchers is to observe and codify these developments [3], p. S40.

While there seems to be acceptance that traditional management control systems (MCS) have limitations, the nature and form of any possible change remains open to debate [27, 14, 3, 4, 10, 20]. Of particular interest in this context is how MCS are focused on organisational strategy. Based on a review of the strategy and management control literature [19] argues that conceptual understanding of the relationships between strategy and management control systems remains underdeveloped. In this regard she concludes: "... our knowledge of the relationship between management

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control systems and strategy is limited, providing considerable scope for further research" [19], p. 207.

The research presented in this paper examines the interface between MC and organisational strategy by means of a case study of a consumer foods manufacturing business. The purpose is to observe and codify MC practices and their interface with strategy within a contemporary organisational setting. Key findings relate to the important role of an organic approach in the development and support of a strategic focus to MC. The study contributes to the literature dealing with the changing and evolving role and purpose of MC in contemporary organisations. There is an increasing expectation that MCS should be innovative in design, flexible in operation, and should enable rapid organisational change in response to capricious environmental circumstances [7, 3]. This implies an extension beyond traditional ideas of management control.

Traditionally, the field of MC has been focused predominantly on accounting measures orientated towards the monitoring of short-term activities (e.g. budget goals) [30, 19]. However, a key problem with traditional MC tools, such as budgets, is that they do not enable managers to assess sufficiently organisational performance in the context of broader strategic and competitive factors, which may provide a better indication of long-term performance and success [4]. This approach may have been influenced by early definitions of management control which did not explicitly emphasise monitoring the attainment of strategic goals [30, 19].

26.1.1   A. Research Lens of this Study

The strategic management process was used as a lens to observe and analyse the interface between MC and strategy within the case study organisation. The strategic management process is often explained in terms of three stages: i.e., formulation, implementation, and evaluation (or control) [e.g., 32, 33]. Formulation is concerned with forming strategies and implementation is focused on the subsequent transformation into actions. The evaluation stage ensures that strategies remain effective and relevant based on actual outcomes. In respect of this study, strategy refers to both strategy formulation and implementation, and strategy evaluation (or control) refers to MC. The study provides insights into how contemporary MC practices were used to support a strategic focus.

The remainder of the paper is organised into four main sections. The next section outlines the research design and methodology. The third section presents the case study findings. The fourth section discusses the case study results. The fifth and final section contains a summary and conclusion.

26.2   II. Research Methodology and Design

The research was based on a case study informed from a naturalistic interpretive perspective [2], but one that was also somewhat ethnographic in nature [15]. Following [2] (p. 99), a naturalistic perspective is where the researcher "seeks to investigate management accounting practice in its 'everyday' organisational context". The case organisation studied was a privately owned New Zealand based consumer foods manufacturing company and is referred to as Food Holdings (FH)[1]. Selection of the organisation was based on a theoretical sampling approach [9, 3] based on its turbulent operating environment. The aim was purposely to select a suitable organisation that would likely provide a rich source of data for the study. Data collection and site visits took place over a 3 month period. Visits typically were in five working day blocks and covered a daily period from approximately 9 am to 4 pm. While this may not necessarily reflect the classic ethnographical approach of 'going native', it still reflects an extension of a more limited case study approach [26]. Multiple sources of evidence were collected at the research site, following what is generally described as data triangulation [9, 39]. The main sources were audiotaped and non-taped (informal) interviews, documents and direct observation.

Audiotaped interviews were conducted with nine organisational members, including the CEO (owner), management team and board members. These were between approximately 60 and 90 min in duration. Informal discussions (interviews) of about 15–20 min duration (and sometimes significantly longer) took place with approximately 20 organisation members. A semi-structured interview guide was used to steer discussions with organisation members formally interviewed[2]. This also provided a focus for issues covered during the informal discussions (interviews). The guide reflected the study's conceptual basis in terms of exploring MC practices in relation to strategy (i.e., strategy formulation, strategy implementation and strategy evaluation). The main purpose of the interview guide was not as a list of questions to put to the interviewees but as a checklist for the researcher to ensure that relevant issues were covered [1].

26.3   III. Case Study Findings

The case study findings are presented and analysed under four sections: Strategy Formulation; Strategy Implementation; The Board and MCS; and Managers and MCS. These sections reflect the 'research lens' of the study in terms of a focus on MC practices and their interface with strategy.

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[1] This name is a pseudonym.

[2] The semi-structured interview guide is available on request from the author.

26.3.1 A. Strategy Formulation

Strategy formulation at FH is highly fluid and closely intertwined with strategy implementation. Both of these aspects are grounded in the strategic planning process. The board oversees the strategic planning process, with a particular emphasis on the setting of 'endpoint goals'. In this respect strategic planning and formulating strategies to achieve those plans can be seen as two distinct stages. These were highlighted and differentiated by the CEO:

> It's about defining an endpoint but not necessarily defining too strictly the pathway. Because you're defining your endpoint, you might say you might go this way or that way. But your overall aim is still for up there. You're aiming for a point on the horizon, but you can't see over the horizon. [emphasis added]

The 'endpoint' is about strategic planning and setting long-term goals for the business, while the 'pathway' is focused on formulating and implementing strategies to achieve those goals. A key role of the board is to apply discipline and control to the processes associated with strategy formulation and implementation, by formally monitoring the accomplishment of endpoint goals. The management team is focused specifically on the pathway (i.e., strategy formulation and strategy implementation).

The approach to strategy formulation at FH is organic rather than mechanistic. This means that strategy formulation is an uncertain and emergent process [24, 8]. While long-term goals and plans are formally developed, there is no real attempt, in a mechanistic sense, to match explicitly environmental circumstances and strategy. The organic approach reinforces the flexible pathway concept. The MC literature, however, generally focuses on strategy as being mechanistic or deterministic [19].

In terms of formulating strategies, extensive reliance is placed on feedback sourced from the external marketplace and broader business environment. A senior manager commented on how this worked:

> Looking at what competitors are doing and what the trade is saying. This is where being out and talking to the trade is powerful—you get a feeling for the gaps and how to get smarter than the competition . . . It's not that structured and its not that formalised. But we know there are a variety of routes that we can go and we'll take the one the market says to go. (senior manager 4)

This process is a continuous and regular task undertaken by various managers. The FH approach places pressure on operations because once a particular strategy is adopted then an operational commitment will quickly follow, which could involve, for example, making an entirely new product. A manager spoke about the operational impact of strategic change.

> Typically what will happen is a major supermarket chain will revise their product lines. That means it's going to be 3 or 4 years before you get that opportunity again. So what [the CEO] does is he takes the gamble that within a relatively short time we can make a product that is satisfactory to the customer. (manager 4)

In this sense the timing of strategic decisions can be significantly influenced by emerging and often capricious market conditions, rather than by strict adherence

to a particular strategy or plan (i.e.. the flexible pathway). Hence responsiveness to external feedback is a key feature that results in a highly fluid strategy formulation thrust. A key attribute underpinning strategy formulation at FH is the organisational culture, which is perhaps best illustrated in terms of staff relationships that revolve around the concept of trust. This point was illustrated, for example, when a manager commented on how FH maintained a balance, or avoided conflict, between its strong people interaction approach and creeping bureaucracy, such as a more formal MCS, which is generally associated with organisations as they become larger:

> [FH] is not into memos and we're not into meeting minutes and those sorts of things. If I've said something, then I remember that I've said it. I don't need it on paper just so someone can say, "you've said this". We're not into covering your backside all the time. (manager 2)

A high degree of trust is placed in the ability of managers to make decisions that are positive for the future of FH. A dominant attitude among management is one of moderate or calculated risk taking, rather than being risk averse or risk neutral. Such an attitude toward risk was supported by the culture of trust. A manager described this:

> We're not criticised for making mistakes. If you make a mistake you're told that it probably wasn't the right thing to do. If you make the same mistake twice it's a different story. It's a direction in this company that we're not going to grow without making mistakes. You're not scared of making mistakes. (manager 1)

Trust acts as a 'glue' that helps bind together staff interactions and cultivate focused working relationships among senior and lower level managers and other supervisory staff. The high level of trust explains why managers are willing to take calculated risks in pursuit of the organisation's strategic goals (i.e., flexible pathway). Research indicates that (personal) trust is potentially a valuable element of organisational control within organisations [37, 38].

Spontaneity is another key attribute underpinning the strategy formulation process. A manager highlighted this when he commented that strategy was about "opportunities—someone perceives an opportunity and then we pursue the consequences of it" (manager 4). This is aided by the lack of emphasis on formal meetings, systems, rules or procedures to guide operations. For example, a manager mentioned that the meetings he attended were "always entirely ad hoc and as required" (manager 4). Spontaneity was further reinforced by a lack of emphasis on job titles or positions. Consequently, managers viewed their roles as focusing on the overall business, rather than solely on certain key areas, which encouraged frequent discussion about various organisational issues. The accountant outlined how this worked:

> We're always in informal discussions. Say the likes of me and [senior manager 4] or [senior manager 3] and [the CEO]. If an idea or a line of thought comes out of it then we just keep talking about it informally until I guess we decide that, yes, it is on the right track. Then it's firmed up and more senior people are brought on board until suddenly you find yourself talking about going in a different direction. That happens informally. (senior manager 2)

Reference [5] found that "informal conversations with staff may actually be the primary channel for much information. Much of the detail necessary to run a company has characteristics that make informal oral transmission more efficient than entering it

into a formal system" (p. 104). The frequent and informal conversational interaction at FH appeared to have developed as a response to the turbulent external situation it faces. Relying on frequent and spontaneous staff interaction enables business decisions and changes to be made and acted on rapidly.

26.3.2   B. Strategy Implementation

In a similar manner to strategy formulation, the underlying thrust of strategy implementation is also relatively loose and informal, with a strong emphasis on frequent verbal conversations and interaction, rather than structured processes. Strategy implementation at FH is a closely integrated component of continuing operations, rather than being seen as a separate management role or activity. The CEO described how long-term plans and strategies were disseminated to staff:

> A mixture of formally and informally, but they're not done as just rigid formal presentations. I believe that what we have got to do here is create a culture that to a certain extent is intangible. It involves trust, I guess, in both directions. As a result of that you can't have really a rigid situation whereby you formally announce plans and implement them.

The nature of strategy implementation at FH effectively gives primacy to strategic activities within the context of ongoing and daily operations. Strategy implementation at FH is embedded within, and seen as, a natural part of the continuing business. However, this is not done in a manner that is explicitly 'strategic' in thrust. Rather, it is unobtrusive and the majority of staff seldom view the various issues discussed as strategy-related. The operational focus at FH is implicitly, but directly, guided by a strategic focus. In other words, operations and strategy are strongly interlinked and integrated. While this integration is generally blurred and fluid, it nevertheless provides a powerful means of enabling strategic issues to unobtrusively steer daily operations.

An important MC process that helps ensure the success of what is effectively an instinctive focus on strategy implementation is the weekly New Product Development (NPD) meeting. This core meeting serves as a coordination mechanism for translating endpoint goals into strategies and then providing for these to be translated into operational outcomes. Strategic issues largely drive the meeting agenda, whereas operational aspects dominate the discussion, which reinforces the role of NPD meetings in terms of translating strategic issues into operational outcomes. A mix of five senior and middle managers comprise the NPD meeting group. The marketing manager organises and coordinates the NPD agenda. Short-term strategic goals derived from the strategic plan and knowledge of competitive pressures and opportunities are used by the marketing manager to construct an agenda of action points and tasks for NPD group members to discuss. She commented: "The whole hub of what I do here is the

NPD. It either goes up from the NPD or down and out from the NPD. That's the one critical meeting" (senior manager 4). Strategy implementation occurs rapidly at FH. While a logical focus of strategy is the long-term, a constant reference point at

FH is its immediate near term impact and the successful management of this. One manager commented:

> The time scale for what we're doing isn't years—it's more months, sometimes even less. If an opportunity arises then it's a case of lets grab it with both hands and get in and go for it. (manager 4)

The core focus of management is rapid implementation, and minimising the role of administrative or bureaucratic procedures that could potentially hinder this. A manager explained this:

> Probably the biggest shortcoming is that we are always on a very tight schedule. In other companies a new product timeline can get talked about for a year before anything happens. Here we talk about it 1 week and we're planning to run it the next week, just about. So [the CEO] is just about selling it before we actually make it in a lot of cases. It's a shortcoming but it's not—I mean that's probably how [FH] has got where it's got. We're quick off the mark and do things. (manager 2)

At FH operational constraints are seldom seen as an obstacle to strategic accomplishment. Often a strategic commitment is made before there is certainty or even clear knowledge in terms of operational considerations and capability. The following comments made by the CEO reflect this:

> It's important to have the ability to move fast, to change direction quickly and to take short cuts, to dance on your toes. This ability has given us an edge over more formalised companies with slow internal communication. Sometimes we end up with the practice or 'ready, fire, aim', rather than 'ready, aim, fire'.

This contrasts with more conventional MC tools and approaches [e.g., 17, 35, 18], which generally assume a more linear or deterministic relationship in terms of the linkages between strategic issues and operational constraints.

The major strategic emphasis at FH appears to be implementation rather than formulation. This is because implementation is more directly focused on operations and is therefore more visible in terms of MCS and the continuing business. This appearance, though, is superficial. Practical segregation of the two areas is neither clear nor obvious. Because implementation is more directly operationally focused, potential hindrances to the accomplishment of formulated strategies only become evident once implementation starts occurring. Hence, to enable implementation to continue, 'instant' strategy re-formulation and re-implementation will take place concurrently. In this sense, the distinction between the two strategy elements is artificial or only conceptual [36].

26.3.3   C. The Board and MCS

Formal MC reports are primarily designed to satisfy the wishes of the board, rather than operating managers and other supervisory personnel. A board member commented on how the board took a strong interest in operational matters: "The internal performance and information systems [at FH] are not as sound as they should be.

So the board does take a keen interest in that" (board member 1). In this regard the board primarily fulfils a core operating role rather than a governance role. In relation to strategy the board examined the MC reports from two perspectives. The first relates to long-term strategic direction and goals, which guides overall firm direction. The second is operational and more short-term focused, but it also contributes to the ultimate achievement of long-term strategic goals. A senior manager described this distinction:

> You've got to look at this general map to see that we are moving in the right direction. And it's the general direction that the board is looking at—are we getting there? But then the street map of how to get there, on the operations side, shows us: how well we're controlling the budgets; how well we're training our people; how well we're monitoring our efficiencies; productivity; manning levels; output etc. (senior manager 3)

Even though there was a growing focus on various KPI's, the board considered the overall MCS at FH inadequate. Various board members commented on how the MC reports lacked coherent structure, were ad-hoc in design and in need of improvement. As a result, various board decisions were being made using only limited or partial performance-monitoring information. A board member summarised this prevailing view:

> I think it's too much in isolation and it's not coherent. The package is weak. Isolated bits of paper that are asked for are not really helpful. For example wanting to know how many hours we worked . . . My observation is that it's superficial, it's not 'hard' enough. (board member 2)

The actual MC reports used by the FH board consist of a monthly profit and loss report, supplemented by a set of KPI measures. Analysis of the actual KPI report documentation revealed that it covered the following:

- Sales, split into local and export;
- Aged debtors balances;
- Factory wages, including overtime;
- Cost per carton, waste costs and warehouse costs;
- Liquidity measures;
- Raw materials, packaging and finished goods stocks;
- Foreign exchange cross-rates.

In spite of a move to a broader set of KPI's, the board places heavy reliance on the monthly profit and loss report to monitor and provide feedback on business performance. Existing MC reports were considered to be particularly weak in areas such as the tracking of plant operating costs and their associated impact on margins. For example, there was concern about the factory and warehouse area, in terms of its operating performance, and how this was hindering company profitability. A senior manager commented on the developing role of KPI's in relation to the factory and warehouse areas:

> Certainly at factory level there is a hell of a lot more focus. The KPI's in terms of wastage, wages, overtime and hours worked—it used to be a very broad brush focus. That's now being driven down much further. A lot more heat is being placed on that area. (senior manager 4)

Concern was also expressed about the lack of segmented information, in relation to different product types and market groups. For example, a senior manager commented:

> There are huge opportunities to identify where profitability is coming from. That's a problem with the system in that we can't say for example that one product goes better than another. And we can't then divide that into [supermarket] chains and look at a chain. That's what we need. (senior manager 4)

The views expressed reflect how the ability to 'drill-down' below aggregate figures was limited. These are important areas for improvement in the view of the board, in terms of structuring MC information into more detailed categories.

26.3.4   D. Managers and MCS

Diverse views were expressed in relation to the type of MC information used and/or needed by operating managers. Some respondents argued that a greater level of formal information was needed, whereas others said that the existing, largely informal, approaches allowed for better flexibility and responsiveness. Executive managers had a dual perspective, in that they were interested in MC information from the viewpoint of both the board and as operating managers. The discussions with various managers and observation of operations revealed that only limited MC information was provided directly to managers via formal reports. In this regard one manager commented:

> I see the sales report but it's not printed off for me. I's up to me to go and have a look, which is fine. The cost per carton and things are put on the [notice] board in the production office. So I know where they are if I want to see them. We don't have a lot of reports and the only meeting minutes are those from the NPD—and that's only because there's so much going on—otherwise we don't have meeting minutes either. So we don't have a lot of paperwork. (manager 2)

Much MC information is informally collected and informally communicated to managers. Discussion relating to such information forms a core part of staff interactions and is an important component of the regular weekly NPD meeting. Some managers also maintain their own systems relating to the collation of external information: "I've set up my own informal systems using Excel and things like that" (senior manager 4). Managers appeared to collect, assimilate and process information about the business via their close knowledge of operations, and through constant interaction with outside parties, other managers and organisational members, rather than by the use of formal reports. It appeared that through various informal 'people processes', managers were able to glean sufficient knowledge about events happening within, or in relation to, various areas of the business. This included the factory, warehouse, various other operating areas, market demands and other external pressures, and their cumulative impact on, and relevance to, FH. High reliance is placed on the ability of individual managers to assimilate relevant information rapidly from a diverse set of informal sources, both internal and external. A senior manager described this:

> We can actually walk around the company and we know if our people are working to the efficiency set by our standards. And so we don't depend on reports. I know before a report is handed to me on packing levels whether we've had a good or bad day. So that means that the emphasis on reports has never been there to drive the company. (senior manager 3)

Some managers expressed frustration about the lack of reports and formal MCS and how a high level of reliance was placed on information communicated and assimilated informally. The costing system, arguably a core source of MC information, was considered to be in need of an upgrade. This was mainly in relation to labour, marketing and overhead costs, as one manager explained:

> Compared to what I would have done at [company name deleted], it doesn't have a lot of overheads in it. We would have a lot more marketing costs added as well, like promotions and such like. In regard to labour calculation, it should be different for each product. (manager 1)

The impact of rapid growth at FH has hindered the design and implementation of a more formal MC approach. The focus, historically, has been on generating aggregate sales and cash flow with seemingly little time devoted to understanding in a formal sense, the detail of the underlying organisational performance dynamics. However, as the business continues to expand, this view seems to be changing, with respondents talking about the importance of understanding the business better via improved MCS. For example, a manager commented: "It'll be a learning process. Once you understand things, then you understand the measures that you need to continually monitor and continue to improve" (senior manager 4). All managers agreed that the informal and flexible MC approach at FHs had contributed powerfully to its growth and success. A senior manager summed-up this view when he commented on how outsiders often speculated that FH had been successful because of well developed and highly effective formal systems and structures. He laughed in reaction to this view and said that the outsiders were wrong. The senior manager said that the success of FH resulted from staff, particularly at management level, being proactive and innovative, and taking ownership of decisions and responding very quickly to market and external pressures.

26.4   IV. Discussion

People-based processes were the core control and information channels that managers used to carry out their respective functions. Interaction by various managers, who have extensive continuing contact with various parties external to FH, enabled externally sourced information to permeate rapidly through the business. The people-based approach at FH allows managers a high degree of flexibility in relation to how they undertake their jobs by enabling them to react essentially instantaneously to external change and turbulence. This is because there are no processing or comprehension delays resulting from the need to capture data formally and convert it into structured reports. The impact of such delays is not adequately addressed in the MC literature. The FH approach enables strategic change and adjustment of the business to take place rapidly. This reflects a key aspect of the interface between MC

and organisational strategy at FH. Conventional MCS convert internal and external sourced data into some kind of systematic form, which is then conveyed to managers for interpretation.

The use of more mechanistic MCS (e.g., the balanced scorecard) implies that in essence all relevant internal and in particular external information can be captured and conveyed to managers using structured systems. Reference [35], for example, suggests that this is possible. However, many key external factors such as technology and globalisation are not clearly observable or measurable [34, 3]. Even if this were possible, it still overlooks the problems and delays associated with capturing and converting external data into structured reporting formats [12, 6, 28]. For example, by the time such information is available to managers external circumstances may have changed, rendering the information redundant [21]. The approach used by FH avoids problems that can be associated with more mechanistic MCS. On the other hand, the disadvantage of the FH approach is that miscommunication and knowledge gaps may occur because obtaining the informal information is not a controlled or systematic process [35]. Accordingly, information conveyed may be unclear, the intended recipient may misunderstand, or critical information may not have been obtained. However, conventional MCS are equally prone to problems of interpretation and reliability [28, 29].

The control approach at FH is organic because it emerges from the processes of social activity and the high level of interaction among managers [16]. In other words MC is highly reliant on people-based processes that reflect, for example, ideas relating to tacit knowledge, political dynamics, social interaction, trust and organisational learning [e.g., 26, 36]. The organic MCS at FH appears to have played a significant role in the growth and success of the business by allowing managers a high degree of strategic and operational flexibility. However, continuing business growth is creating a desire by the board for greater levels of more structured MC information. There is conflict between the board's desire for more formal MC information, in order to measure progress against endpoint goals, and the organic control approach used by managers to comprehend and respond to external circumstances rapidly (the flexible pathway), and to strategically position the business. The board believes that greater formal control and accountability is needed within the business, whereas management currently operates using a strongly organic MCS.

26.5   V. Summary and Conclusion

This study has examined an organisation displaying an innovative mode of operation in relation to MCS. There are three main general findings of this study. The first is an organic MCS that has minimal focus on formal measurement and is used primarily by managers in relation to strategy formulation, strategy implementation and operational control. The approach has a strong orientation towards external information, which is mainly captured and comprehended using flexible processes. This enabled rapid assimilation and comprehension of information about external threats and issues.

The second main finding is that formal aspects of MC were relatively weak. Reliable information about various cost areas in the factory and warehouse is weak or limited. Formal MC information is primarily used by the board to monitor and manage progress against end point goals in the strategic plan. However, the shortcomings mentioned above are restricting the board's monitoring role. In this regard the overall findings highlight a continuing need for conventional measurement as a core component of MCS.

The third main finding is that both strategy formulation and strategy implementation at FH were strongly focused on operations. This was undertaken in a manner that was unobtrusive, in the sense that strategic issues were viewed as no different to any other facet of operations. A range of factors help to explain how close integration with operations was achieved. These include frequent conversational management interactions and a low emphasis on formal communications, such as reports and documents and few formal management meetings. Various intangible factors, which reflected the overall company culture, also supported integration with operations, including a high degree of trust among staff, a management approach that was actively spontaneous and a strong collective focus in relation to management decision making.

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Chapter 27
Can Transformational Leadership Make a Difference in Banking Service?

Nalin Abeysekera and Ananda Wickramasinghe

Abstract

Purpose This study suggests a model of the impact of transformational leadership of manager on customer orientation of salesperson at the individual level in corporate banking sector.

Design/methodology/approach The model is tested on 130 customer relationship officers (CRO) in licensed commercial banks in Sri Lanka. The hypothesis of the study was tested using Partial Least Squares (PLS). The software for the PLS analysis used in the study is SmartPLS 2.0.

Findings The results propose that transformational leadership of manger significantly influences on customer orientation of salesperson in the banking sector. In addition, there is no any difference examined in transformational leadership behavior of manager in state and private banks in the corporate banking sector.

Practical implications These findings strengthen the notion that the attribute of transformational leadership of a manger is paramount importance for salesperson to work closely with customers. In other words for a customer oriented salesperson this can be a "triggering factor" for long lasting relationships.

Originality/value The findings of this research contribute to advancing the body of knowledge pertaining to the relationship between transformational leadership of manager and customer orientation of salesperson and how it influences for better relationship with customers in the long run in Sri Lankan context.

27.1 Introduction

The economy of Sri Lanka has undergone considerable structural transformation particularly since 1977, benefiting from progressive economic liberalization. Since then the dependence on the agricultural sector has declined and services and

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manufacturing sectors have become leading sectors in the economy, while highly facilitated by the rapid growth of banking and other financial services. The role of banking sector and contribution made by the sector is more important at present. Despite the global and local macro economic problems financial sector still maintain 8.8 % as a share of Gross National Product (GNP) in 2011 [1]. The competition in the sector can be seen with different strategies adopted by both state and private banks. There are several studies done by researches linking the attributes of transformational leadership in selling environment which [2] conducted an empirical study to examine the influence of sales managers' transformational leadership behaviours on sales management. Furthermore [3] research stressed that the firm's marketing success is largely dependent upon the sales force. Moreover the concept of customer orientation of salesperson cannot be ignored in the context of selling. However there was very little research done to bridge the theoretical gap in customer oriented selling with the transformational leadership. Thus following research objective emerged for the study.

> To investigate the relationship between transformational leadership of manager and customer orientation of salesperson.

27.2 Literature Review

27.2.1 Transformational Leadership

Burns has defined leadership as a relationship that induces followers to pursue joint purposes that represent the motivations of both leaders and followers. Addressing the motivations of both leaders and followers could be handled in two ways: transactional and transformational. Burns' idea was based on the premise that "transforming leadership raises both leaders' and subordinates' level of motivation and morale". When transformational leadership causes more active behavior of every participant due to inner motivation, the transactional leaders try to motivate subordinates by rewarding or punishing them. A rapidly expanding body of empirical research on transformational and transactional leadership behaviors used with different perspectives has recently emerged in the management and organizational behavior literature.

27.2.2 Customer Orientation

Customer orientation of salesperson has been defined by Saxe and Weitz referring to the degree to which salespeople practice the marketing concept by trying to help their customers make purchasing decisions that will satisfy customer needs. Highly customer-oriented salespeople engage in behaviors aimed at increasing long-term

customer satisfaction and avoid behaviors that may lead to customer dissatisfaction. They avoid actions that increase the probability of an immediate sale at the expense of sacrificing customer interests. Further research suggests that Customer oriented salespeople are solution providers who deliver value by assessing customers' needs, then responsively helping customers identify alternatives, evaluate them, and select the best solution. Moreover propose that a customer-centric point of view helps salesperson to better recognize cues from customers and prospects. They also suggest that customer orientation of salesperson improve the performance of both and organization. The customer orientation of salesperson has been discussed in the study done by Singh and Koshy and they recommend that the Salesperson's customer orientation is becoming increasing important in ever-changing demand driven market.

27.2.3 Transformational Leadership and Customer Orientation

It is worthwhile to understand the relationship between transformational leadership and customer orientation as well. MacKenzie, Podsakoff and Rich argued the relationship between transformational leadership behavior and the sales performance. The findings elaborate that transformational leadership influences salespeople to perform "above and beyond the call of duty" and discuss how is affect direct and indirect relationships with sales performance. Furthermore also discuss the relationship between transformational leadership behavior and the sales performance in the context of three food and beverage consumer packaged goods companies in the U.S. Dubinsky demonstrated that sales managers who more frequently displayed leadership towards their salespeople that was *transformational* (charismatic, inspirational, intellectually stimulating, and individually considerate) had sales personnel who were more committed and satisfied and less stressed than when sales managers emphasized. Interestingly there is a relationship between transformational leadership and customer orientation.

In order to understand the theories and the relationships between concepts, variables and constructs, it is critical to discuss more on literature and the conceptual framework.

27.3 Research Methodology

27.3.1 Conceptual Framework

Based on review of literature and previous empirical evidence the following conceptual framework has been developed for the study (Fig. 27.1).

Fig. 27.1 Conceptual
framework

| Transformational Leadership of a manger | ⟹ | Customer orientation of salesperson |
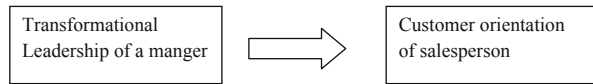
According to this conceptual framework Customer orientation of salesperson can be considered as dependent variable and Transformational leadership of a manger can be considered as an independent variable. As discussed in the section of literature, with the evidence of empirical work following hypothesis has been formulated for the study.

> The higher the *transformational leadership of a manger* higher will be the *customer orientation of salesperson*.

27.3.2 Operationalization

Items of multifactor leadership questionnaire (Multi-factor Leadership Questionnaire (MLQ), developed by Bass and Avolio were adapted with some modifications as indictors of transformational leadership. Modified SOCO (Selling Orientation-Customer Orientation) scale of Thomas et al. was used to operationalized the Customer Orientation among salesperson.

27.3.3 Data Collection Technique and Sample

Survey strategy was employed to collect data using questionnaire method as this questionnaire has been widely used in various contexts, including our own research in Sri Lanka and we modified the original questionnaire with our previous research experience in this field, and also to reflect unique contextual factors we observed in interviews in our mega project. Data for this study was drawn from a questionnaires targeting customer relationship officer (CRO) in banks.

The major part of the study was to test the conceptual model with hypotheses testing procedure, Inferential Statistics played the major role. When the sample size was fairly large (> 30) and the measurement scale was interval, it is reasonable to assume that the data is normally distributed. However, linearity test, Kolmogorov-Smirnov(KS test) test and Shapiro-Wilk(S-W test) tests were carried out to check the linearity and normality assumption of the data set for each variable. It has been proved that data was not normal and linearity cannot be seen. Hence because of the nature of data SMARTPLS was used to measure the relationships between variables. In that context path coefficients were used to test the hypotheses. The hypotheses of the study were tested using Partial Least Squares (PLS). PLS is recognized as a powerful multivariate analysis technique and is considered as the most appropriate technique for testing structural models with latent variables.

Table 27.1 Reliability measures

Construct	AVE	Composite reliability	Cronbach's alpha
Transformational leadership of manager (TLM)	0.678088	0.955450	0.949760
Selling orientation and customer orientation (SOCO)	0.809354	0.976916	0.955117

27.4 Findings and Analysis

27.4.1 Measurement Model

The measurement model is validated through the assessment of three types of validities: content validity, composite validity and convergent validity. Before the assessment of validity item reliabilities were assessed by examining the outer loadings of each item which were above the recommended threshold of 0.7.

Convergent validity is assessed through the assessment of composite reliability of constructs, AVE of the measures and also by assessing factor loadings and cross loadings. When examining the composite reliability of constructs, a score of 0.8 as an indication of adequate composite reliability. Since all constructs in the study as per Table 27.1, demonstrate a value that is 0.8 or above, composite reliability of the study can be considered adequate. Convergent validity is judged to be adequate when average variance extracted equals or exceeds 0.50.Hence Table 27.1 depicted that all items are exceeding the level of 0.5 and it can be concluded that all constructs in this study have an adequate convergent validity as well. Furthermore construct reliability was measured using Cronbach's alpha, with a value of 0.70 or higher being recommended. It also can be seen as satisfactory by confirming the threshold level of 0.70 is shown in Table 27.1.

27.4.2 Structural Model

The hypotheses of the study are tested through the Structural Model (SM) of the PLS graph. Opposite to the measurement model, SM deals with the relations between latent variables and their manifest, the structural model concerns the mode of estimation of latent variable between them. The inner model is assessed by examining the path coefficients among latent variables. The value of path coefficients provides evidence regarding the strength of the association among latent variables. This include the estimation of path coefficients and the R^2 value.

The statistical summary of the results of the structural model of PLS path modelling is depicted in Table 27.2 which includes the path coefficients and the t-statistics. The construct column represents the relationship between the dependent variable and the independent variable for each associations. These statistics are also graphically depicted further in next section with testing of the hypotheses.

Table 27.2 Summary of PLS results. (Source: Survey Data 2012)

Models	Path coefficient	t-statistic	Significance at 0.01 confidence level
TLM-SOCO	0.567374	9.712951	Significant
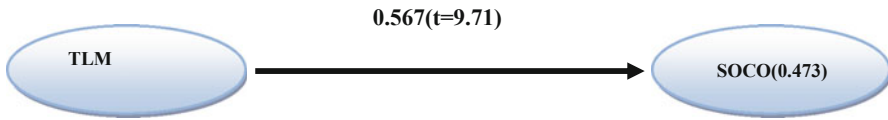
Fig. 27.2 Hypothesis testing

27.4.3 Hypothesis Testing

In the hypothesis it has anticipated the relationship between transformational leadership of manager *and* customer orientation of salesperson. According to the hypothesis five in Fig. 5.5, adjusted R square is 0.473,reasonably higher for the regression indicating a relationship between transformational leadership of manager *and* customer orientation of salesperson. It reveals 47.3 % of the variation in customer orientation of salesperson explained by *transformational leadership of a manager.* The path coefficient is 0.567 which is significant at 1 % level of significance. Hence the hypothesis that "*Higher the* transformational leadership of manager higher will be the customer orientation of salesperson" can be accepted (Fig. 27.2).

27.5 Conclusion

Selling can be considered as the life blood of an organization. The role of a salesperson is of paramount importance in that context. The salesperson that has the most contact with the customer has been identified as a decisive determinant of the degree to which customers experience satisfaction. The competition between organizations can be imperative in the current turbulent environment. There is a need to explore and identify core competencies for the organizations in order to remain competitive in the market. The transformational leadership can be considered as one important variable which has been underutilized by many. According to the findings transformational leadership of manager is important to build up a better customer oriented salesperson. The findings of this research contribute to advancing the body of knowledge pertaining to the relationship between customer orientation and transformational leadership of salesperson in the Sri Lankan context, an area in which empirically tested studies are scarce. Moreover, this study found certain relationships (mangers and salespersons) in banking sector which is essential for the studies in the services sector with the growing importance and contribution to gross national product (GNP).

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Chapter 28
Easy e-Money Syndrome: Challenges of Risk Management in Credit Card Industry in Sri Lanka

A. R. Waidyalankara and Helan Gamage

Abstract The concept of plastic money as a value of the currency is transferred from the credit of the buyer or the beneficiary through cyber space. The volume of utilizing credit cards and the risk incurred, has considerably increased due to certain vulnerabilities in the credit card industry in Sri Lanka. The research paper aims at identifying the challenges in the Sri Lankan credit card system through quantitative and qualitative approaches of research methodology. This paper has ascertained that credit card discrepancies are mainly due to the arrival of the concept of credit cards without proper IT literacy, institutional frame work, infrastructure and legal safeguards. The study recommends measures to minimize the perceived challenges of the credit card risk management by giving better awareness to the stakeholders about credit card frauds and imposing the required legal system which has to go beyond the existing British legal system used in Sri Lanka.

28.1 Introduction

Credit card as an alternative to the standard 'money' and a mode of payment became popular among the exchange parties due to multiple reasons. Primarily, it is convenient and less risky in carrying a credit card. Though the use of credit cards is becoming popular in Sri Lanka, there are many disadvantages, such as card user becoming excessively indebted and thereby facing financial distress. Gross and Souleles [1] found that "increases in credit limits generate an immediate and significant rise in debt" (p. 151). E-payment services in India shows that Electronic money systems are still relatively slower than some people expect due to many obstacles to growth [2]. These include issues relating to interoperability, security, privacy, and verification and authentication of transaction. Nehaluddin Ahamad [3] has exposed the seriousness of the credit card fraud in Malaysia. Credit card frauds encompass a large

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component of the risk factor in the credit card industry [2]. With the introduction of electric payment system the perpetrators have taken undue advantage of the new technology development by using technological skills. Credit card fraudsters employ a large number of modus operandi to commit fraud [4].Consequently, a new set of crimes on credit cards have emerged and the new dimension of frauds need extensive investigation in terms of its scope, methodologies and management.

Therefore, this paper seeks to analyze the risk of credit card system on possible frauds and actions taken against them in the Sri Lankan context in order to create a better awareness of it among exchange parties and stakeholders. The finding of this paper will inform the need for development of better risk awareness programs and assist in formulating more appropriate legal and security polices and framework for the usage of credit cards. Hence this paper will critically identify the criminal justice system in Sri Lanka with reference to the credit card industry. The bottom line of these recommendations is aimed at achieving an effective credit cards risk management regime in Sri Lanka.

28.2 Contemporary Issues Related to Credit Card as a Medium of Exchange

Bhatla et al. [4] have identified credit card frauds as being one of biggest threats to the business today. Customers, banks, issuing agencies, merchants, low enforcement officers, judicial officers, regulators and the governments have being facing numerous issues on credit card due to various reasons [4, 5, 6]. Credit card frauds can be defined as 'When an individual uses another individuals' credit card for personal reasons while the owner of the card and the card issuer are not aware of the fact that the card is being used. Further, the individual using the card has no connection with the cardholder or issuer, and has no intention of either contacting the owner of the card or making repayments for the purchases. (p. 1).

With technological development, an increasing number of credit card frauds could be identified from embossers to encoders to decoders. With the very latest technological development, credit card counterfeiters are able to read, change, and implant magnetic information on counterfeit credit cards [7, 8]. Recent trend of shopping on the internet causes a greater threat as the trader on the web site is no longer protected due to absence of physical verification. It is not possible to 'objective' checking necessary to detect who is at the other end of the transaction. This makes the internet extremely attractive to fraud perpetrators. According to a recent survey, the rate at which internet fraud occurs is 12–15 times higher than physical world fraud [4]. In view of these gaps, the element of risks in executed transactions is being accumulated in modern society. Table 28.1 summarises the modus operandi for credit card frauds and their percentage of occurrence.

The risk factor causes enormous damages not only to the parties involved in the transaction but also to the banks, organizations, individuals and especially to the citizens. The risk management is imperative in terms of prolongation and the

Table 28.1 Methods of credit card fraud and their percentage of occurrence (Source: Celent Communications, January 2003)

Method	Percentage (%)
Lost or stolen card	48
Identity theft	15
Skimming (or cloning)	14
Counterfeit card	12
Mail intercept fraud	6
Other	5

expenditure involved. Thus it is necessary to assess the situation and identify the magnitude of the risk in order to make remedies to curtail upward trends.

28.3   Research Protocol: Methodology and Research Approach

The credit card related issues and risk on challenge involve complex human and legal interactions and embraces a range of artifacts and objective certainty. Credit card issues will be addressed by employing quantitative and qualitative data. Quantitative research method such as questionnaire is used in obtaining objective data on credit card usage and frauds. In-depth analysis on credit card issues and frauds were based on qualitative unstructured interview method and observation of relevant artifacts including police reports. The study is limited to the operation of the Master Card and the Visa Credit Cards as they are the key players covering the majority of the credit card transactions in Sri Lanka.

28.4   Analysis and Findings

According to Bhatla et al. [3], credit card frauds are committed in various ways such as an act of criminal deception (mislead with intent) by use of unauthorized account and/or personal information; illegal or unauthorized use of account for personal gain; misrepresentation of account information to obtain goods and/or services. However, a number of credit card frauds have been identified through the investigation and analysis of this research.

28.4.1   Behavioral Fraud

Human active role and engagement related frauds are categorized as Behavioral fraud. Behavioral frauds include mail theft, stolen/lost card, counterfeit card and 'card holder not present' fraud. Mail theft fraud occurs when fraudsters intercept credit cards in mail before they reach cardholders or pilfer personal information from bank and credit card statements. Stolen/lost card fraud happens when fraudsters get hold of credit cards through theft of purse/wallet or gain access to lost

cards. However, with the increased usage of online transactions, there has been a significant rise in counterfeit card and 'card holder not present' fraud. Card holders' information is obtained through a variety of ways, such as employees stealing information through unauthorized 'swipers', 'phishing' scams, or through intrusion into company computer networks.

28.4.2   Monitory Losses

Monitory losses due to credit card directly affect the credit card operations of the issuing banks, especially the Commercial Bank in Sri Lanka. One understood that the nature of this type of losses not only affects the banks, but also the national economy as well. Although the Sri Lankan national economy has not been affected so drastically, an increased level of losses is conspicuous. The 2007 issue of Central Bank report of Sri Lanka clearly shows that the outstanding dues had increased by 11 % from 2006 to 2007 which account for Rs. 83,369 millions. Although the statistics have not been published and made available thereafter, the report submitted by Visa International at the beginning of year 2011 could be taken as a cross section about fraud operations which is a component of total over dues or losses incurred by banks.

28.4.3   Fraud Trends in Sri Lanka

Visa International holds the majority share of the credit card business in Sri Lanka.

28.4.3.1   Issuing Fraud Trends

The statistics available from the fourth quarter of year 2008 to the first quarter of year 2010 shows an issuing fraud loss ranging from US $ 82,150 to $ 52.325, which has resulted in incurring quarterly loss of revenue. Although there is a slight decrease from the year 2009, the fraud loss against sales had been much more that the levels maintained by the South Asian Sub-region. The analysis of the fraud shows that the accounts used and the counterfeits are accountable for 89 % of the frauds. The cross–border frauds remain very high compared to domestic fraud losses in respect of the accounts used. In counterfeiting, again the cross-border fraud losses remain very high compared to the local frauds. However, a significant increase in domestic frauds on counterfeiting had taken place in the 3rd quarter of the year 2009. When analyzing data on issuing fraud trends, as per the countries from Aug 2010 to Jan 2011, it is apparent that Sri Lanka retains the 3rd position next to the United States and United Kingdom. It is more than India, Italy, Australia, Luxemburg, Portugal, Russian Federation and Indonesia.

28.4.3.2 Acquiring Fraud Trends

The statistical analysis of acquiring fraud trends during the period of the 4th quarter of year 2007 and the 1st quarter of year 2011 shows that nearly $ 1 million had been lost. The counterfeiting of credit cards contributes to 79 % of to the total while the contribution of account losses was 13 %. However, the fraud loss in Sri Lanka appears to be very much lesser compared to the sub region of South Asia and Asia Pacific region. Nevertheless, as a percentage, frauds against sales remain high in Sri Lanka, which is well above situation in the Asia pacific and the South Asian region. Very much similar to issuing frauds, the cross-border counterfeiting frauds remains high compared to domestic counterfeits.

Both issuing and acquiring fraud statistics provided by Visa International could be used as a sample to estimate and realize the existing fraud trends and the degree of associated risk to make sense about entire picture of the operations in Sri Lanka. Although the fraud operation in Sri Lanka has affected the detrimental blows to the Sri Lankan economy, the legislative and institutional frame work had shown a lackadaisical approach in combating and promoting social awareness about this issue.

28.4.3.3 ATM Cards Racket: The Liberation Tigers of Tamil Eelam (LTTE) and Credit Card Frauds

The Liberation Tigers of Tamil Eelam (LTTE), a terrorist organization that operated in Sri Lanka, has been outcaste and proscribed by many countries including EU, USA, Canada, UK, and many Asian countries. The latest ploy adopted by the LTTE is to raise funds is Credit Card scam. For example, Colombo Crimes Division had arrested five suspects involved in an ATM cards racket trying to withdraw money from a People's Bank branch at Wellawatte on 17th October 2007. They are believed to have pilfered nearly Rs. 1.5 million on three consecutive days from the ATM machine to finance LTTE operations. They had been involved in similar operations in France and Britain. The suspects are also reported to have laundered millions of rupees worth of foreign currency into the country. There were 21 credit cards in their possession at the time of arrest. The Australia news paper The Herald Sun reported that global crime syndicates committing large-scale identity fraud around Australia may have links with Sri Lankan terrorists. Organized gangs with links to Britain and Sri Lanka are fuelling a fresh wave of identity fraud in Victoria, with Melbourne's inner city firming as the latest frontier in card skimming, as police accuse banks of putting their own reputations before their customers' welfare, Herald Sun further reported.

28.5 Credit Card Fraud Control and Sri Lanka Legal Background

Fraud Control is the identification, recovery, restitution and prosecution of the fraudulent use of credit card accounts that is accomplished through the development of internal detection systems, as well as interfacing with law enforcement agencies.

Under the usual three party transaction arrangements (purchaser, merchant and creditor), it is difficult to convict the misuse of a credit card of the crime of false pretenses, for the person deceived (merchant) losses nothing, and the person who losses something (issuer) is not the one deceived. The effectiveness of the Fraud Control area is determined by the effective interpretation of laws and subsequently applying this information in a practical methodology utilizing human resources and to an even greater extent, the systematic resources. Special credit card legislation has been enacted in a number of states making it a crime, generally a misdemeanor, to obtain property or services by means of a stolen, forged, canceled or revoked credit card, or a card whose use is for any reason unauthorized.

The Criminal law that is currently applicable in Sri Lanka has been greatly influenced by the British Criminal Justice system. The legal profession still continues with some of the traditions of the bar of England. The substantive Criminal Law of Sri Lanka is found in the Penal Code of 1883, which was introduced by the British. The English Act of 1968 too has not been considered as an adequate definition in several instances in view of the restrictive approach in judicial inexertion. In the absence of statue dealing with information Technology Law, the question that has to be considered is whether the existing Penal Code is adequate to cover various different types of crimes that may be committed in the arena of information Technology. When we consider the nature of criminal activates connected with Information Technology concepts, it appears that most of such criminal activates fall within the scope of the offences that deal the chapter on offences against property offences.

In a limited number of instances, some of such activities would fall within the ambit of offences under the Chapter on offences relating to documents. Any defamatory electronic mail or article or a defamatory message would fall within the ambit of the offence listed in Chapters 19 and 20 of the Penal Code of Sri Lanka. This problem could be resolved to a great extent if the interpretation of the term "Property" has been expanded to mean and include intangible property such as a matter stored in a computer.

One area that has to be mentioned at the point is theft of information. This is a common occurrence even in Sri Lanka and there have been many instances where employers face a problem of the employees removing confidential information. Unfortunately, the provisions in the Penal Code are inadequate to deal with this issue since the interpretation of the term "Theft" requires the offence to be committed in respect of movable property. Our courts are guided by the principle that "property" means "tangible Property". Since information in a computer does not fall within this situation a charge of theft cannot be maintained.

The data fraud has to be altered by the person entering the data. Offences of mischief, forgery, falsification of accounts are the possible offences which are accused are prosecuted. A program fraud is much more difficult to be detected and poses a serious problem in the modern context. An increasing number of laws and regulations act as a key driver shaping the banking industry, while generating more complexity in operations, as well as in managing risk. As a general rule, a government has a legal duty to define the accepted norms and regulations of a society. It does this through legislation and its numerous agencies. There is a significant need to understand the extent of implementation of those legislations and its numerous agencies for credit cards fraudulent activities

28.6   Conclusion and Recommendations

Credit card is a global phenomena introduced to Sri Lanka as an alternative mean to the traditional material money merge with technology without proper introduction and guidelines to the people in Sri Lanka. The magnitude of the risk component of the usage of credit card haven't properly identified by the stakeholders. This includes the financial risk, reputational risk and the security risk. The factors detrimental to national security have not been properly identified, monitored or supervised.

The issue related to siphoning out money from the credit card frauds, which has been a source of terrorist funding had not been adequately addressed. Inadequate legal provisions and the institutional framework exist in Sri Lanka and therefore the system needs rational modifications. Existing criminal justice system in Sri Lanka does not address the core issues relating to administering criminal justice and a consolidated effort of all stakeholders is required.

Anticipated risks of credit card frauds, new trends have not been properly monitored and poor analysis and forecasting machinery is in place with regard to credit card frauds. Absence of a regulatory authority based on public policy to regulate the credit card industry is mandatory in Sri Lanka similar.

28.7   Recommendations

Several recommendations can also be made by considering the findings of research. Integration of systems across products, channels and geographies by introducing centralized management mechanism. Improving scientific management of risk by issuing banks can be considered as important. Furthermore, introducing forward-looking strategies as new payment types enter the market, risk management by resource professionals, improving policing can also be recommended for fraud prevention and management. Introducing fraud prevention technologies, placing address verification system, introducing card verification methods can also be recommended. In addition, there is a need for publishing negative and positive list, introducing payer authentication system, introduction of lockout mechanism, and identifying fraudulent merchants by acquiring banks are suggested. More importantly there is a need for enacting stringent laws & regulations on issues detrimental to national security, an amending the payment devices frauds Act to fulfill the shortcomings of the legal provisions with establishing a regulatory body for governing the system.

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Chapter 29
Model of Lending Decisions on Small and Medium Enterprises: Case Study in the South of Sumatera

Maulana Ali

Abstract The objective of the research is to analyze the effects of 5C (character, capacity, economic conditions, capital, collateral) on performance of partnership programs, collectability and spirituality of partnership program in Region II, South of Sumatera. Data were collected from 250 partners of the Partnership Program of Pertamina Co. Ltd in Region II South of Sumatera and analyzed by path analysis. The results show that the dimensions of 5C (character, capacity, condition of economic, capital, collateral) simultaneously and partially have significant effect on business performance. Also, performance has no direct influence on collectability of partnership program. However, performance and spirituality have an interactive effect on collectability of partnership program.

29.1 Introduction

Capital (physical capital formation), is the capital associated with the physical form of a person or company that is required to produce. Physical capital may include capital and capital moving not moving. Human capital (human capital) is one of the resources that exist within a business organization in addition to other resources, such as capital, materials, machinery and technology. In fact can not be denied that human capital is an important element in running a business organization. Humans have the functions and strategic role in managing a variety of other resources to be beneficial to the organization. Thus without humans, the presence of other resources is meaningless.

Human capital is closely related to the competence of human resources is a reflection of the quality of human resources are represented in the form of motives, attitudes, skills, knowledge, behaviors or other personal characteristics, which is essential to carry out the work that distinguish between average performance with superior performance (Spencer and Spencer 1993). In addition to 2 (two) in the capital, currently developing what is called spiritual capital. According to (Danah Zohar

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and Ian Marshall 2001) is the spiritual capital of meaning, purpose, and a view that we share the most meaningful things in life. Spiritual encouragement of capital as well as anxiety, concerns, needs and struggles of real human existential depth to do something to make life meaningful to serve a purpose.

In terms of working capital lending through the partnership program PT. Pertamina South Sumatra Region II have noticed one important factor to consider in determining the lending strategy, is the condition factor Prospective Debtor (Bramantyo and Ronny 2007). The condition factor Prospective Debtors generally categorized by 5C (character, capacity, capital, collateral, and condition) for the realization of the provision of effective and efficient credit. 2009–2011 in the partnership program Region South of Sumatera especially on agriculture, fishery and animal husbandry decreased collectability loan repayment rate. This has an impact on the performance of the partnership program itself.

29.1.1 Research Problems

The objective of the research is to analysis: (1) The effect of simultaneously or partially; character, capacity, economic conditions, capital, collateral on Performance of Partnership Programs Pertamina Co. Ltd Region II South Of Sumatera, (2) directly effect performance on Collectability Partnership Program. Pertamina Co. Ltd Region II South of Sumatera, (3) interactive effect of performance and spiritual on collectability Partnership Program Pertamina Co. Ltd Region II South Of Sumatera.

29.2 Literature Review

29.2.1 Agency Theory

This study refers to the agency theory. Jensen and Meckling [9] define an agency relationship as a contract in which one or more person (principal engage with others to perform some service on their behalf, who delegate decision-making authority to the agent. If both parties want to maximize utility, there is good reason to believe that the agent will not always be in the best interests of the principal. Arrow (1971) and Wilson 91 968) explore risk sharing among individuals or groups. Risk sharing problem arises when parties work together have different behavior in the face of risk. Jensen and Mackling [9], Ross (1973) developed agency theory that incorporate risk sharing in the agency problem that occurs when the parties work together has goals and division of labor. Agencu theory devoted to the agency relationship of any kind in which one party (the principal) delegates work to another party (the agent) who carry out the work.

29.2.2   Credit

A person or entity that provides credit (creditors) believe that the loan recipient (debtor) in the future will be able to fulfill everything that was promised. As for the receiver, credit constitutes acceptance of the trust so as to have the obligation to pay in accordance with the time period.

Any person or entity or financial institution that provides credit loan recipients believe that the future will be able to fulfill everything that has been promised in the form of goods, money or services. Therefore, the character of the credit applicant a factor considered by lenders in making credit decisions (Djinarto 2000).

In ruling for the creditworthiness of borrowers, financial institutions such as banks generally have a standard formal valuation. Standard bank is often used 5C and 3R principles.

29.2.3   Spirituality

Spirituality is complicated multidimensional concepts (Cook [3]; George et al. [6]; Moberg [15]). Spirituality is defined as oneself experiences, one experiences with respect to other people and nature and transcendent substance. Spirituality has tendency to make a meaning through the connection feeling with the dimensional over oneself. This connection may be intrapersonal, interpersonal (with other people and nature), and transpersonally (with God).

It seems that there are large contributions about the importance of one spirituality that influences on one's working mental and significantly influences on one's (McCormic and Donald [13]; Strawbridge et al. [17]; Mitroff and Elizabeth [14]; Lewis and Gary [11]).

The most of the owners of micro and small companies follow and embrace their own religion that teach them to behave correctly such as prohibit deception, prohibit lying, keep promise, and other good behaviors. The behaviors represent the regulation of a religion and the output of application of devotion to God. Mastering and applicating the religious knowledges by owners of micro and small companies, then it is expected that as increasing the performance of the companies, therefore increasing the collectability.

29.2.4   The Performance and Collectability

Small and medium enterprises (SMEs) play a major role in economic development in every country. Studies indicate that in both advanced economies and developing countries SMEs contribute on average 60 % of total formal employment in the manufacturing sector (Ayyagari et al. 2007). One measure of the performance of micro and small companies is return on investment (ROI). The lower ROI, the lower their

collectability and it affects on the increasing of non performing loan (NPL) of the loan institution. Stephanou and Rodriguez (2008) analyze trend and structure of the SME financing market in Colombia and find that banks in the country regard the SME segment as an attractive companies opportunity. They conclude that the market is characterized by a number of institutional and policy constraints, which inhibits further growth of SME lending. Although they have good performance and ability to make loan payment, it does not guarantee that they do, because the bank has credit risk, namely bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms (Basel 2000). Sinkey and Greenwalt (1991) argue that there are five major.

29.2.5 Based on the Theoretical Review, we can Develop Hyphothesis as Follows

H1: character, capacity, condition of economy, capital, collateral of simultaneously or partially effect on the performance of the Partnership Program established partners PT. Pertamina (Persero) Region II Sumbagsel.
H2: The performance has a direct effect on the Partnership Program collectability PT. Pertamina (Persero) Region II Sumbagsel.
H3: Performance moderated Spirituality has an influence on the partnership program collectability PT. Pertamina (Persero) Region II Sumbagsel.

29.3 Research Method

The location of the research is at southern sumatera and the number of samples are 250 micro and small companies. According to Roscoe 1975 (Sekaran [16]) that study that uses multivariat analysis, then the number of samples must be more than 10 times as analyzed variables and the number of samples for the research is more than 30 and less than 500 units.

The research model in the study can be presented as follows (Fig. 29.1).

29.4 Analysis Model

Processing the data collected from the results of questionnaires and secondary data collection is done in 4 steps: editing, entry, tabulation and analysis of data using the help of Microsoft Excel 2007 and SPSS version 16 and Amos Version 18. Given this research model is a model of causality (cause and effect), then to test the hypothesis statistical test equipment used in the research model. But before the first testing data is tested for validity and reliability. Further to differential statistical analysis performed using 'path analysis' (path analysis).
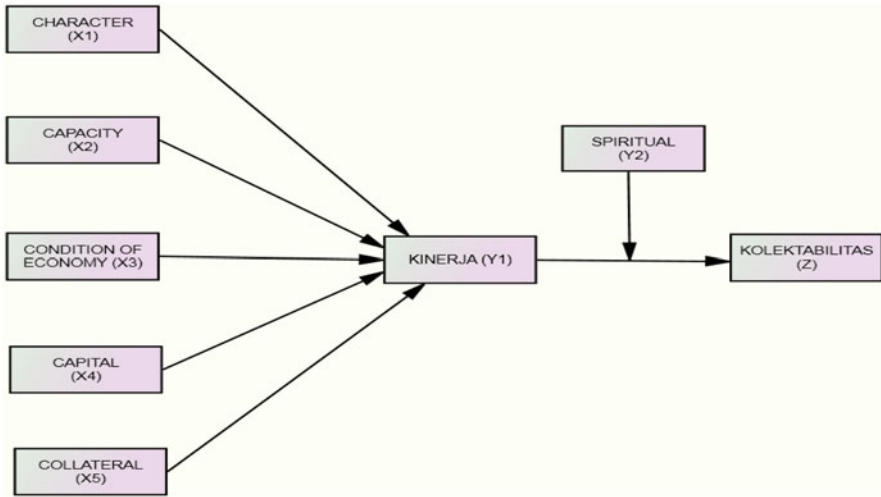
Fig. 29.1 Research model
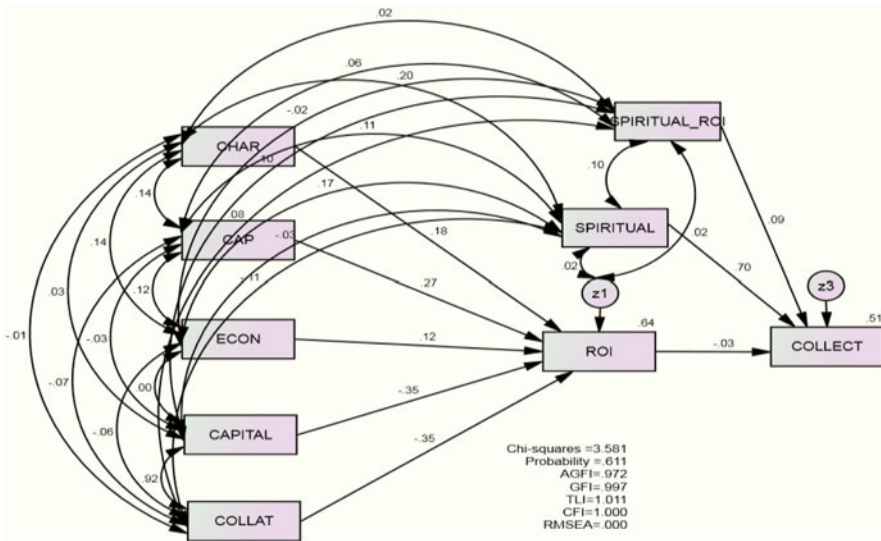
Fig. 29.2 Model of lending decision

29.5   Results and Discussion

We present the results with the beginning of model partnership program for 5C approach and variables of return on investment, spirituality, collectability as follows (Fig. 29.2).

Table 29.1 Regression weights: (Group number 1—Default model)

			Estimate	S.E.	C.R.	P	Label
ROI	←	CAP	0.891	0.125	7.119	0.000	par_11
ROI	←	ECON	0.356	0.113	3.161	0.002	par_12
ROI	←	CAPITAL	0.000	0.000	−3.601	0.000	par_13
ROI	←	COLLAT	0.000	0.000	−3.635	0.000	par_14
ROI	←	CHAR	0.398	0.085	4.689	0.000	par_15
COLLECT	←	ROI	−0.035	0.052	−0.674	0.500	par_16
COLLECT	←	SPIRITUAL	0.816	0.053	15.486	0.000	par_17
COLLECT	←	SPIRITUAL_ROI	0.112	0.053	2.098	0.036	par_29

Model test results above, note the value of χ^2—Chi-Square of 3.581 in accordance with the terms of the cut-value $\leq 67\,505$. Probability value of $0.611 \geq 0.05$. Value of GFI, AGFI, TLI, CFI terms of value in the provision of ≥ 0.90. In addition it is also seen from the fit modelRMSEA value of 0000 in accordance with the terms fit $\leq 0{:}08$. The test results showed that the models were well received because it has the goodness-of-fit is good, so the causality hypothesis testing can be done with this model (Table 29.1).

After assessing the existing assumptions, hypothesis testing will then be performed as proposed in the previous chapter. Testing the hypothesis proposed in this study by analyzing the value of Critical Ratio (CR) and the probability of a causal relationship. Critical value above the required ratio of 1.96 and a probability value below 0.05 level. If the results of data processing to meet the requirements of the proposed hypothesis stated acceptable.

29.5.1 Directly Influence the Performance (ROI) to Collectability

Directly influence the performance of the CR value indicates collectability obtained at -0.642 and probability value 0.521. Therefore, the probability value is greater than 0.05 then it can be concluded that the performance (ROI) directly no significant effect on collectability. It can be concluded that the hypothesis of variable performance (ROI) directly affect collectability rejected.

29.5.2 Indirect Effect of Performance Variables (ROI) to Collectabilty with Spritual as Moderate Variables

Estimated value in the table above it can be seen that without spiritual values is moderated by variables estimation performance (ROI) to collectabillty of 0.005. With spiritual variables moderated the estimated value of the performance collectabillty increased sharply to Rp 0.507. Changes can also be seen from the value of χ^2—Chi-Square is getting better. This suggests that if the effect of increasing the spiritual

Table 29.2 Interaction variable performance and spiritual seen from squared multiple correlations: (Group number 1—Default model)

Variabel	Direct	Moderated by spiritual
	Estimate	Estimate
ROI	0.644	0.644
Collectabilty	0.005	0.507

collectabillty also increased. This indicates that good performance is supported by a good spiritual collectabillty will also increase (Table 29.2).

29.5.3   Influence with Variable Character, Ability, Economic Conditions, Capital and Collateral on Performance (ROI)

Based on the results of data processing while the effect of the model equations with variable character, ability, economic conditions, capital and guarantees on performance (ROI) ROI $= 0.181$CHAR $+$ is $+ 0.276$CAP 0.124ECON $- 0.351$CAPITAL $- 0.347$ COLLAT. Furthermore the magnitude of the effect is indicated by the value of the coefficient of determination is 0.643. Based on these results, this research received no influence hypothesis together variable character, ability, economic conditions, capital and guarantees on performance (ROI).

Results of this study reinforce the results of research conducted by Jimenez et al. (2007) and Kyaw (2008) which also showed that the specific conditions of the debtor also mampengaruhi management in determining the strategy to be run by a financial institution. One important factor to consider in determining the lending strategy, is the condition factor Prospective Debtor (Bramantyo and Ronny 2007). The condition factor Prospective Debtors generally categorized by 5C (character, capacity, capital, collateral, and condition).

29.6   Conclusion

The objective of the research is that whether the micro and small companies the performance of micro and small companies affect on the collectability and their relationship will be moderated by spirituality variable. Based on the results and discussion, it can be concluded that the micro and small companies that accept the loan from PT Pertamina have increased their performance measured by return on investment (ROI). Their performance do not affects on the collectability. Still, as the owners of micro and small companies have and applicate the religion knowledges, the performance of micro and small companies influence on the collectability. The research has limitation, namely it does not analyze the factors that affect on the performance of micro and small companies. For future research, it suggests to add those variables.

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Chapter 30
New Paradigms in Banking

Madhavi Pethe and Sudha Subramaniam

Abstract In India, the last 10 years have seen major improvements in the working of various financial market participants. The government and the regulatory authorities have followed a step-by-step approach, not a big bang one. The entry of foreign players has assisted in the introduction of international practices and systems. Technology developments have improved customer service. On the whole, the cumulative effect of the developments since 1991 has been quite encouraging. An indication of the strength of the reformed Indian financial system can be seen from the way India was not affected by the Southeast Asian crisis. However, financial liberalisation alone will not ensure stable economic growth. Some tough decisions still need to be taken. This research paper seeks to analyse some of the thrust areas of the Banking sector in India and its impact, with an overview of the Asian context. Banking Sector Reforms have always postulated positive goals. However, the impact of Banking, economic and Governmental policies reveal a lopsided growth ailing in several quarters as well as a shortfall in targets due to several constraints. We have analysed the impact of policies on rural credit and funding, the extent of financial inclusion achieved, the need to address inequalities of income through planned redistribution of income and wealth and to channelize the Banking sector for a positive role in this regard, the funding from Banks in infrastructure and growth projects, the support to MSMEs', the impact of monetary and fiscal policies in the context of the current economic situation, effectiveness achieved through regulation and norms and a brief assessment of system integrity and a comparative analysis in the Asian context. The Research data indicates that Banking Sector Reforms have always been pragmatic and inclusive. However, the impact of Banking, economic and Governmental policies reveal a lopsided growth ailing in several quarters as well as a shortfall in targets due to several constraints.

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30.1 Introduction

In 2011, Federation of Indian Chambers of Commerce and Industry (FICCI) said that the monetary and fiscal authorities need to work in tandem in addressing the concerns of the banking sector. As per the assessment of the Planning Commission, during the Twelfth Plan (2012–2017) India may need infrastructure investments of over US$ 1 trillion. This poses a mammoth financing task. The infrastructure gap in India, both in relation to other major countries and its own growing demand, has been a key factor affecting the overall productivity of investments. The requirement of high initial capital outlay, that too over longer terms, necessitates measures to address the financing constraint to capacity expansion in infrastructure. The financing issue relates not only to possible resource gap, but also to ensure commercially viable funding that remains so over business cycles. Infrastructure investment during the Twelfth Plan will need to be funded by both, public and private sectors. Despite increasing participation of the private sector in bridging the infrastructure gap, public investment still has to play a significant role. Fiscal consolidation and reorientation of expenditure towards capital expenditure is required to meet the target. The banking system, despite the risk of asset-liability mismatch while lending for long-term infrastructure projects, has seen high growth in credit to this sector in recent years [1]. At an aggregate level, Indian banks fare well against the Basel III requirement for capital. However, some may appear inferior on comparison; for instance, nine banks had Tier I capital of less than 8.5 % as on March 31, 2011. Considering the stricter deductions from Tier I and the fact that some of the existing perpetual debt (around Rs. 250 billion) would become ineligible for inclusion under Tier I, some banks may need to infuse superior or core capital (equity capital or Tier I). Additional capital may also be required to support a growth rate that exceeds the internal capital generation rate, which is likely [2]. The objective of the Basel III reform package is to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy. An assessment of Indian banks' capital requirements under Basel III has revealed that, notwithstanding some issues with a few individual banks, the system as a whole, is very well capitalised and the transition to the revised capital norms of overall capital adequacy, Tier I component or equity component would be smooth. The implementation period of Basel III capital requirements, including capital conservation buffer and regulatory deductions, will begin from January 1, 2013 and will be fully implemented by March 31, 2018, before the timeline (January 1, 2019) indicated in Basel III rules [1]. Globally, there is an increasing move towards more advanced approaches to risk management. Banks in India have made progress in moving towards the advanced risk management approaches. Banks, however, need to traverse a long distance in this regard. As capital always comes at a cost, banks need to have in place a fair and differentiated risk pricing of products and services.

30.2   Research Approach

An overall Scientific Approach with a combination of Quantitative, Qualitative, Analytical and Evaluative as well as Exploratory. Primary data gathering techniques through well-drafted questionnaires were used to capture data regarding control and regulation, policies and their impact with specific focus on the Banking Sector's performance and futuristic perspective. Secondary data from reliable sources such as the World Bank, IMF, Asian Development Bank, research editions, Governmental sources and Chambers of Commerce and Industry, Reference Books, magazines, newspapers and periodicals were analysed at length over a considerable time-frame. Speeches given by prominent people in the Banking Sector and Industry were studied and vital data utilized.

30.3   Rural Credit and Funding

Rural India, where 70 % of all Indians live, still depends heavily on agriculture. However, it is increasingly becoming a diversified market with a strong demand for credit for agriculture and non-agricultural purposes, savings, insurance and money transfers. India's rural areas are characterized by stark opposites; on one hand there are chronic credit and infrastructure shortages and a crumbling co-operative credit structure and yet on the other rural markets are emerging as important consumption epicenters. "Today, for instance, close to a third of both FMCG and durable sales is contributed by rural markets. Overall, rural consumption in value terms has grown 17.2 % per annum in the FY08-10 period. Recent data shows that rural consumption has grown faster than urban in the last 2 years". Moreover credit is a very important determinant in overall rural and consequently economic development. "A quick assessment by the Reserve Bank of the relationship between institutional credit to agriculture (from commercial banks, cooperatives and RRBs) evidences positive and statistically significant elasticity—every 1 % increase in real agricultural credit results in an increase in real agricultural GDP by 0.22 % with a one-year lag". Evidence also suggests that share of organized financial institutions in total farm/cultivator credit availed has grown and now accounts for over 60 % of total credit. Lending to agricultural sector (surrogate for rural lending) has increased at a CAGR of 18 % between 2006 and 2012. As seen in Fig. 30.1 (credit intensity in agriculture), agricultural credit to agricultural GDP has increased over the last 10 years implying that a greater amount of agricultural growth is now credit funded.

What is causing this is the policy impetus on priority sector, Increasing financial awareness and the allure of the fortune at the bottom of the pyramid, thereby leading financial institutions to increasing look at Indian rural areas as growth engines of the future.

Fig. 30.1 Credit intensity in agriculture

Note: Since the data on agricultural credit from cooperatives were available only up to 2007/08. figures for the years between 2008/09 and 2010/11 are based on estimates made using the three-year moving average method.

Source: Handbook of Statistics on Indian Economy, RBI (2010-11)

Source: RBI Supervisory Returns.
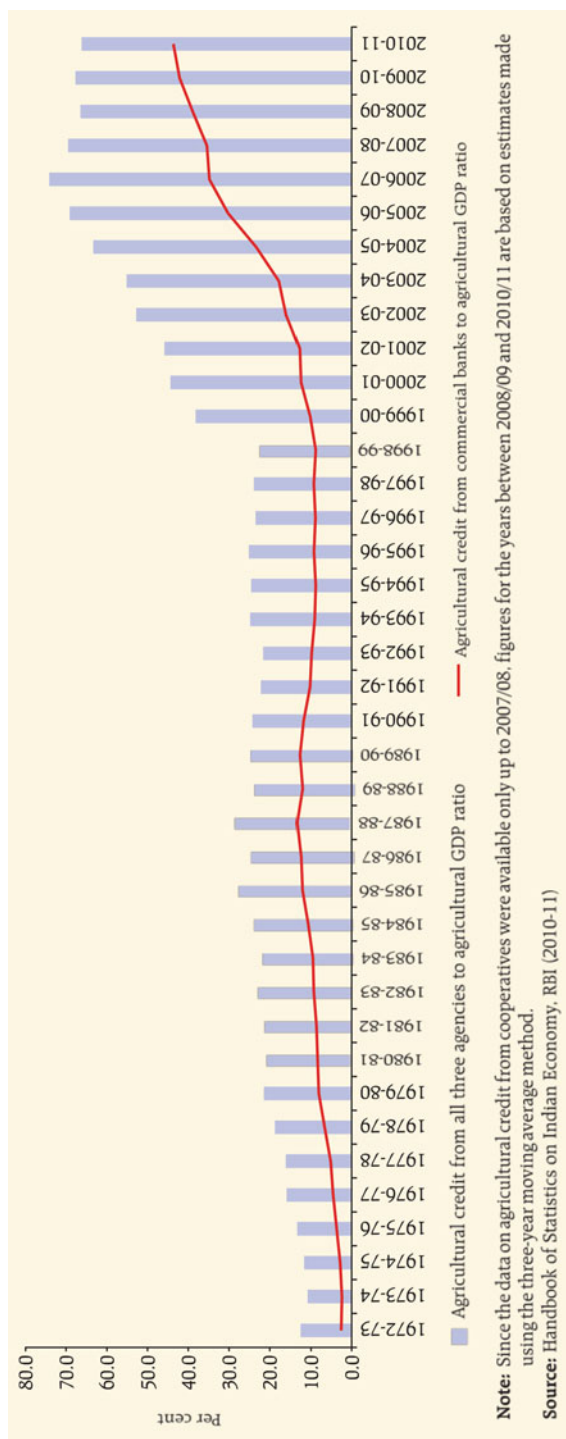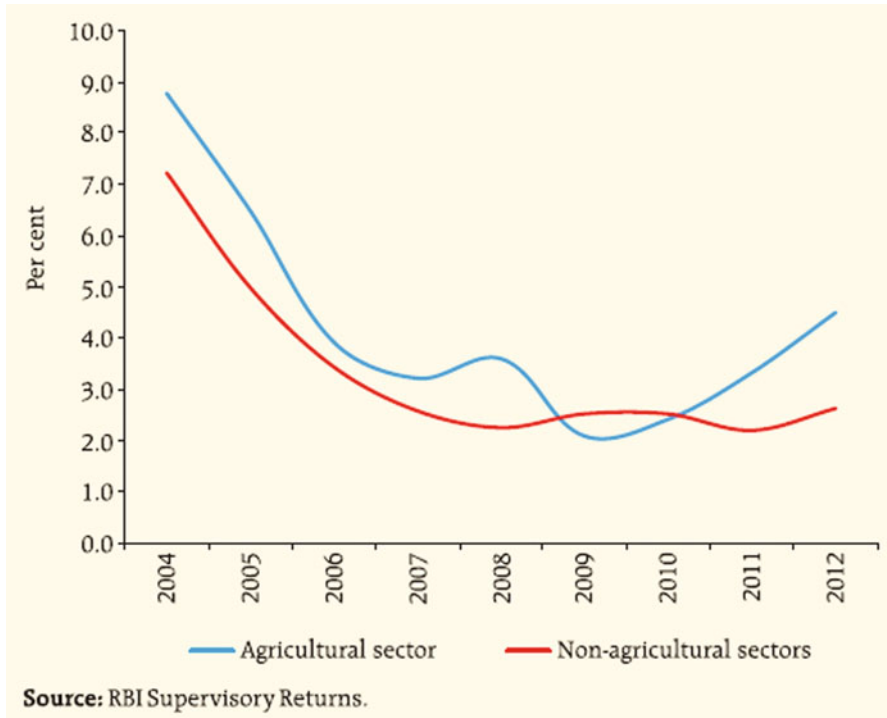
Fig. 30.2 Agricultural NPA

30.3.1   Challenges

The financial institutions designed to promote this credit flow (thereby leading to inclusive and grass root development) are today a sorry lot. An expert committee constituted by RBI to examine the short term cooperative credit structure (ST CCS) noted that the share of ST CCS in providing agricultural credit is a mere 17 % at an overall level and almost half the loans provided were for non agricultural purposes. A large number of the institutions did not even meet the relaxed capital adequacy limits (4 % CRAR). Agricultural seasonality and poor credit culture have diluted some of the gains resulting from increased credit delivery. Agricultural NPA's have increased at a much faster rate than overall banking sector NPAs (see Fig. 30.2). Moreover, the existing banking products are not tuned to the credit needs of the rural populace primarily because this asset class has poor/no credit history and unique funding needs; as a result the non-banking channel has proliferated in this space which is causing structural issues.

30.3.2   Assessing the Extent of Financial Inclusion

The provision of uncomplicated, small, affordable products can help bring low-income families into the formal financial sector. Taking into account their seasonal inflow of income from agricultural operations, migration from one place to another, and seasonal and irregular work availability and income, the existing financial system needs to be designed to suit their requirements. Banking connectivity has been extended to 211,234 villages up to December 31, 2012 from 67,694 villages in March 2010, 5,694 rural branches have been opened, the numbers of Business Correspondents have increased from 34,532 to 152,328 and the share of ICT based accounts have increased substantially—Percentage of ICT accounts to BSBDAs has increased from 25 to 45 %.The World Bank's select indicators on financial inclusion (2011) pointed out an abysmally low financial inclusion in India.

30.4   Investment in Infrastructure and Growth Projects

The way India responds to meeting the Infrastructure financing needs is likely to define the growth trajectory for its GDP growth as well as its relative growth in the region as well as world economy. As per the planning commission document India needs over Rs. 45 trillion investments in Infrastructure. Indian banks have been active in the infrastructure financing space. Outstanding bank funding to infrastructure sector stood at Rs. 6.9 trillion as on December 31, 2012 (as compared to Rs. 5.96 trillion in 2011). According to the Planning Commission, during the first 3 years of Eleventh 5 Year Plan, funds from the Central Government budget financed around 45 % of the total investment in infrastructure. The remaining 55 % was divided between debt financing (41 %) and equity financing (14 %). It is noteworthy that within the debt financing, commercial banks alone financed around 21 % and another 10 % was financed by the NBFCs. Notably other sources of financing, such as, External Commercial Borrowings (ECBs), equity, FDI and insurance companies financed less than 10 % of the total infrastructure investment each.The central bank has continued to support funding to this sector. The share of bank credit to the infrastructure sector in the total non-food credit increased from 8.18 % in September 2005 to 14.54 % in December 2010. In March 2013, RBI accorded a secured status to the debt of infrastructure projects set up under public-private partnerships (PPPs)—a move aimed to reduce borrowing costs in this sector. RBI has also encouraged take out financing for this sector which provided much needed liquidity to these projects at a critical time.

30.4.1   Challenges

Lending to infrastructure is inherently risky for banks. It is also pertinent to note that commercial banks can play a limited role in financing infrastructure as the institutions primarily leverage on short term financing and as such ability to lend to long term projects is limited. Higher yields (by lending to infrastructure) expose the banks to asset liability mismatch risks and high NPA risks should the economy slow down.

STATE-OWNED BANKS HAVE COLLECTIVELY SUNK IN OVER ₹50,000 CRORE IN PROJECTS ACROSS FIVE CORE SECTORS

	Power	Roads	Port	Cement	Steel	
State Bank of India*						11,034/1,975/541/348
Punjab National Bank						4,580/98
Bank of Baroda						4,202/464/39
IDBI Bank						2,637/582/134
Bank of India						2,359/798/32/338
Oriental Bank of Commerce						2,197/1,104/80
Canara Bank						2,020/1,039/650
United Bank Of India						2,016/462/112/291
Union Bank of India						1,609/637/29
Central Bank of India						1,593/685/17
Uco Bank						1,188/908/106
Dena Bank						1,111/379/53/216
Punjab & Sind Bank						885/91
Allahabad Bank						824/362/87/13
Indian Bank						609/531
Andhra Bank						426/75
Syndicate Bank						263/27/92
Vijaya Bank						58/349/21/50
Indian Overseas Bank						337

All figures in ₹crore; Iron and Steel exposure of SBI is through State Bank of Travancore and State Bank of Hyderabad

Fig. 30.3 Bank lending to infrastructure

30.4.2 Impact Assessment

Although commendable progress has been made by banks in funding infrastructure, recent data suggests that this thrust has backfired in many areas. By April 2013, over 20 state-owned banks reported that 215 projects, worth over Rs. 7 trillion, have been sanctioned for investments but are stalled or delayed for various reasons. Over 40 % of this amount has already been disbursed. This has the potential to single handedly impair the profitability of the Indian banking system (Fig. 30.3).

30.5 Support to MSMEs and the Inroads Made

The MSME sector is an important pillar of Indian economy as it contributes greatly to growth of Indian economy with a vast network of around 30 million units, creating employment of about 70 million, manufacturing more than 6,000 products, contributing about 45 % to manufacturing output and about 40 % of exports, directly

and indirectly.The micro small and medium enterprises (MSME) sector is a vehicle for faster, sustainable and more inclusive growth. Despite this, the MSME sector continues to face constraints like, non-availability of adequate and timely credit, high cost of credit, high collateral requirements, access to alternative capital sources and challenges in rehabilitation. RBI's guidelines state:"In order to ensure that sufficient credit is available to micro enterprises within the MSE sector, banks should ensure that: (a) 40 % of the total advances to MSE sector should go to micro (manufacturing) enterprises having investment in plant and machinery up to Rs. 5 lakh and micro (service) enterprises having investment in equipment up to Rs. 2 lakh; (b) 20 % of the total advances to MSE sector should go to micro (manufacturing) enterprises with investment in plant and machinery above Rs. 5 lakh and up to Rs. 25 lakh, and micro (service) enterprises with investment in equipment above Rs. 2 lakh and up to Rs. 10 lakh. Thus, 60 % of MSE advances should go to the micro enterprises. Public sector banks have been advised to open at least one specialized branch in each district.

30.5.1 Challenges

Information asymmetry, lack of credit culture and absence of credit history are the primary hindrances in credit flow to this sector. As on March 2011, there were 1,200 specialized SME branches, total credit outstanding to the MSME sector as on February 28, 2013 stood at Rs. 4 trillion which accounted for 8 % of overall bank credit as on that date. However, a significant funding gap still persists, according to the planning commission document at the beginning of the 12th Plan period, the outstanding credit gap for the MSME sector was estimated to be a whopping 62 % which will reduce only by around 20 % over the next 5 years. Consequently the gap would still remain at 43 in March, 2017. According to the fourth all-India census of Micro, Small & Medium Enterprises with reference year of 2006–2007, over 88 % of the registered units did not receive adequate finance and had to depend on own sources of funds. Finance through institutional sources was only available to 11 % units. These numbers point out the chronic need of financing to this sector.

30.6 Gauging the Banking System's Efficiency Achieved and Assess System Integrity

Indian banks, the dominant financial intermediaries in India, have made good progress over the last 5 years, as is evident from several parameters, including annual credit growth, profitability, and trend in gross non-performing assets (NPAs). While the annual rate of credit growth clocked 23 % during the last 5 years, profitability (average Return on Net Worth) was maintained at around 15 % during the same period, and gross NPAs fell from 3.3 % as on March 31, 2006 to 2.3 % as on March 31, 2011.Good internal capital generation, reasonably active capital markets, and governmental support ensured good capitalisation for most banks during the period

under study, with overall capital adequacy touching 14 % as on March 31, 2011. At the same time, high levels of public deposit ensured most banks had a comfortable liquidity profile. While banks have benefited from an overall good economic growth over the last decade, implementation of SARFAESI, setting up of credit information bureaus, internal improvements such as upgrade of technology infrastructure, tightening of the appraisal and monitoring processes, and strengthening of the risk management platform have also contributed to the improvement. Significantly, the improvement in performance has been achieved despite several hurdles appearing on the way, such as temporary slowdown in economic activity (in the second half of 2008–2009), a tightening liquidity situation, increases in wages following revision, and changes in regulations by the Reserve Bank of India (RBI), some of which prescribed higher credit provisions or higher capital allocations. Currently, Indian banks face several challenges, such as increase in interest rates on saving deposits, possible deregulation of interest rates on saving deposits, a tighter monetary policy, a large government deficit, increased stress in some sectors (such as, State utilities, airlines, and microfinance), restructured loan accounts, unamortised pension/gratuity liabilities, increasing infrastructure loans, and implementation of Basel III. The data on financing pattern of fiscal deficit throws up two serious concerns. One, net small savings collections have been negative so far. Recognising this disturbing trend, the Government had announced extra market borrowings of around Rs. 52,872 cores in September 2011. In December 2011 it further raised market borrowings by Rs. 40,000 crores. This means that the shortfall on account of small savings would be made good by market borrowings. Second, the Government has taken continuous recourse to ways and means advances (WMA) from the RBI. According to RBI weekly data as on November 18, 2011, the Government has also taken recourse to overdrafts. Thus, the WMA has ceased to meet temporary mismatch of Government receipts and expenditure. On the contrary, it has become a resource. At an aggregate level, Indian banks fare well against the Basel III requirement for capital. However, some may appear inferior on comparison; for instance, nine banks had Tier I capital of less than 8.5 % as on March 31, 2011. Considering the stricter deductions from Tier I and the fact that some of the existing perpetual debt (around Rs. 250 billion) would become ineligible for inclusion under Tier I, some banks may need to infuse superior or core capital (equity capital or Tier I). Additional capital may also be required to support a growth rate that exceeds the internal capital generation rate, which is likely.

30.7   A Brief analysis in the Asian Context

New frontiers in transparency and accountability are emerging. The increased demand for natural resources across the world has created both massive opportunities as well as considerable risks for the resource exporting developing countries. Take the case of China. Plans to extend the Shanghai line have been put off apparently because of local protests over electro-magnetic radiations from the trains and concern about the expensive nature of such projects. China is moving to a new stage,

one in which costs and public reaction matter and the scope for multi-billion dollar experiments is narrowing. Japanese Prime Minister ShinzoAbe, on taking office last December, announced, that policies should be changed to bring growth back to the Japanese economy. He announced his three arrows policy. Abe's three arrows are a bold monetary policy, a flexible fiscal policy and a growth strategy to stimulate private investment. The first two are in place. The third depends on the first two. The middle-income trap also ignores the separate phenomenon of middle-income deceleration. The economies of many nations have slowed down to a lower cruising speed even if they did not stop catching up entirely. This has been the experience of even the most successful growth stories in modern history, including those of Japan, Korea and Taiwan, which witnessed an early deceleration at an income level equivalent to where China is today. After adjustments are made for changes in the exchange rate, China is at roughly the same level of income of around $5,000-as Japan in the early 1970s, Taiwan in the late 1980s and Korea in the early 1990s. During the BRICS summit in Durban, the leaders from Brazil, Russia, India, China and South Africa were seen trying to sort out funding basics of the proposed Development Bank for emerging economies. China, the world's second largest economy has reportedly agreed to contribute $41 billion to the Bank's $100 billion capital, South Africa $5 billion and the others $18 billion each. Favourable regulatory support in countries such as Singapore is also drawing the attention of Indian firms. For technology Companies, the Singapore Government pays half the salaries of technical staff for 1 year with a cap of S$250,000 or Rs. 1 crore. The city-states no-tax rule until a Company reaches a revenue of $300,000 and thereafter, a very low Corporate tax of 17 % compared with India's 33 % is the biggest draw for several entrepreneurs.

30.7.1   Sustainability

The Banking sector is a very strong sector that is a massive inter-linked empire which is more powerful than nation-states. Therefore, the need to safeguard this sector from crisis situations like the current bailout in Cyprus is of utmost essence. In the words of RBI Deputy Governor, Dr. A.K.Chakrabarty, "Sustainability-meaning thereby, the ability of the present to meet its needs without comprosing the ability of the future generations to meet theirs-is the key issue and should be the key focus".

The International Monetary Fund warned in April 2013 that risks from the easing policies of central banks around the world are increasing as the Bank of Japan joined its counterparts in the U.S. and Europe in unleashing monetary stimulus to end 15 years of deflation. Gross capital inflows into the East Asia and Pacific region surged 86 % in the first quarter from a year earlier, the World Bank said in its report, adding to pressure on inflation and asset prices."Near-zero interest rates and new and protracted rounds of quantitative easing in the United States, European Union, and Japan are inducing large capital inflows into emerging markets including in East Asia," the World Bank said. "The risk of an asset boom in the markets, in which global liquidity spills over is emerging, with asset valuations moving ahead of fundamentals

and possibly a correction down the road". The World Bank's comments echo those of International Monetary Fund Managing Director Christine Lagarde and the Asian Development Bank. Central banks in Asia should "think about the timing and pace of withdrawing monetary support" as strong credit growth has seen a buildup of financial imbalances, Lagarde said in a speech in Boao, southern China on April 7th 2013. The ADB said in an April 9 report that the region's growth recovery faces the risk of asset bubbles from rising capital inflows.

The World Bank trimmed its estimate for 2013 growth in Developing East Asia, which excludes Japan and India, to 7.8 % from a 7.9 % forecast previously. That's still more than three times faster than the 2.4 % it projects for the world economy. Its estimate for the region's growth next year is unchanged at 7.6 %. As per report on 12th April 2013, The World Bank said on Thursday it would lend between $3 to $5 billion annually to India under a new four-year plan that focuses development projects on the country's poorest states. The World Bank said in a statement that 60 % of the financing will go to government-backed development projects and half of this, or 30 %, will go to the country's poorer states. Under the previous strategy, about 18 % of lending went to these states. Earlier this month World Bank President Jim Yong Kim urged the international community to eradicate global poverty by 2030. He said the strategy for India would be the first by the bank to hone in on areas where developing financing would have the biggest impact on India's poorest. The Bank said the plan aims to cut poverty in India to 5.5 % of the population by 2030 from an estimated 29.8 % in 2010.

30.8 Conclusion

Banking to the unbanked areas and a strong stance to ensure viability to rural projects through efficient funding must be in place. The Governmental policies should be drawn up and carried out and carried out in a progressive manner so as to support the projects and eliminate bottlenecks of lack of storage, improper distribution networks, insufficient profit margins and lack of technological prowess among others. In order to achieve financial inclusion and Banking to the unbanked areas, every bank could adopt a village, work on overall competitive efficiencies and leveraging of profits, whereby inclusive growth is simultaneously achieved. The study has found that apart from channelising funds to enable repayment and to access worthy projects and fund them, a strong mechanism for redistribution of income and wealth through project creation as well as a model for sustenance of weak regions and states by strong ones in order to achieve uniform growth and eliminate lopsided growth must be in place through various services, investments and funding. Our Industry corridors, techno-parks, the golden quadrilateral, etc reveal a considerable foray ahead. However, the wheels of progress must be constantly lubricated with a sound system of disbursement, continuous monitoring, evaluation and appraisal. Moreover, there must be policies in place for non-repayment of loans and advances, otherwise, the increasing burden on the Banking sector will inhibit further growth and set the pace

for an economic downturn. MSMEs must be supported with grants and seed capital. Banks could venture into collaborative agreements with a regular project overview. Moreover, creation of a global market is an area that should be worked on from the point of view of maximising returns to the farmer and the common man and ensuring an elevated lifestyle in due course. Apart from adhering to the Basel III, we must move towards a regime of transparency and accountability. Regulation, control, prevention and detection measures must be in existence and operation. Eternal vigilance is but of course the price we need to pay for a healthy sector. Off-site surveillance as well as on-site monitoring measures must be in place.

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Chapter 31
Determining the Factor Affecting Stock Investment Decision of Potential Women Investors in Indonesian

Linda Ariany Mahastanti and Edy Hariady

Abstract Investor in Indonesia there are not many women. It make Jakarta Stock Exchange (JSX) have special program to make promotion for potential women investor. In recent years Indonesian have a new phenomenon that there are many women have been working. Women not only become housewife but also can be work to make additional income in the family. This make women become potential investors for JSX that there are not happened in the past view years ago.

This research used theory of planned behavior to describe more deeply about the link between beliefs and behavior. The theory states that attitude toward behavior, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions. The study used a self-administered questionnaire of a sample of women lecturer in university. Data will be analyzed with regression technique. This result indicated that only perceived behavioral control and risk preference influencing intention to buy financial product but not with subjective norms and attitudes.

31.1 Introduction

Indonesia has the potential to target women as potential new investors in capital market. In term of population, the number of women in Indonesia in very large. Based on data the Central Statistics Agency of the total population amount to 217 billion, the number of female reached 49.8 % or approximately 108 million people. A large population of women was further potential as a target market investment product, because family culture in Indonesia is positioning as a financial manager. Indonesian Stock Exchange is targeting the number of investor in the capital market two reach two million in two or three years. Indonesian Stock Exchange have breakthrough to achieve that target with women who closely step that appropriate.

Indonesian women have belief and norm that would be difference with other country. Culture in Indonesia always thinks that women just have position in second

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class in our society. Women didn't have power to make decision in their family. Usually women always follow man to make decision, if women want to make decision in investment would be difficult because they didn't have experience and brave to make huge decision in investment in capital market. It is happened because women more risk averse to manage their money. Women usually make investment in real asset like property, gold but not in financial product who sale by capital market.

Finally, there is emerging evidence that women 'shy away from competition' to quote. This pattern has also been found for example by [13] or [10]. The less competitive behavior of women may be seen as typical. This also applies to higher risk aversion as fund managers do not aim for maximum returns but for risk. It is perfectly possible that there is an ongoing self-selection mechanism among women on becoming fund managers. If so, this supports the hypothesis of 'expertise dominates gender'. Interestingly, recent research indicates that women react on incentives—which are extremely strong in fund management—as men do.

Our research on women investment extends most former studies towards the phenomenon in Indonesia and literature review results. Using theory of Planned Behavior (TPB) in this research want to know about intention women in Indonesia to invest their money in financial product. Women intention to buy financial product not only influenced by their financial literacy, risk preference, but also their norm, belief, perceive control (TPB). Reference [9] deduce that an individual's level of financial knowledge influences their opinions and impinge on their decisions. Reference [16] argue that their review revealed that many persons did not have the adequate knowledge of basic economic concepts required to make investment decisions. Thus, there is a need to conduct research on factors, other than knowledge, that could influence investment decisions.

The purpose of this paper is to look at factors influencing the investment intentions by applying Ajzen's 1991 theory of planned behaviour. This paper borrows from behavioural psychology and management theory to explore the investment decisions of future investors. We assume that the investor is desirous of constructing a portfolio of investments that best suits her return requirements and risk propensity. Investors can be either risk-averse, risk-neutral or risk-seeking. Thus, we seek to understand how risk affects investment decision making.

31.2   Literature Review

This study will look more deeply at a women's interest in investing in financial products. previous research said that women tend to be afraid to take risks than men so do not willing to make decision in investing. There is emerging evidence that women 'shy away from competition' to quote. This pattern has also been found for example by [13] or [9]. As it already seems to exist among young children, the less competitive behavior of women may be seen as typical. Previous studies have shown that an individual's investment behaviour has been linked to specific areas such as attitudes to risk. Reference [21] argued that any focus on particular financial issues

may not be a good indicator of one's attitudes and behaviour to financial matters. However, attitudes can be quite influential in explaining an individual's investment behaviour.

In particular, several researchers have used social psychology theories (for example [1]) to explain behavioural intentions in the investment context. This current study seeks to explore the influence of potential investors' attitudes. social influence, control beliefs and other factors on their intentions to invest in different ventures or business opportunities. Reference [1] stated that 'past behaviour is the best predictor of future behaviour', and thus, he further argued that attitudes may influence one's behaviour. theory of planned behavior is very useful to explain the intention of Indonesian women to invest their money in financial product. This is important because Indonesian have unique culture about women. Norm, belief, control in their social community is very difference with western country. In east culture women have inequality with man. This can make influenced that they want to invest their money or not. Reference [1] defined attitudes toward a behaviour 'as the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question.' He also defined subjective norm as being 'the perceived social pressure to perform or not to perform the behaviour' [1]. Subjective norm refers to the influence of one's peers, family and referent others in performing the behaviour. In Indonesian women, family member and friends have big influences in made references before make decision. Because they have a good relationship. Reference [1] defined perceived behavioural control as being 'the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experience as well as anticipated impediments and obstacles.' The perception of the degree of ease or difficulty of performing an action can encourage or inhibit the performance of the actual behaviour. Attitudes, perceived behavioural control and subjective norms have been proposed to influence behavioural intentions and actual behaviour. Reference [1] stated that 'as a general rule, the more favourable the attitude and subjective norm with respect to a behaviour, and the greater the perceived behavioural control, the stronger should be an individual's intention to perform the behaviour under consideration.'

Potential investor is very sensitive about risk, it is happened because they have perception of assessment about gain or loss with the investment. Specifically, investments in start-up businesses are considered riskier than other investment options. This is the opportunity to the Indonesian women to make decision in financial product investment, because they didn't have enough experience about investment that make afraid women to invest.

Indonesian women contexts have subjective norm from their community usually friends and family, when they want to make decision making in investment, family member, friends have recommendation and opinion about their behavior in investment. It happened because Indonesian culture that always made perception women is not strong enough when making decision, Beside this in our tradition always made women behind the man. It made women usually afraid when made important decision like investment in financial product. Even though they have capability and knowledge about financial product, women always did not have enough confidence

to invest in financial product. That made their behavioral intention in investment become decreasing.

Thus, this study seeks to explore whether the three individual-level antecedents of the theory of planned behaviour, as well as risk propensity can significantly predict intentions to invest among future investors. Based on the above review of literature, we now provide the following hypotheses:

H1 Attitudes will be influenced to intentions to invest.
H2 Subjective norms will be influenced to intentions to invest.
H3 Perceived behavioural control will be influenced to intentions to invest.
H4 Risk propensity will be influenced to intentions to invest.

31.3   Research Methodology

This study selected a sample of women who have knowledge in financial product. The sample is a lecturer in the Faculty of Economics Satya Wacana Christian University. Data was collected using questionnaires with cross sectional design during 2012.

31.3.1   Development of Instrument

To evaluate the relationship between planned behaviour and investment decisions, we formulated a survey questionnaire. The initial questionnaire was piloted to clarify all ambiguities and badly worded questions, as well as to choose applicable scenarios that meet the focus of the study. The remainder of this section describes the structure of the questionnaire. Firstly, the questionnaire requested respondents' demographic data such as salary, marital status, education background. Attitudes, subjective norms, perceived behavioural control and intentions to invest were adapted from study, we extended the research to include two aspects of risk, namely two scenarios (highly risky and less risky) and the risk propensity scale.

31.3.2   Dependent Variables

Intention to invest was measured using a 3-item scale, adapted from [11], [7], [2].

31.3.3   Independent Variables

Attitudes to investing were measured using five 5-point fully anchored semantic differential scales, ranging from 1 to 5. Respondents were asked to state their attitudes

in applying for shares in an established public company. In this study, we utilised scales which have been widely used and found to have high internal reliability in prior research.

Subjective norms were measured using a 3-item scale, adapted from [11], [7] and [2]. Perceived behavioural control was measured using three items adapted from [11] and [2].

Risk propensity was measured using a 5-item scale developed by Sitkin–Weingart Business. Prior research has used the Sitkin and Weingart's Business Risk Propensity scale and achieved high internal reliability.

The data has been collected, then testing reliability and validity. Furthermore, the data is processed by using multiple regression to determine whether any of the variables affecting the behavioral intention of women to invest in financial product. Beside this the regression using control variable (major, income, and marital status), variable control used to reduce bias in model regression.

31.3.4 Statistical Models

$$Y = \alpha + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4 + \beta 2 X5 + \beta 3 X6 + \beta 4 X7$$

(Y: behavioral intention, X1 = attitudes, X2 = subjective norm, X3 = perceive behavioral control, X4 = risk preferences, X5 = Marital Status, X6 = Major, X7 = Income)

31.4 Discussion

Data collected consisted of 50 respondents. Based on this data and then be viewed the individual characteristics from each these respondents (Table 31.1).

Women who were respondents in this study had a master's degree level education with marital status married and have sufficient financial knowledge. Exciting of the above phenomenon, although they have sufficient knowledge in finance and enough salary, but none of them are interested to invest in the stock market. Most women actually investing in gold, deposits, or property which they considered more secure. This indicates that women do tend to be more risk averse when making investment decision by choosing a safe investment product.

The following information will describes the influence of TPB (Theory of Planned Behavior) and risk preference toward the intention to buy financial product in the stock market.

The results of the regression analysis show that Perceived behavioural control effect on the intention to buy financial products. This is in line with the research conducted by [2], This occurs because women feel confident and believes that he has the opportunity and enough knowledge to invest in financial products. This

Table 31.1 Characteristic respondent

Education background	(%)	Marital status	(%)	Salary (IDR)	(%)	Majoring	(%)	Product Investment	(%)
Bachelor degree	3	Married	90	3.000.000–5.000.000	35	Finance	58	Gold	37
Master degree	93	Single	10	> 5.000.000–7.000.000	35	Non Finance	42	Land and property	34
PhD	3			> 7.000.000	30			Stocks	2
								Deposits	27
Total	100	Total	100	Total	100	Total	100	Total	100

conviction arose because the respondents in this study plumpness is a lecturer in the faculty of economics who has an educational background in finance. Beside this women in Indonesia have plenty opportunity to buy financial product, it happened because securities company have great promotion program for potential women investor. The next variable that also significant is risk preferences. Risk preferences is very important for women because women are risk averse tendencies. women usually love with secure product investment like gold, property, deposit, although the level of return they receive low. It is evident that the risk preferences of women affect their behavioral intention in investing Reference [2] also stated that the risk preferences affect a person's intention to invest. Table 31.2 show that there are one variable control that have significant value to determining intention to buy financial product that is income. Women who have enough income want to invest their money in financial product. Reference [5] stated that investors with a higher level of income invest their funds in more volatile portfolio composed of more volatile stocks.

Based on TPB theory that there is only one significant variable that is Perceived behavioural control, while the others such as subjective norms and attitudes do not have a significant effect on intention to buy a financial product. Subjective norms and attitudes that exist in the culture of women in Indonesia always thought that investing in the stock market is something terrible because it has a high risk. Besides those people and family who around women in Indonesia also does not provide support for investment in the capital market. Lack of support and the belief that investing in the stock market is risky made women in Indonesia do not have behavioral intention to buy a financial product. Some of women in Indonesia think that investment in financial product like stock is not "halal" (prohibition to buy because it was considered sinful to a particular religion), because buy stocks at high risk and considered such gambling.

The research results indicate that the Jakarta Stock Exchange must have a special program to socialize the financial products for women in Indonesia. Promotion program that can be done using cultural and religion approach. It is important because most women in Indonesia is still strongly tied to cultural values and religion Financial products are fit for women in Indonesia further leads to the mutual funds or syariah product (financial products that contain religious elements), where mutual funds and syariah product has lower risk than stocks. Moreover investments in mutual funds do not require a lot of funds. Investing in mutual funds can be done in groups with

Table 31.2 Influence of TPB theory and risk preference toward the intention to buy financial product

Variable	Standardized coef. beta	Sign	Variable	Standardized coef. beta	Sign		
Constant		0.129	Risk preference	0.276	0.055*		
Attitudes	−0.153	0.27	Marital_st	−0.155	0.328		
Subjective norms	0.026	0.858	major	0.076	0.624	R^2	0.561
Perceived behavioural control	0.543	0.001**	Income	0.313	0.027**	Anova	0

***sig. 0.01,**sig. 0.05,*sig. 0.1

a combination of several women investors. Mutual funds are also considered more secure because it is managed by a professional investment manager from the company's securities. The socialization of financial products that will be conducted by the Jakarta Stock Exchange would be better if done in communities of women in Indonesia, such as the PKK (women's associations who meet regularly once a month). This association is almost there in every city in Indonesia. Through this association expected to more Indonesian women dare to invest in financial products because they have endorsement of the environment, such as (friends, family).

31.5   Conclusion

Results of this study indicated that women in Indonesia has ability such as enough salary and knowledge of financial products. The problem faced is the lack of support from the surrounding environment. This happens because their friends and family did not support to invest in financial products, they consider investing in financial products is a bad thing because financial products has a high risk.

Therefore the Jakarta Stock Exchange must has special program to make women in Indonesia are interested in investing in financial products that are traded in the capital market. Approach to the promotion and socialization by Indonesian stock exchange may be through groups such as the PKK. PKK are expected to provide social support for women in Indonesia when they will invest.

31.5.1   Limitation and Suggestion for Future Research

Respondents in this study is limited to women who worked as a lecturer at The Faculty of Economics Satya Wacana Christian University. Where most of them already has good understanding of financial products. Future research the respondents not only from one type of professional course work, but also involves several other

professions. The diversity respondents should be able to explained the more deeply understanding of financial products. Different knowledge about financial products suspected of influence perceived behavioral control ultimately affect behavioral intention in investing. The other one that not captured in this research is about religion perception in investing financial product. Religion perception become important variable that can be influence behavioral intention in Indonesian women, because they have tied relation with their religion.

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Part IV
Psychological Issues in Asia

Chapter 32
The Teenagers' Lifestyle of Popular Culture Fans

Livia Yuliawati

Abstract During the period of identity formation, teenagers are looking for role model as their references. Those references may come from the involvement as certain popular culture fans. Several activities can be done for admiring the celebrity and consuming the popular culture products. The aim of this research is describing the teenagers' lifestyle of popular culture fans. The subjects were 16–18 years old teenagers as the certain popular culture fans ($N = 137$). It was found that most of the subjects are Experiencers, Believers, and Survivors. It means that their involvement in fandom and related activities are motivated by self-expression and ideals.

32.1 Introduction

As the part of life-span development, adolescence is crucial period of identity formation. They need role model as the source of inspiration and learning about beliefs, values, and behaviors. Actually the role model can be found in parents, relatives, and teachers. Barna Group [1] found that beside those people, American teenagers also choose celebrity or popular figure form entertainment, sport, politic, and religion as their role models. Celebrity is the famous people from entertainment field, medicine, science, politics, religion, sports or close association with other celebrities [2]. As the public and remote figure, teenagers may develop parasocial relationship with their celebrity [3]. Celebrities from entertainment attracted teenagers because of their talents, performance, and money. Unsurprisingly, the celebrity is perceived as ideal person. Therefore, idolizing popular figure, like celebrity often can be a phenomenon in teenager life [4]. Previous research found that celebrities brought both positive and negative impacts for teenagers. The positive impacts are helping teenagers to maintain their self-concept, providing positive meaning as the pseudo-friends while they develop autonomy [5–7]. However the negative impacts are poor body image, lower psychological well-being, lower friend relationship [8–10].

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Celebrity cannot be separated from popular culture. Popular culture in the simple term is the culture which is liked by many people [11]. Film, music, fashion style, hairstyle, and many ways as the expression of celebrity existence will be followed by their fans. That is why celebrity fans might become the fans for the popular culture related with the celebrity. Reference [12] found that female teenagers who higher in idolizing male celebrities tend to buy commercial culture products. Reference [4] also highlight that teenagers' economic behavior is quite relevant as the consequence of the celebrity idolization. Idolizing celebrities can be expressed by buying celebrities' stuff, by using time to follow news about celebrity or by coming to celebrity's music concert [13]. Moreover they found that there was a stronger relationship in purchase intention among teenagers who adore celebrity.

Therefore many marketers use celebrity to endorse their products because positive feeling to celebrity will be associated with the endorsed products [13]. The marketers also use celebrity for creating the dreams that by using the products, the fans will have same characteristics with the celebrity [14]. Actually those buying behaviors are the representation of certain teenagers' lifestyle. So the aim of this article is describing the teenagers' lifestyle of popular culture fans.

32.2 Literature Review

32.2.1 Lifestyle

Lifestyle can be defined as someone's life pattern in daily life which is represented in activities, interest, opinion [15]. Value and Lifestyle (VALS) is one of measurement of lifestyle. This research used the VALS concept from Strategic Business Insight [16]. They categorize consumer based on their primary motivation and resources.

There are 8 types of lifestyle which are based on three primary motivations. These motivations drive someone to behave in certain ways. First are ideals, which mean that they use time, money, and opportunity based on knowledge and principle consideration. Secondly, some people also can be motivated by achievements. They want to use their time, money, and opportunity to get success or to show their success to the peers. Third motivation is self—expression. These types desire for social or physical activity, variety, and risk.

These 8 types are categorized by resources they had and innovation that they do. Resources here include age, income, education, energy, self-confidence, leadership, innovativeness, etc. The specific characteristics of 8 VALS types will be explain below:

1. Innovators (motivated by the combination of ideals, achievement, self-expression; high resources)
   Innovators are the successful people with the highest level of income as well as have a lot of resources that enable them to meet all three types of primary

motivation in different levels. Image is important for this type, not for the sake of status or power but as an expression of taste, independence, and personality.

2. Thinkers (motivated by ideals, high resources)

   Thinkers are the people who have an independent style, good responsibility, and a good level of education. They are also open to new ideas and social change, also have a high income, practical, a value oriented consumer.

3. Believers (motivated by ideals, low resources)

   Believers are the people who come from lower middle income levels, conservative and predictable. They tend to be loyal and love the famous brand. They undergo regular activities, organized in families, communities, religious organizations or their social fellowship. They hold certain beliefs from family, religion, community, or country.

4. Achievers (motivated by achievement, high resources)

   Achievers are the consumers who are quite successful and work-oriented, conservative and liked the well-known products and services in order to demonstrate their success

5. Strivers (motivated by achievement, low resources)

   Strivers are active consumers because shopping is a social activity and an opportunity to demonstrate their purchasing power on others

6. Experiencers (motivated by self-expression, high resources)

   Experiencers are impulsive, very excited to variety, novelty, risk challenges. They usually love sports, recreation, and social activities. Fashion, entertainment, and socializing consume a large portion of their expenses. Experiencers consume a lot of products that are favored by young people. It is a representation of them to look as good as possible and have the cool products.

7. Makers (motivated by self-expression, low resources)

   These consumers like the experience and influence their environment through their discovery of the usefulness and practicality of a product or service.

8. Survivors (limited motivation and limited resources)

   They tend to attempt to meet the basic needs rather than fulfill their desires. As such, they are not included in the category of a particular primary motivation. Because of limited means, they tend to be a cautious consumer, loyal to the brand, and would like to buy it if the discount will be given.

32.3   Methodology

Population is 16–18 years old teenagers from 3 schools in Surabaya. Using purposive sampling technique with the criteria that subjects must have at least one idol from celebrity, there were 137 subjects in this research. The questionnaires of VALS were distributed to the subjects. Then their responses were scored to categorize their VALS type.

32.4   Results and Discussions

From the response of 137 subjects, the researcher will describe the results in several tables below. The researcher asked the subjects about where or with whom they stay now. In Table 32.1, the result shows that 63.5 % subjects still live with their parents. The researcher assumes that physical and psychological contacts with the parents are still influence the subjects' behavior. Just only 3.65 % subjects who live with the relatives, e.g. uncle/aunt, grandparents, elder brother/sister. Although the influence of relatives are lower than parents, but living at relative's home probably still maintain subjects proper behavior.

There are 22.63 % subjects who stay at room board and 10.22 % subjects who stay at others. Others here are included the answer like subjects who rent house together with some peers or subjects who live alone (some of them live with domestic servant) in the rent house (Table 32.2).

From 137 subjects, almost half of them chose celebrities from Western (UK or USA). Then it is followed by 35.77 % subjects who loved Korean celebrities. In the third number, there were 16.06 % subjects who favor celebrities from Indonesia. Only 2.91 % subjects chose celebrities from other countries, such as Hongkong, China, or Japan.

Based on their answers, Indonesian teenagers got more focused on talents, outer look, and the similarity of the celebrity and themselves. Other reasons were the variety of popular culture products and how those products can be fit with teenagers' expectation for entertaining themselves. Related with concept of observational learning from Bandura, someone can learn by observing other person as model whose behavior get reward/punishment [17]. The characteristics of effective model are they are attractive, trustworthy, similar with observer, and perceived competent [18]. It can be said that the characteristics of effective model are fit with the reason of teenagers to choose favorite celebrity, except trustworthiness.

The researchers asked subjects about how much money they spent to buy celebrities' stuffs for each month. Based on Table 32.3, there were 40.88 % subjects who buy nothing. Probably, they chose to get it free by searching or downloading the music, news, and film from internet, borrowing those stuffs from their friends, or by watching on TV.

The second largest subjects spent less than Rp. 50.000,00 (less than US$ 5). Most of them bought magazine about celebrities and DVD film in the illegal version (sold very cheap: US$ 1 for each disc).

The third largest subjects spent from Rp. 50.000,00–Rp. 299.999,00 (from US$ 5 to US$ 29.9) for each month. The subjects mentioned that they spent money to watching on the movie, buying the music albums (CD), and combined with buying magazine and posters.

So if Table 32.2 and 32.3 are compared, interestingly although all of the subjects had favorite celebrity, but it's around half of them (59.12 %) who had willingness to spend money to buy celebrities' stuffs. It can be said that not every teenager celebrity fans impulsively will buy popular culture products related with celebrity. However

Table 32.1 Subjects' residence

Residence	Frequency	Percentage
Living with parent	*87 subjects*	*63.50*
Room board	31 subjects	22.63
Living at relatives' home	5 subjects	3.65
Others	14 subjects	10.22
Total	*137 subjects*	*100*

Table 32.2 Subjects' favorite celebrity

Favorite Celebrities	Frequency	Percentage
Korean celebrities	49 subjects	35.77
Western celebrities (from UK or USA)	*62 subjects*	*45.26*
Indonesian celebrities	22 subjects	16.06
Others	4 subjects	2.91
Total	137 subjects	100

Table 32.3 Expenses for celebrities' stuffs

Expenses for buying celebrities stuff	Frequency	Percentage
< Rp. 50.000,00	55 subjects	40.15
Rp. 50.000,00–Rp. 299.999,00	18 subjects	13.14
Rp. 300.000,00–Rp. 499.999,00	2 subjects	1.46
Rp. 500.000,00–Rp. 999.999,00	3 subjects	2.19
Rp. 1.000.000,00–Rp. 1.999.999,00	3 subjects	2.19
None	*56 subjects*	*40.88*
Total	137 subjects	100

40,15 % subjects who don't spend their money, they still spent their time and effort in order to get free access to popular culture products related with their celebrity.

Then here is the result of subjects' lifestyle in Table 32.4 below. Experiencers are the most of VALS type with 21.89 % subjects. Experiencers are the consumers with high resources and self-expression as primary motivation. Therefore they tend to excite with new things and risk as far as they can express their interest and ability. Then it is followed by Believers with 19.71 % subjects who had low resources and had primary motivation of ideals. Believers prefer doing regular activities and buying products with famous brand in line with their beliefs. Believers can be said as the loyal customer, because of the motivation underlying their buying behavior are those products fit with the principle, value, and norms. There are 17.52 % subjects as Survivors. This kind of lifestyle has limited resources and limited motivation. For them, they just think to meet the basic need and look for discount to buy. Survivors are also loyal customers but they become like that because they have less money, energy, time, interest, opportunity, leadership position.

Some subjects also had more than one VALS type. Like personality type, some subjects had some combined of resources and primary motivation.

Table 32.4 Subjects' lifetsyle

VALS Type	Frequency	Percentage
Achievers	9 subjects	6.57
Believers	27 subjects	19.71
Experiencers	*30 subjects*	*21.89*
Innovators	9 subjects	6.57
Strivers	11 subjects	8.03
Survivors	24 subjects	17.52
Thinkers	4 subjects	2.92
Experiencers, Achievers	2 subjects	1.46
Experiencers, Believers	2 subjects	1.46
Experiencers, Innovators	1 subjects	0.73
Innovators, Achievers	3 subjects	2.19
Innovators, Survivors	2 subjects	1.46
Innovators, Thinkers	1 subjects	0.73
Makers, Believers	1 subjects	0.73
Strivers, Believers	4 subjects	2.92
Strivers, Survivors	1 subjects	0.73
Survivors, Believers	2 subjects	1.46
Thinkers, Survivors	1 subjects	0.73
Strivers, Achievers, Believers	1 subjects	0.73
Strivers, Achievers, Survivors, Believers	1 subjects	0.73
Innovators, Makers, Achievers, Survivors, Believers	1 subjects	0.73
Total	137 subjects	100

Based on Table 32.3 and 32.4, it is understandable that because of the Believers and Survivors with low resources and ideals motivation or limited motivation, then many subjects spent none or less than Rp. 50.000,00 for buying celebrities' stuff. Probably it is also related with their preferences to Western celebrities as the famous brand.

Western popular cultural products have dominating Indonesian teenagers. For example Hollywood movie are very popular and new Hollywood movie can be the hot discussion among teenagers and the question whether they watch it or not. Certainly Western celebrities as the film characters also become the famous figures. The film soundtracks are also hunted like one package with the film and celebrities. Western foods are well-received, like restaurant with fast food, steak menu, and burger can grow so fast in Indonesia.

Korean popular culture as the new booming popular culture is well accepted in the form of Korean drama and K-pop. The acceptance of Korean dramas is the reflection of cultural proximity [19], as eastern value which is believed in Asia countries, included Indonesia. Korean wave actually is a hybrid of the traditional Korean cultures and western cultures, particularly American [20]. This combination can accommodate the need of ideal concept of Western popular culture and the proximity of Eastern value among teenagers and parents value.

Then why do many Experiencers who tend to buy impulsively and seek risks and novelty, but many of subjects who spend none for celebrities' stuff? Probably

because they still live with parents, then the activities, expenses, and buying behavior are controllable with parents' involvement.

32.5 Conclusion

It can be concluded that most of teenagers lived with their parents, might imply to the involvement of parent in the activities and resources chosen by teenagers. Based on the number of fans, Western celebrities is in the first rank, followed by Korean celebrities in the second rank, and Indonesian celebrities in the third rank. Regarding to the expenses for buying celebrities' stuffs as the representation of popular culture products, most teenagers spent none until less than Rp. 500.000,00 (US$ 5). Most of popular culture teenagers' fans are Experiencers, Believers, and Survivors type.

In future studies, it can be explored more about the parent-teenager relationship and popular culture product buying behavior. It is possible to study the differences behavior of teenagers' fan among Western, Korean, and Indonesia celebrities.

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Chapter 33
Individual Differences in Statistics Anxiety Among Students in Singapore

Kia Hong Peter Chew and Denise B. Dillon

Abstract The purpose of the current study was to explore statistics anxiety among students in Singapore and the effect of individual differences on statistics anxiety. Participants were 65 psychology undergraduates (64 % female) enrolled in two statistics courses at James Cook University, Singapore campus. A series of t-tests revealed that the current sample reported significantly lower statistics anxiety than the UK sample but higher statistics anxiety than samples from China and Austria. MANOVA revealed a significant interaction effect between gender and prior statistics experience for the Computation Self-Concept Factor of statistics anxiety. Practical implications, limitations, and future research directions are discussed.

33.1 Individual Differences in Statistics Anxiety among Students in Singapore

Cruise, Cash and Bolton defined statistics anxiety "as the feelings of anxiety encountered when taking a statistics course or doing statistical analyses" (p. 92). According to Cruise et al., statistics anxiety is a multidimensional construct consisting of six factors: (a) Interpretation Anxiety, (b) Test and Class Anxiety, (c) Fear of Asking for Help, (d) Worth of Statistics, (e) Computation Self-Concept, and (f) Fear of Statistics Teachers. Interpretation Anxiety refers to the feelings of anxiety encountered when interpreting statistical data. Test and Class Anxiety deals with the anxiety involved when attending a statistics class or when taking a statistics test. Fear of Asking for Help assesses the anxiety experienced when seeking help. Worth of Statistics relates to an individual's perception of the relevance of statistics to the individual. Computation Self-Concept relates to an individual's self-perception of his or her ability to understand and calculate statistics. Lastly, Fear of Statistics Teachers refers to an individual's perception of the statistics teacher.

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In addition to the multidimensional nature of statistics anxiety, research has also documented the antecedents of statistics anxiety. The antecedents of statistics anxiety can be classified as situational, dispositional, and environmental. Situational antecedents refer to factors that surround the stimulus object or event and include variables such as mathematics anxiety [3] and characteristics of statistics courses [6]. Dispositional antecedents refer to the personality characteristics of an individual and include variables such as procrastination and reading ability. Environmental antecedents refer to events which occurred in the past and include variables such as age, gender and prior mathematics experience. The importance of environmental antecedents cannot be denied because they identify high risk individuals for intervention. Unfortunately, research on age and gender differences has yielded conflicting results.

Baloğlu [2] and Bell [5] reported that older students had higher statistics anxiety than younger students. However, a recent study found no age differences [7]. With regards to gender differences, although some studies found no differences [2, 7], others documented gender differences for statistics anxiety [4]. In addition to age and gender, prior mathematics experience has been widely investigated due to the intimate relationship between mathematics and statistics.

In general, prior mathematics experience has been found to be negatively related to statistics anxiety [8]. Nevertheless, no studies have investigated statistics anxiety among students with outstanding prior mathematics experience. For example, students in Singapore are supposedly "gifted in Math" should experience little, if any, statistics anxiety. Furthermore, it is surprising that little or no studies have investigated the effect of prior statistics experience on statistics anxiety. Indeed, most research recruited students enrolled in introductory statistics courses as participants (i.e. no prior statistics experience) [8]. The conflicting results regarding age and gender differences, and the lack of research on prior statistics experience and students with outstanding prior mathematics experience, suggest a research gap in the statistics anxiety literature.

33.2   The Current Study

Studies on age differences often employ a split on an arbitrary cut-off point to convert age as a continuous variable into a categorical variable. For example, Bell [5] classified students below the age of 25 years as "traditional students" and those age 25 years and above as "nontraditional students". The dichotomization of continuous variables leads to loss of information as well as interpretation problems. However, no statistics anxiety research to date has treated age as a continuous variable and used appropriate statistical tests, such as correlation or regression, to analyze their data.

The discrepant findings on gender differences suggest that a third variable might be influencing the results. For example, Baloğlu [2] controlled for prior mathematics experience and reported no gender differences for statistics anxiety. Hence, it

seems possible that the effect of gender differences on statistics anxiety might be moderated by prior mathematics or statistics experience. Nevertheless, no research has investigated the effect of prior statistics experience on statistics anxiety, much less the interaction of gender and prior statistics experience in relation to statistics anxiety.

The current study was based on students in Singapore whereas the majority of the studies on statistics anxiety were based on students in the USA. According to the National Center for Education Statistics, students in Singapore have consistently scored at or near the top in the Trends in International Mathematics and Science Study, an international mathematics examination, since 1999. Results in 2011 ranked Singapore 1st and 2nd among more than 50 countries for their 4th and 8th grade students, respectively. In contrast, the USA was ranked 11th and 9th for the two groups of students, respectively. Consequently, researchers in the USA have conducted studies to explore the feasibility and advantages of learning from "Singapore's world-class mathematics system". Subsequently, Singapore's teaching method for mathematics, commonly known as "Singapore Math", has been adopted by an increasing number of schools in the USA. The outstanding prior mathematics experience of students in Singapore might prepare them for subsequent statistics courses and insulate them against statistics anxiety. Hence, they might experience substantially lower levels of statistics anxiety, if any, than their USA counterparts.

However, despite statistics being one of the branches of mathematics, it appears there are differences between the two. For example, statistics learning has often been conceptualized as second language learning rather than mathematics learning. This notion was supported by findings that linguistic intelligence, in addition to mathematical intelligence, is related to lower statistics anxiety. In addition, statistics anxiety was reported by psychology students in Austria, Spain, USA, UK, and Ireland, suggesting statistics anxiety to be a global phenomenon that affects all psychology students taking a statistics course. Hence, statistics anxiety might still be prevalent among the supposedly "gifted in Math" students in Singapore. Nevertheless, little or no research has explored statistics anxiety among students in Singapore.

Therefore, the first purpose of the current study is to bridge the research gaps by exploring the levels of statistics anxiety among students in Singapore in comparison with other countries. Secondary data from the UK, China, and Austria will be used.

The second purpose of the current study is to explore the effect of individual differences (age, gender, and prior statistics experience) on statistics anxiety. Specifically, it is hypothesized that age will be positively correlated with statistics anxiety (Hypothesis 1), females will have higher statistics anxiety than males (Hypothesis 2), students with prior statistics experience (experienced) will have lower statistics anxiety than students without experience (novices) (Hypothesis 3), and there will be an interaction between gender and prior statistics experience in relation to statistics anxiety (Hypothesis 4).

33.3 Method

33.3.1 Participants

The sample consisted of 65 psychology undergraduates (89 % Singaporeans; 64 % female) enrolled in two statistics courses at James Cook University, Singapore. The two statistics courses were as follows: introductory statistics for which students were considered novices ($n = 33$) and intermediate statistics for which students were considered to be (relatively) experienced ($n = 32$). Participants in the experienced group had successfully completed the introductory statistics course (prior statistics experience). Only 36 participants provided their age and they ranged from 18 to 50 years ($M = 21.75$, $SD = 5.31$).

33.3.2 Instruments

Participants were invited to complete a Background Information Form and the Statistical Anxiety Rating Scale (STARS). The Background Information Form asks for demographic information such as age and gender. The STARS is a 51-item instrument designed to assess the six factors of statistics anxiety: (a) Interpretation Anxiety, (b) Test and Class Anxiety, (c) Fear of Asking for Help, (d) Worth of Statistics, (e) Computation Self-Concept, and (f) Fear of Statistics Teachers. Participants respond on a 5-point Likert scale that ranges from 1 = *No Anxiety/Strongly Disagree* to 5 = *Strong Anxiety/Strongly Agree*. Appropriate item scores are summed for each factor, with higher scores indicating higher levels of statistics anxiety. Cruise et al. reported internal consistencies that ranged from 0.80 to 0.94 ($n = 1150$). In addition, the six-factor structure has been supported and confirmed by factor analytic studies done with university students in the USA [1], South Africa, the UK, China, and Austria.

33.3.3 Procedure

This study was carried out over one fourteen-week study period at the James Cook University Singapore campus. The first author visited the two statistics classes and administered the Background Information Form and the STARS. Participation was voluntary.

33.4 Results

All results were analyzed using SPSS version 16.0 and an online statistics calculator with the alpha level set at 0.05. The online statistics calculator runs *t*-tests using summary data only (i.e. means, standard deviations, and sample sizes).

Table 33.1 Intercorrelations, correlations with age, reliability coefficients (Cronbach's alpha), and descriptives of the STARS

	1	2	3	4	5	6
1. Interpretation anxiety	–					
2. Test and class anxiety	0.70**	–				
3. Fear of asking for help	0.67**	0.50**	–			
4. Worth of statistics	0.39**	0.50**	0.34**	–		
5. Computation self-concept	0.39**	0.49**	0.38**	0.83**	–	
6. Fear of statistics teachers	0.41**	0.43**	0.29*	0.77**	0.69**	–
Age (n = 36)	− 0.12	− 0.18	− 0.05	− 0.25	− 0.20	0.05
Cronbach's alpha	0.90	0.88	0.82	0.94	0.88	0.85
M	29.15	26.95	9.18	41.11	18.89	11.62
SD	7.86	6.57	3.26	12.63	6.29	4.44
Median	30.00	27.00	9.00	41.00	19.00	11.00
MPRES	77	68	70	73	72	50
Actual range	11–47	11–40	4–16	18–79	8–35	5–25
Potential range	11–55	8–40	4–20	16–80	7–35	5–25

$^*p < 0.05$, $^{**}p < 0.01$

33.4.1 Statistics Anxiety among Students in Singapore

The intercorrelations, reliability coefficients, and descriptives of the STARS are presented in Table 33.1. In addition, the median percentile rank equivalent scores (MPRES) for statistics anxiety in the current study are also presented. The MPRES were calculated by comparing median anxiety scores of the current study to the percentile rank norms for undergraduate students in the USA reported by the author of the STARS. A MPRES of 77 for Interpretation Anxiety indicates that at least 50 % of the current sample scored higher than 77 % of the norm group on this factor. The MPRES ranged from 50 to 77 for the six factors of statistics anxiety. Hence, the current sample appears to represent a moderate statistics-anxious group.

Additionally, despite differences in sample sizes and major of study (e.g. psychology), a comparison of the means and standard deviations of statistics anxiety between different countries (see Table 33.2) was undertaken. Specifically, the current study (Singapore) was compared to three of the most recent psychometric studies conducted on the STARS in the UK, China, and Austria. A series of *t*-tests was conducted with the alpha level adjusted for using the Bonferroni correction (0.05/18 comparisons = 0.003) and the results presented in Table 33.3. Mean scores that were significantly different from the current study are underlined in Table 33.2. In general, the current sample reported significantly lower statistics anxiety than the UK sample but higher statistics anxiety than samples from China and Austria.

Table 33.2 Means and standard deviations of statistics anxiety across different countries

	Singapore (current study)		UK		China		Austria	
	M	SD	M	SD	M	SD	M	SD
Interpretation anxiety	29.2	8.0	30.3	8.4	22.8	7.2	21.6	7.2
Test and class anxiety	27.0	7.0	27.1	6.7	19.0	6.0	20.7	6.2
Fear of asking for help	9.2	3.3	10.4	3.9	8.4	3.0	8.1	3.4
Worth of statistics	41.1	13.0	57.0	14.1	40.1	12.3	35.3	11.8
Computation self-concept	19.0	6.3	23.9	6.6	18.0	5.0	15.8	5.7
Fear of statistics teachers	12.0	4.4	18.2	4.7	12.0	4.0	9.7	3.6

Table 33.3 Significance tests of statistics anxiety between Singapore (current study), UK, China, and Austria

	Comparison of Singapore with other countries	t-tests
Interpretation anxiety	UK	$t(713) = 1.01$, n.s.
	China	$t(264) = 6.06$, $p < 0.001$
	Austria	$t(463) = 7.77$, $p < 0.001$
Test and class anxiety	UK	$t(713) = 0.11$, n.s.
	China	$t(264) = 8.96$, $p < 0.001$
	Austria	$t(463) = 7.46$, $p < 0.001$
Fear of asking for help	UK	$t(713) = 2.40$, n.s.
	China	$t(264) = 1.82$, n.s.
	Austria	$t(463) = 2.43$, n.s.
Worth of statistics	UK	$t(713) = 8.73$, $p < 0.001$
	China	$t(264) = 0.56$, n.s.
	Austria	$t(463) = 3.62$, $p < 0.001$
Computation self-concept	UK	$t(713) = 5.73$, $p < 0.001$
	China	$t(264) = 1.31$, n.s.
	Austria	$t(463) = 4.14$, $p < 0.001$
Fear of statistics teachers	UK	$t(713) = 10.20$, $p < 0.001$
	China	$t(264) = 0.00$, n.s.
	Austria	$t(463) = 4.62$, $p < 0.001$

33.4.2 Individual Differences in Statistics Anxiety

The relationship between age and statistics anxiety was investigated using a series of Pearson product-moment correlation coefficient tests. No significant correlations were found between age and all six factors of statistics anxiety (see Table 33.1).

A 2 (Gender: Male or Female) × 2 (Experience: Experienced or Novices) between-subjects MANOVA was conducted with the six factors of statistics anxiety as dependent variables to explore the impact of gender and experience on statistics anxiety. The use of MANOVA instead of separate ANOVAs was justified due to the moderate correlations between the dependent variables (see Table 33.1). There was a
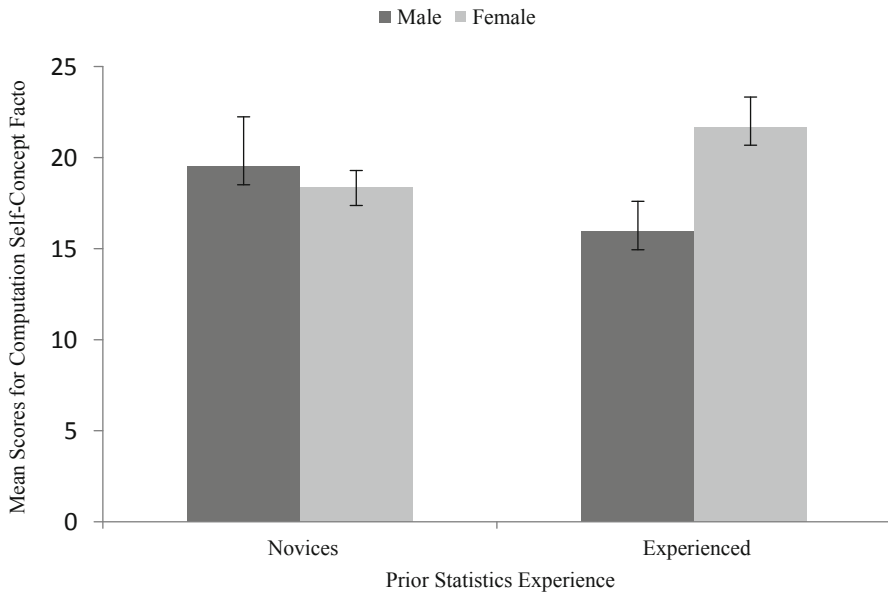
Fig. 33.1 Mean scores for the computation self-concept factor of statistics anxiety as a function of gender and prior statistics experience

statistically significant interaction effect between gender and experience on the combined dependent variables, $F (6, 56) = 3.62$, $p < 0.05$; Wilks' Lambda $= 0.72$; partial eta squared $= 0.28$. When the results for the dependent variables were considered separately, the only difference to reach statistical significance was the Computation Self-Concept factor, $F (1, 61) = 4.37$, $p < 0.05$, partial eta squared $= 0.07$. Follow-up analysis revealed a statistically significant simple main effect for gender, $t (30) = -2.42$, $p < 0.05$. For the experienced group, females reported higher levels of anxiety regarding Computation Self-Concept ($M = 21.67$, $SD = 6.99$) than males ($M = 15.93$, $SD = 6.22$). For the novices group, gender had no effect, $t (31) = 0.51$, *n.s.* The interaction effect is presented in Fig. 33.1. The main effect for gender and experience did not reach statistical significance.

33.5   Discussion

The first purpose of the current study was to explore the levels of statistics anxiety among students in Singapore in comparison with other countries. The results suggest that students in Singapore represent a moderately statistics-anxious group compared to norms for undergraduate students in the USA. In addition, the results suggest that these students experience significantly lower levels of statistics anxiety than students in the UK but higher levels of statistics anxiety than students in China and Austria.

It seems that students in Singapore experience statistics anxiety despite their outstanding prior mathematics experience. This could be explained by self-selection of students into psychology programs. For example, students who are not mathematically inclined might choose to enroll in Social Science programs (e.g. psychology) instead of programs with a heavy emphasis on mathematics (e.g. engineering).

The second purpose of the current study was to explore the effect of individual differences (age, gender, and prior statistics experience) on statistics anxiety. Specifically, it was hypothesized that age will be positively correlated with statistics anxiety (Hypothesis 1), females will have higher statistics anxiety than males (Hypothesis 2), students with prior statistics experience (experienced) will have lower statistics anxiety than students without experience (novices) (Hypothesis 3), and there will be an interaction between gender and prior statistics experience in relation to statistics anxiety (Hypothesis 4).

The relationship between age and statistics anxiety was investigated using a correlational analysis and the results provided no support for Hypothesis 1. There were no statistically significant correlations between age and all six factors of statistics anxiety.

The effect of gender and prior statistics experience on statistics anxiety was investigated using a multivariate approach and the results provided no support for Hypotheses 2 and 3 but partial support for Hypothesis 4. There were no statistically significant differences in statistics anxiety for both gender and prior statistics experience. However, a significant interaction effect was found between gender and prior statistics experience for the Computation Self-Concept Factor of statistics anxiety. Among students with prior statistics experience, females reported higher statistics anxiety than males whereas among students with no prior statistics experience, no gender differences were found.

The results depict a more complicated situation than what the literature suggests, with some studies reporting gender differences [4] but others reporting no gender differences for statistics anxiety [2, 7]. Since Computation Self-Concept relates to an individual's self-perception of his or her ability to understand and calculate statistics and given the prevalent stereotype that females do not perform as well as males in mathematics, the results might be explained by taking into account the issue of stereotype threat. For example, females with prior statistics experience might recognize statistics to be another branch of mathematics and, hence, experience higher statistics anxiety than males due to the fear of confirming the stereotype.

33.5.1 Practical Implications

Several practical implications for statistics instructors in Singapore can be derived from the current study. First, instructors could be mindful of students who are over-confident in statistics courses due to their prior mathematics experience. Instructors can warn them against complacency and adjust their expectations with regards to the difficulty of the course. Similarly, instructors should not assume that students in

Singapore do not experience statistics anxiety. Instead, instructors are recommended to assess students' anxiety prior to the first class using the STARS and adjust their teaching throughout subsequent classes. For example, the current sample reported the highest statistics anxiety on the Interpretation Anxiety factor with a MPRES of 77 compared to undergraduate norms. Armed with such information, an instructor could set a slower pace when guiding students in interpreting statistical data and allocate more time for questions. Lastly, instructors teaching students with prior statistic experience could allocate more attention to female students. In particular, instructors can encourage the use of positive self-statements to increase female students' perception of their ability to understand and calculate statistics (i.e., their computation self-concept).

33.5.2   Limitations

Several limitations of the current study should be considered. First, the conclusions were drawn from a small sample size. Post hoc power analysis suggests an achieved power of only.32 for the correlational analysis ($n = 36$) and.57 for MANOVA ($n = 65$), both of which were lower than the recommended power of.80 for Social Science research. Given sufficient power, some of the correlations between age and the six factors of statistics anxiety might be significant, albeit in a different direction from existing studies [2, 5]. Lastly, the sample was drawn from a small private university in Singapore and the results might not generalize to all undergraduate students taking a statistics course.

33.5.3   Future Research Directions

Evidence of statistics anxiety among students in Singapore despite their outstanding prior mathematics experience suggests the need for future research. Firstly, mathematical ability could be assessed across programs (e.g. psychology, engineering, law, etc.) with the goal of determining if students who are not mathematically inclined self-select themselves into psychology programs. Secondly, research can determine if there are differences between statistics learning and mathematics learning and, if so, delineate the factors that differentiate them. Specifically, success in learning statistics might involve other factors, such as linguistic intelligence, in addition to mathematical intelligence. In turn, these factors could inform interventions for statistics anxiety.

Future research could also examine the role of stereotype threat in underlying gender differences in statistics anxiety. Specifically, research could investigate if the endorsement of the stereotype that males are better in mathematics would result in females experiencing higher statistics anxiety. This could provide insight into

the conflicting findings with regards to gender differences. Furthermore, interventions for statistics anxiety could be designed with a focus on reducing stereotype endorsement.

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Chapter 34
Parental Influences on Young Adult Body Dissatisfaction and Disordered Eating: The Role of Gender

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Abstract The present study explored the role of gender on the influence of parental comments on body shape and disordered eating concerns in young adults living in Singapore. Participants were 384 young adults (mean age = 21 years, SD = 1.90) who completed self-report measures (Parental Comments Scale and the Clinical and Research Inventory for Eating Disorders). Significant gender differences were found in the levels of body dissatisfaction and disordered eating, and perception of parental comments, with females reporting higher scores on all measures. These findings highlight the need for further exploration of gender-specific pathways of parental influence.

34.1 Introduction

Parental influence has been described as one of the principal sociocultural influences related to the development of body dissatisfaction and disordered eating in young adults (between 18 and 25 years of age), perhaps even the most salient influence [1–3]. One important form of this parental influence is parental comments regarding body shape, weight and eating habits [2–5].

The existing literature proposes two main modes of parental influence: through modeling and by active influence. The modeling theory suggests that one's body dissatisfaction and disordered eating behaviors are modeled after those of their parents [2]. These modeling effects occur in four combinations: mother-daughter, mother-son, father-daughter, and father-son. Of these, the mother-daughter modeling effect is the most widely studied, generating majority of the studies that support the modeling theory. However, the majority of the studies exploring modeling effects on body dissatisfaction and disordered eating have reported contradictory findings [5–7].

The active influence perspective emphasizes the active parental role, instead of the passive influence envisioned by the modeling theory [8]. One of the most

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prominent form of active influence from parents on their offspring's development of body dissatisfaction and disordered eating is the way parents communicate with them [3–5]; specifically, comments regarding their offspring's body shape, weight and eating habits. Thus, the active influence perspective emphasizes that the parental influence from parental comments regarding body shape, weight and eating habits influences offspring to adopt and strive to achieve the thin-ideal, resulting in the development of body dissatisfaction and disordered eating [8].

Parental comments regarding body shape, weight and eating behaviors have been reported to be linked to body dissatisfaction and disordered eating and can be divided into three categories: negative, positive and, importance and comparison comments [9]. Negative parental comments encompass negative statements regarding their offspring's weight and shape, eating habits and fitness and have been associated with the development of body dissatisfaction and disordered eating amongst adolescents and young adults [10–12]. However, positive parental comments which consist of positive statements regarding the weight and shape, eating habits and fitness of offspring that convey positive health views on body shape and weight, and discourage the pursuit of the thin-ideal have only been explored in a limited way. Initial findings suggest that positive parental comments have the potential to act as a protective factor [11]. Lastly, importance and comparison parental comments include a wide range of comments revolving around the emphasis on the importance of one's physical appearance and the comparison of and reference to the body shape and weight of others. These comments have been reported to be associated with body dissatisfaction and disordered eating in offspring [13, 14].

In the research reviewed above, the role of gender has been largely overlooked. Previous research has largely focused on female adolescents and young adults, as body dissatisfaction and disordered eating concerns are often considered to be gender-linked female concerns. Gender differences have been consistently described, with females found to perceive greater parental pressure and report higher levels of body dissatisfaction and disordered eating. However, there is evidence that these issues are increasingly prevalent in males. Secondly, there is a lack of understanding of the role of the gender of the parent in the current knowledge of the transmission of parental influence through comments to offspring.

The aim of the present study was to explore the less studied role of gender in the influence of parental comments on body shape and disordered eating concerns in young adults living in Singapore. The study's hypothesis therefore proposed that females, compared to males, would report higher levels of body dissatisfaction and disordered eating, and perceived more parental comments.

34.2 Method

34.2.1 Participants

Participants were young adults between the age of 18 and 25 years old. The data was screened for incomplete data and outliers. Twenty-four cases that did not meet the inclusion criteria of young adults (18–25 years old) and one case with incomplete

data were identified and removed from further analyses. No univariate or multivariate outlier cases were identified. The final sample consisted of 384 participants, 118 (31 %) males and 266 (69 %) females, with the mean age of 21.22 (SD = 1.90) years. The body mass index (BMI) in the sample ranged from 14.7 to 44.1 ($M = 20.6$, $SD = 3.5$) for females and from 16.7 to 33.7 ($M = 22.5$, $SD = 3.3$) for males.

34.2.2   Procedure

The study was approved by the Human Research Ethics Committee (James Cook University) and participants were recruited via an online invitation for study participation. Participants who consented to the study completed a set of questionnaires and received course credit for their participation. All participants provided informed consent and were assured of their confidentiality and right to withdraw from the study without prejudice. Participants were debriefed of the study's aims after completion.

34.2.3   Measures

34.2.3.1   Parental Comments

Parental comments regarding body shape, weight and eating habits were assessed via a 36-item 5-point Likert scale developed by Rodgers, Faure and Chabrol [9]. Participants rated the frequency of 18 statements made by their fathers and mothers separately. Three dimensions of parental comments were assessed: negative comments, positive comments and, importance and comparison comments. Higher scores in each subscale indicate higher perceived frequency of each category of parental comments. The subscales showed good reliability and the Cronbach's alpha value in the present sample ranged from 0.84 to 0.94 for both genders.

34.2.3.2   Body Dissatisfaction and Disordered Eating

Participants completed the 63-item Clinical and Research Inventory for Eating Disorders [15], of which the scores from three subscales (the body embarrassment, restrained eating behavior, and affect-regulatory eating subscales) were used to measure body dissatisfaction and disordered eating. Items were rated on a 6-point Likert scale, from "1 = totally false" to "6 = absolutely correct". Higher mean scores on each subscale indicate higher levels of impairment. In previous research, this measure has shown good internal reliability with Cronbach's alpha values between 0.62 to 0.95, and test-retest reliability over a 4-week period ranging between $r = 0.83$ to 0.97 [15]. The Cronbach's alpha value in the present sample was 0.93 for both genders.

The five-items body embarrassment subscale measures body dissatisfaction and its Cronbach's alpha for the internal reliability in this sample was 0.83 among females and 0.79 among males.

Disordered eating was measured using the 6-item restrained eating and 8-item affect-regulatory eating subscales. Scores from both subscales were combined and the mean score from this combined scale were indicative of disordered eating. The Cronbach's alpha values for both the restrained (0.79 for females and 0.74 for males) and affect-regulatory (0.88 for females and 0.83 for males) eating subscales and the combined scale (0.82 for females and 0.80 for males) showed good internal reliability.

34.2.3.3 Body Mass Index

Self-reported height and weight were used to calculate body mass index (BMI; weight in kilograms divided by the square of height in meters).

34.2.4 Statistical Analysis

Descriptive statistics were examined for all measures and bivariate correlations between all variables, as well as partial correlations controlling for BMI, were explored. A multivariate analysis of variance (MANOVA) was conducted to investigate gender differences between the levels of body dissatisfaction, disordered eating and perceived parental comments reported by offspring.

34.3 Results

To test the study's hypothesis, namely that females would report higher levels of body dissatisfaction and disordered eating, and perceived more parental comments than males, a MANOVA was conducted. A significant gender difference was found in the combined variable consisting of body dissatisfaction, disordered eating and parental comments, Wilks' Lambda $= 0.90$, $F (8, 354) = 4.82$, $p < 0.001$; partial eta squared $= 0.10$. An examination of univariate F-values (Table 34.1) for the individual variables revealed significant gender differences (using a Bonferroni adjusted alpha $= 0.007$) for body dissatisfaction, disordered eating, negative maternal comments and positive paternal comments. For all measures, females reported higher scores than males.

34.4 Discussion

The present study aimed to shed further light on gender differences concerning the levels of body dissatisfaction and disordered eating, and the perception of parental comments regarding body shape, weight and eating habits in young adults. Findings

Table 34.1 Scale range, mean, and standard deviation for body dissatisfaction, disordered eating, and maternal and paternal comments according to gender

	Scale range	Females Mean (SD)	Males Mean (SD)	F Value	Partial eta squared
Body dissatisfaction	1–6	2.81 (1.12)	2.45 (1.07)	8.07*	0.022
Disordered eating	1–6	2.71 (0.76)	2.45 (0.76)	9.14*	0.025
Negative maternal comments	7–35	15.05 (7.07)	12.33 (5.13)	13.30*	0.036
Negative paternal comments	7–35	12.40 (6.13)	10.69 (4.91)	6.07	0.017
Positive maternal comments	5–25	15.17 (4.93)	13.92 (4.98)	4.71	0.013
Positive paternal comments	5–25	14.22 (5.55)	11.71 (5.08)	15.17*	0.040
Importance and comparison maternal comments	6–30	12.88 (4.44)	12.16 (4.81)	4.13	0.011
Importance and comparison paternal comments	6–30	10.84 (4.28)	10.44 (4.71)	2.12	0.006

*$p < 0.007$

from the study support the assumption that gender differences do exist in the perception of parental comments and in the levels of body dissatisfaction and disordered eating in young adults.

Consistent with the study's hypothesis and previous findings [1, 3], significant gender differences were found in the variables of body dissatisfaction and disordered eating. Females reported higher levels of body dissatisfaction and disordered eating, suggesting that desires to be thin are more salient in females than in males. Indeed, physical appearances have been suggested to be more central to female identities [16]. Furthermore, females tended to perceive more parental comments regardless of valence. This finding might suggest that parents engage in disproportionate amounts of commenting about their adult offspring's body shape, weight and eating habits with their daughters which might have resulted in the reinforcement of their daughters' desires to be thin. It is important to note that since the reports of parental comments were the perceptions of the offspring and this result might be a reflection that females are more sensitive to parental comments regarding their body shape, weight and eating habits, making them more memorable and therefore reporting them as more frequent than compared to males.

The results also suggest that there is a possibility that parents make unique contributions to the development of body dissatisfaction and disordered eating in young adults. The frequency of maternal comments emerged consistently higher than the frequency of paternal comments for both genders. This higher frequency of maternal comments indicates the possibility of maternal comments being more salient in the level of influence than paternal comments on the level of body dissatisfaction and disordered eating in their young adult offspring. In particular, the gender differences in the perception of negative maternal comments and positive maternal comments

were found be the most significant, suggesting that these comments might be more influential for females than males.

Although the present study expands the existing knowledge on gender differences regarding the levels of body dissatisfaction and disordered eating, and the perception of parental comments regarding body shape, weight and eating habits, several limitations have to be considered. The first resides in its failure to consider parental reports of their personal attitudes towards body shape, weight and eating habits, and those of to their offspring. As a result, the reported associations only reflect the participant's perception of parental comments. Some disparity has been reported to exist between parent and offspring reports, possibly arising from social desirability by parents or over-reporting by comment-sensitive offspring [10, 17, 18]. However, offspring reports have consistently been shown to be more strongly associated with body dissatisfaction and disordered eating than parental reports [17, 18], therefore negating the study's limited ability to draw conclusions about parental comments when using offspring reports.

The second limitation resides in the restricted measurement of body dissatisfaction and disordered eating in terms of the desire for weight-loss and restrained and affect-regulatory eating, respectively. It is possible that the expression of body dissatisfaction differs with gender and the study failed to capture certain areas of appearance and body dissatisfaction more pertinent to males (such as muscularity). Similarly for disordered eating, females have been suggested to diet and exhibit restraint and affect-regulatory forms of disordered eating more frequently than males [19]. Future research could explore the use of gender specific measures for body dissatisfaction and disordered eating, such as measurements of masculinity for body dissatisfaction and eating to gain muscle mass among males.

In response to the aim of the present study, it would appear from the study's findings that gender differences are to be found in the levels of body dissatisfaction, disordered eating and perception of parental comments among young adults. This finding supports the general research direction in this area: studying body dissatisfaction and disordered eating separately for males and females. However, the need to study the reasons why gender difference do exist in body dissatisfaction and disordered is similarly highlighted. In addition, the gender difference in the perception of parental comments highlights that parents should be mindful of the type of comments they make to their young adult offspring. Future research should explore the relationships between body dissatisfaction, disordered eating and parental comments and the possible gender differences in these relationships. It is possible that the relationship between parental comments and disordered eating in young adults is mediated by the occurrence of body dissatisfaction given that the levels of body dissatisfaction reported were higher than the levels of disordered eating.

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Chapter 35
'Feeling' (and Feeding) the Body: The role of Body and Emotional Awareness, Body Responsiveness, and Body Appreciation in Intuitive Eating

Sudev Suthendran and Daniel Fassnacht

Abstract This study explores an adaptive eating style termed 'intuitive eating'. Intuitive eating is a physiological hunger-based approach to eating which emphasizes one's awareness and insight into internal states (i.e. somatic and affective experience). Potential contributing factors to this internal awareness were investigated. Three hundred and eighty university students in Singapore completed self-report measures of intuitive eating, body awareness, body responsiveness, emotional awareness, body appreciation and body mass index (BMI). Body awareness, body responsiveness, body appreciation and emotional awareness collectively predicted 24 % of the variance in intuitive eating after controlling for demographic influences. No differences were found across four BMI groups (underweight, normal, overweight, and obese). These findings suggest that improving attitudes towards one's body and having a strong mind-body connection may facilitate intuitive eating behaviour.

35.1 Introduction

The global prevalence of eating and weight-regulation problems ranging from obesity to disordered eating behaviours and clinical eating disorders have resulted in efforts to understand, prevent, and treat these issues. However, well-being cannot simply be conceptualised as the lack of maladaptive behaviours [1]. As such, it is vital to understand what constitutes adaptive eating behaviour in order to curtail or treat the range of eating-related problems [2–5]. Psychological research into adaptive eating is however still in its infancy.

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35.1.1   Intuitive Eating

One such adaptive eating style that was initially developed as a set of ten behavioural guidelines, and subsequently gained attention in psychology is 'intuitive eating' [6–10]. It is defined as a self-regulated eating behaviour that emphasises awareness and insight into internal states (i.e. somatic and affective) [11, 12]. This self-regulation can be easily disrupted if one eats for appearance related reasons (e.g. dieting) or to manage emotional distress [8]. Research has indeed shown that body dissatisfaction and a history of dieting prospectively increases the risk for clinical eating disorders [13–14]. Interoceptive awareness deficits—the inability to recognise hunger, satiety and emotional states—are also predictive of eating pathology [15]. Accordingly, being able to access and accurately identify these internal states is critical for a healthy eating response [16].

35.1.2   Body Appreciation

Body appreciation involves having a positive opinion about the body regardless of its imperfections, protecting the body through a rejection of societally-prescribed body ideals and attending to the body's needs through healthy behaviours. Women who appreciated their bodies as they are would tend to be aware of their bodily needs and thereby eat to satisfy biological hunger as opposed to other reasons. The pathology literature has specified consistent links between thin-ideal internalisation, body dissatisfaction, self-objectification and body shame and disordered eating. These associations are represented within the acceptance model of intuitive eating. This acceptance model of intuitive eating suggests that body acceptance by significant others allows women to appreciate their bodies by encouraging a functional view of their bodies. This eventually leads to intuitive eating. Hence in this model, body function and body appreciation separately predicts intuitive eating [17]. While body appreciation can foster better internal awareness, the body function merely assesses the extent to which a woman monitors her appearance [17]. Arguably, it does not reveal how much an individual is aware of or responsive to bodily sensations.

35.1.3   Utility of the Integrated Mind-Body Paradigm: Body Awareness and Body Responsiveness

In dealing with the theoretical shortcomings of body function variables in the acceptance model of intuitive eating, the integrated mind-body paradigm may be well-positioned to fill the gap. This paradigm asserts that emotions and bodily sensations share a reciprocal relationship. This view is conceptually compatible to the posited mind-body connection underpinning the practice of intuitive eating.

Body awareness is a key construct in this paradigm. It refers to a focus on and awareness of internal bodily sensations. It is known to promote adaptive eating by enhancing the attunement to bodily and emotional cues and improving attitudes towards the body. The lack of body awareness is a feature some clinicians have historically observed in their eating disordered patients. It was hence concluded from this qualitative work that body awareness was critical for a healthy relationship with eating.

Body responsiveness represents the ability and willingness to respond to bodily cues. It emphasises how body sensations are valued and treated beyond mere perception. One study found that body awareness and body responsiveness were positively associated with intuitive eating in a sample of female yoga practitioners. Yoga is used as an adjunct therapy in the treatment of body image disturbances and disordered eating to improve body awareness.

35.1.4   Emotional Awareness

A diminished ability to accurately identify and describe emotional states is known to relate to a range of maladaptive eating behaviours such as dieting, laxative use and bulimic behaviours. This lack of emotional awareness is further reported to be a causal risk factor for the development of eating pathology. It is hence reasonable to speculate that emotional awareness would relate to better adaptive eating practices.

35.1.5   Body Mass Index (BMI)

Given that eating based on physiological hunger is adaptive, intuitive eating has been postulated to relate to a healthier weight [7]. An inverse relationship with BMI has been found for intuitive eating in college-aged females, older females and males samples [17]. Denny and colleagues however only measured intuitive eating with two items from the intuitive eating scale. Hence, the BMI-intuitive eating relationship needs to be re-investigated for conclusive findings.

35.1.6   Hypotheses

On the basis of the associations between a better awareness of the body, emotions and a positive body image in potentially contributing to better internal awareness, it was hypothesised that these factors would collectively predict intuitive eating. Additionally as a secondary hypothesis, BMI was expected to have an inverse relationship with intuitive eating, and intuitive eating scores were expected to differ across the four BMI groups.

35.2   Method

35.2.1   Participants

Three hundred and eighty-six self-identified current university students participated in the study. An additional inclusion criterion for participation was no previous or current diagnosis of an eating disorder. There were 178 males (46.1 %) and 208 females (53.9 %), aged 17 to 32 years ($M = 22.20$, $SD = 2.19$). Participants identified themselves as Chinese (67.1 %), Malay (6.2 %), Indian (17.9 %), Eurasian (1.6 %), Caucasian (1.3 %) and Others (6 %). The participants were recruited from the undergraduate psychology course at James Cook University Singapore (JCUS) via an experiment management system, and through an online data collection method, relying on snowball sampling procedures.

Prior to administering the measures, approval to conduct the study was obtained from the Human Research Ethics Committee of James Cook University Australia. Participation either took place on campus in a research laboratory, or online. All participants were provided with an information page and confidentiality of their responses was assured.

35.2.2   Measures

35.2.2.1   Demographic Data Sheet

Information asked of participants included their age, sex, ethnicity, current university status, height (in metres), and weight (in kilograms). Participants' BMI (weight divided by height squared) were calculated from these self-reported measurements. BMI scores were further categorised into four groups: underweight (18.5 or less), normal weight (18.5 to 24.9), overweight (25 to 29.9), and obese (30 and above) following the World Health Organisation's guidelines.

35.2.2.2   Intuitive Eating

The 21-item self-report Intuitive Eating Scale was utilised to assess levels of intuitive eating. Participants rated items on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha for the current study was 0.80.

35.2.2.3   Body Appreciation

An aspect of positive body image termed body appreciation was measured with the 13-item Body Appreciation Scale. The extent to which one holds favourable views

of one's body, respects for and accepts one's body and rejects unrealistic body ideals is measured. Items are rated on a 5-point scale ranging from 1 (never) to 5 (always) and averaged for a final score. Cronbach's alpha for the current sample was 0.89.

35.2.2.4 Emotional Awareness

The self-report 11-item Clarity of Feeling subscale of the Trait Meta-Mood Scale was used to assess emotional awareness. Its items measure one's capacity to be aware of, identify and differentiate among feelings. Participants responded to items on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha for the present study was 0.88.

35.2.2.5 Body Awareness

The 18-item self-report Body Awareness Questionnaire was utilised to measure general body awareness. A 7-point Likert scale ranging from 1 (not true about me at all) to 7 (very true about me) was used. The questionnaire's internal consistency for the present sample was also high, with a Cronbach's alpha of 0.87.

35.2.2.6 Body Responsiveness

Body responsiveness was measured by the 7-item Body Responsiveness Questionnaire. It measures the willingness to trust and respond suitably to internal body signals. A 7-point scale ranging from 1 (not at all true about me) to 7 (very true about me) was used to answer items. The Cronbach's alpha coefficient for the present sample was 0.65.

35.3 Results

35.3.1 Preliminary Analyses and Descriptive Statistics

Tests of assumptions were performed for all planned statistical analyses. The assumptions of normality, multicollinearity and homoscedasticity were met. Participants' mean age was 22.20 ($SD = 2.19$), with an average BMI of 21.53 ($SD = 3.48$). Two hundred and sixty-eight participants were of normal weight, with 66, 40, and 12 of them being underweight, overweight, and obese respectively. The mean intuitive eating score was 3.38 ($SD = 0.46$).

Table 35.1 Hierarchical regression analyses for each variable predicting intuitive eating

Variable	R^2	p	ΔR^2	β	p
Step 1	0.06	0.00	0.06		
Age				0.06	0.25
Sex				−0.22	< 0.001
Ethnicity				0.02	0.65
BMI				−0.13	< 0.01
Step 2	0.30	0.00	0.24		
Body appreciation				0.20	< 0.001
Body responsiveness				0.26	< 0.001
Body awareness				−0.19	< 0.001
Emotional awareness				0.18	0.001

The variables explained an additional 24 % of the variance in intuitive eating, after controlling for age, sex, ethnicity and BMI, $\Delta R^2 = 0.24$, $\Delta F(4, 377) = 35.55$, $p < 0.001$.

35.3.2 Predicting Intuitive Eating

The ability of body appreciation, body awareness, body responsiveness and emotional awareness to predict intuitive eating was assessed through hierarchical regression. Demographic variables including BMI were controlled for in the analysis. Age, sex, ethnicity and BMI were entered at Step 1, explaining 6.1 % of the variance in intuitive eating. After entry of body appreciation, body awareness, emotional awareness and body responsiveness at Step 2, the total variance explained by the model as a whole was 30.1 %, $F(8, 377) = 20.32$, $p < 0.001$. The results for each block are summarised in Table 35.1.

35.3.3 Differences in Intuitive Eating across BMI groups

A one-way ANOVA was performed to assess the impact of BMI on intuitive eating scores, as measured by the Intuitive Eating Scale. Participants were segregated into four groups based on their BMI: underweight (18.5 or less), normal weight (18.5 to 24.9), overweight (25 to 29.9) and obese (30 and above). There was no statistical significance across the four BMI groups: $F(3, 382) = 0.64$, $p = 0.59$.

35.4 Discussion

The theoretically informed hypothesised regression model involving body appreciation, body awareness, body responsiveness and emotional awareness was significant. Body responsiveness was found to be the strongest predictor. This supports Daubenmier and Taylor's speculation that body responsiveness is a critical protective factor against disordered eating, and eating disorder risk. Furthermore, an explanatory

mechanism for improving internal awareness is provided. Overall, the regression model suggests that improving intrapersonal factors such as body responsiveness, body appreciation and emotional awareness can collectively predict better intuitive eating.

Unlike the other variables, body awareness negatively predicted intuitive eating. This is contrary to the early clinical hypotheses of the importance of body awareness for healthy eating behaviour. Being aware of general bodily processes may not necessarily improve intuitive eating, but instead could further reduce one's ability to detect physiological hunger signals due to lack of attention to specific hunger and satiety mechanisms. Being able to identify hunger and satiety cues, and recognise it as separate from emotional arousal appears to be more critical.

Intuitive eating scores did not differ across the four BMI groups. This highlights that even in the purportedly healthy (i.e. normal) group, intuitive eating behaviour was not significantly higher than in the other groups. The fundamental assertion by intuitive eating theorists who suggest that eating according to physiological cues is adaptive and hence translates to a healthier weight is hence questioned [9]. This finding could be explained by the fact that the Intuitive Eating Scale has items which measure emotional eating. Past pathology research has shown that the tendency to emotionally eat is present across all weight groups. Additionally, hunger itself is a singular construct difficult to capture psychometrically.

The findings have key implications for the theoretical development of the intuitive eating concept. It suggests that other conceptually compatible psychological frameworks such the integrated mind-body perspective can be integrated into the intuitive eating literature. This can potentially generate further variables that can aid to the understanding of intuitive eating behaviour. The findings from the present study can also inform work in dietetics, health education, and medicine. Nutritionists could augment their clients' adherence to intuitive eating behavioural guidelines by concurrently enlisting psychologists' assistance in increasing clients' emotional awareness skills, and cultivating positive attitudes towards their bodies. Adjunct mind-body therapies such as yoga can also be relied on to facilitate improvements in body responsiveness. Furthermore, the present results highlight the importance of trusting and responding to bodily cues as opposed to mere awareness of them. Body responsiveness seems to be a more critical factor than body appreciation, and could perhaps be a better variable to explain the body function-body appreciation pathway in the acceptance model.

There are a number of limitations to the current study which should be considered. All measures used in the study were self-reported, and thereby subject to retrospective and erroneous responding. Particularly, the self-reporting of weight is a potentially sensitive issue especially for the overweight and is hence open to misrepresentations. Also, given that the construct of intuitive eating is relatively new, and that the present study was the first to have been conducted in an Asian sample, participants' knowledge of it might not be accurate. Furthermore, the cross-sectional nature of the study precludes any casual claims for the results found.

The present study advanced the intuitive eating literature by its collective consideration of factors that can promote internal awareness in individuals. Body awareness,

body responsiveness and emotional awareness could be incorporated into current theories of intuitive eating and ideas of adaptive eating in general. At the macro-level, the findings suggest potential integration of both the adaptive and pathology literature to gain a comprehensive understanding of what healthy eating entails and its study can be complementary to the present theoretical and prevention research focus on maladaptive eating behaviours.

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Chapter 36
Smartphone Use and Work Related Wellbeing

Angela A. Q. See and Nicola Lasikiewicz

Abstract While the smartphone allows employees to connect with work "anytime and anywhere", the demands to carry out work related tasks outside work hours may translate into extra demands on employees and incur negative outcomes such as work related fatigue. Alternatively, smartphone use may help to distract the employee from work issues or recover from the demands of work, though activities such as music and games. With Singapore having the highest smartphone penetration rate per capita (90 % of the population) in the world, this study aimed to explore associations between both work related and personal smartphone use in non-work time and work related rumination, fatigue, and job stress in full-time employed Singaporean adults. Sixty-seven male and female working adults (mean age 36.5 years, $SD = 9.35$) from a diverse range of occupations completed online measures of work related and personal smartphone use during non-work hours and work related rumination, detachment, fatigue and recovery. The results indicated that smartphone use significantly decreased with increasing age. Further, work related smartphone use was significantly, positively correlated with personal use, problem-solving pondering but also work demand. Personal smartphone use also significantly, positively correlated with problem-solving pondering. Psychological detachment was the best predictor of personal smartphone use. The findings suggest that work related smartphone use in non-work time may facilitate work performance through problem solving, whilst personal use may promote psychological detachment from work. However, the link between work related smartphone use and job demand may signal risk. More research is required in a smartphone dense population such as Singapore to clarify these relationships.

36.1 Introduction

Singapore has one of the highest smartphone ownership rates in the world with a smartphone penetration rate of 90 % per capita [1]. Within the workplace smartphones are an integral part of working life [2, 3], and an essential communication tool [4]. Smartphones enable employees to stay connected and continue work re-

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lated tasks beyond normal working hours [5–7]. Despite increased autonomy and flexibility employees are now faced with the expectation that they continually available regardless of time and place [8–11], engaging in work related activities during nonwork hours [12] which prolong the working day [13, 14].

Previous research has focused on general communication technologies, conducted either prior to the introduction of smartphones or not including their use [15]. Many of these studies are qualitative in nature and focus on work-home interference or segmentation. Such studies have indicated modest effects of smartphone use on wellbeing, in that smartphone users (compared to non-users) facing high work-home interference, are less successful in initiating activities aimed at recovery. Smartphone use may, therefore, promote work related rumination (having repetitive thoughts directed to work) which may impair successful recovery in non-work hours. Smartphone use in nonwork hours, however, can have the *opposite* effect in that use can promote recovery enhancing activities (e.g., listening to music, social interaction, gaming, internet browsing), lowering fatigue. Employees with high levels of work related fatigue have exhibited a greater tendency to play recreational games during working hours than those with low work strain. This indicates that smartphone gameplay may facilitate recovery by detachment. Indeed, psychological detachment has been associated with better mood, less negative effect, lower fatigue at bed-time and the following morning. Further, individuals who successfully detach from work often report greater life satisfaction and better wellbeing.

The aim of this study was to explore associations between smartphone use and work related wellbeing and recovery using an online survey. It was hypothesised that work related smartphone use would be associated with work related fatigue and personal smartphone use would be associated with recovery. It was further hypothesized that work related rumination and psychological detachment would mediate the relationships between smartphone use and fatigue or recovery.

36.2 Method

36.2.1 Participants

Sixty-seven young working adults (30 males and 37 females) with a mean age of 36.5 years ($SD = 9.35$) completed the online study. All participants were in full time employment and owned and used a smartphone. All participants provided consent to participate in the study.

36.2.2 Measures

36.2.2.1 Demographics

A demographics questionnaire was used to measure variables such as gender, age, education, family status, occupation, monthly income, type of smartphone, whether

a smartphone is provided by the company, usual working hours and extra hours worked per week. These variables have been found to either influence fatigue levels or inhibit opportunities of recovery.

36.2.2.2 Smartphone Activities Scale

This measure was custom-designed based on previous measuresto gauge the frequency of work related and nonwork related activities using a smartphone in nonwork time. Two subscales, Personal Smartphone Use (PU) and Work Related Smartphone Use (WU) were formed to cover a range of activities both recovery enhancing and inhibiting. Both subscales comprised of 14 items each, both matched for work and personal use. Participants indicated how often they engaged in a particular activity using a 6-point Likert scale from 0 (not at all/rarely) to 5 (frequently). A total score was then computed for each subscale.

36.2.2.3 Work Related Rumination Questionnaire (WRRQ)

The WRRQ contains three subscales, Affective Rumination (AR) (intrusive and recurrent thoughts about work), Problem-solving Pondering (PP) (reflective thinking about work)and Psychological Detachment (PD) (sense of being away from the work situation).Participants responded using a 5-point Likert scale from 1 (very seldom/never) to 5 (always).

36.2.2.4 Occupational Fatigue Exhaustion Recovery Scale (OFER15)

The OFER15 is a measure of acute and chronic fatigue, as well recovery between work shifts. It includes three subscales, Chronic Fatigue (CF) (mental, physical and emotional characteristics of persistent fatigue), Acute Fatigue (AF) (inability to engage in normal daily activities) and Intershift Recovery (IR) (extent to which acute fatigue has dissipated). Participants responded using a 7-point Likert scale from 0 (completely disagree) to 6 (completely agree). The OFER15 was chosen for its ability to measure both chronic and acute fatigue, as well as the recovery phase.

36.2.2.5 Brief Job Stress Scale (BJSS)

The BJSS is a short version of the Job Content Questionnaire with two subscales, Demand (D) (assessing quantitative aspects of the time, speed and effort needed to perform job tasks), and Control (C) (the use and development of abilities as well as latitude in decision making in the job). Participants responded using a 4-point Likert scale from 1 (almost never/never) to 4 (often).

36.2.2.6   Negative Affect Subscale of the Positive and Negative Affect Schedule (NA)

The NA consists of 10 single word items which represent different emotions associated with negative effect. Participants rated the extent to which they had experienced the emotion in the past month on a 5-point Likert scale from 1 (very slightly/not at all) to 6 (extremely).

36.2.3   Procedure

Participants were screened to confirm they were in full time employment and used a smartphone. Participants who did not were directed to the end of study page and thanked for their interest. Eligible participants proceeded to complete the questionnaires.

36.3   Results

Data were tested for normality, reliability and outliers. All subscales measuring smartphone use, rumination, and fatigue were found to be reliable (all α above 0.70) except for Psychological Detachment ($\alpha = 0.38$). One item from this subscale was subsequently removed and reliability improved ($\alpha = 0.82$). A selection of key participant characteristics is presented in Table 36.1. The top five work related smartphone activities were editing documents, reading, web browsing, searching for applications and watching videos. The top five personal smartphone activities were gameplaying, shopping, watching videos, taking pictures/videos, planning events and web browsing.

   Scores for PU and WU smartphone use were correlated with AR, PP, PD, AF, CF and IR (Table 36.2). A strong, positive correlation was observed between PU and WU smartphone use. Those who were younger, had a higher education, were single or had no children were more likely to report higher personal use of their smartphones in nonwork hours. Further, those with higher education qualification and more demanding jobs were also more likely to use their smartphones for work related purpose in nonwork hours.

   WU significantly, positively correlated with AR and D but also PP. Further, PU significantly, positively correlated with PP. PD was also found to significantly predict PU ($\beta = 0.41$, $p < 0.05$). Additional regression analyses were performed to examine the predictors of fatigue and recovery. PU significantly predicted AF ($\beta = -0.56$, $p < 0.05$) where increased use, decreased fatigue. PU also positively predicted IR ($\beta = 0.45$, $p < 0.05$), however, WU did not. Further mediation analyses to assess the possibility that AR mediated the relationship between PU use and AF were conducted.

Table 36.1 Selected participant characteristics ($n = 67$)

Items	n	%
Gender		
Female	37	55
Male	30	45
Occupation		
Managers/professionals/associates/technicians	40	60
Service/sales workers	3	4
Clerical/support workers	24	36
Years In current job		
≤ 3 years	34	51
4–10 years	15	22
≥ 10 years	18	27
Extra hours		
Rarely/never	27	40
Sometimes	25	37
Most of the times/always	15	22
Work at home		
Work mainly at home	1	2
Once a week or more	25	37
Once a month or less	18	27
Never	23	34
Reason for working at home ($n = 44$)		
To catch up	32	73
Part of job at another location/other	12	27
Company provided smartphone		
No	60	92
Yes	5	8
Not answered	2	
Company paid smartphone		
No	56	85
Yes	10	15
Not answered	1	
Monthly income		
< \$ 2,000	8	12
\$ 2,000–4,999	50	75
≥ \$ 5,000	9	13

It was found that when controlling for AR, PU no longer predicted AF ($\beta = -0.27$, ns). AR, therefore, mediated the relationship between PU and AF.

36.4 Discussion

The current study aimed to explore associations between smartphone use and work related wellbeing, specifically, psychological detachment, fatigue and recovery. The results showed that work related smartphone use significantly, positively correlated

Table 36.2 Correlations between smartphone use, rumination and fatigue

Variables	1	2	3	4	5	6	7	8	9
1. WU									
2. PU	0.79**								
3. AR	0.22*	0.03							
4. PP	0.29**	0.25*	0.60**						
5. PD	−0.03	0.07	−0.62**	−0.61**					
6. AF	0.09	−0.03	0.59**	0.41**	−0.38**				
7. CF	0.16	0.10	0.57**	0.58**	−0.51**	0.73**			
8. IR	−0.09	0.001	−0.72**	−0.53**	0.54**	−0.80**	−0.75**		
9. D	0.25*	0.19	0.56**	0.61**	−0.43**	0.31**	0.51**	−0.31**	
10. C	0.21	0.15	0.09	0.28*	−0.13	0.02	0.05	0.11	0.43**

$^*p < 0.05$; $^{**}p < 0.01$

with personal smartphone use and also affective rumination, problem-solving pondering and work demand. Personal smartphone use also significantly, positively correlated with problem-solving pondering, while psychological detachment was the best predictor of personal smartphone use.

The findings suggest that work related smartphone use in non-work time may be detrimental to work related well being through affective rumination and work demand. This is consistent with previous studies, in that smartphone use in non-work hours may promote work related rumination. Work related smartphone use was not, however, related to fatigue or recovery, contrary to previous research. In addition, and perhaps in opposition, work related smartphone use may *facilitate* work performance through problem solving pondering. Work-related smartphone use in non-work hours may, therefore, not be entirely harmful as problem-solving pondering has been associated with decreased fatigue. Further, the findings also suggest that personal use may promote psychological detachment from work, which is central to the recovery process. E-mailing, browsing and gaming in the midst of work have previously been found to enhance recovery. However, in the current study, no significant relationships between personal smartphone and fatigue or recovery were observed.

There are some limitations to consider. First, the findings are based on a small sample and further research in larger, more diverse populations is required. Second, this is the first time the Smartphone Activities Scale has been used in this format. The measure is, however, derived from prior validated measures and has been enhanced to comprehensively assess smartphone usage. The psychometric properties of the scale, however, require more assessment to increase reliability. Third, the results of the study are based on subjective self-report measures which may have led to bias due to common-method variance. Particularly in assessment of smartphone use, De Reuver et al. [16] found smartphone users were only moderately accurate in assessing the frequency of use in commonly used services such as SMS, email and browsing, and less so regarding navigation and weather information services. Survey approaches could, therefore, be complemented with more objective measures such as actual recorded smartphone usage based on application data. The current study

also did not extend to other handheld devices such as iPads[TM] and tablets. Previous research has suggested that smartphones are predominantly used for information-viewing rather than information-producing tasks. Bao et al. [17] found that while reading tasks on smartphones was on par with computers, typing tasks took longer and were more effortful. Further, Karlson et al. [18] observed that people often read email messages on smartphones but only generate occasional, short replies due to screen size.Users may, therefore, express a preference for tablets or iPad[TM] for work related tasks, using them more often.

The findings of the current study suggest that smartphone usage may be associated with increased rumination and fatigue but also the ability to distract from work related demands. With increasing work demands and the accessibility smartphones provide, it is important to determine the extent to which smartphones allow users to experience recovery, particularly in a smartphone dense population such as Singapore. It is also unclear, by which mechanisms these relationships operate. Further research is therefore, required.

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Chapter 37
Understanding Career Choice Among Asians: The Need For Indigenous Vocational Psychology?

Stefanus Suryono and Koong Hean Foo

Abstract Research studies in psychology have shown that human behaviours differ across culture. As such, Western psychological theories have been criticized for assuming their universality in explaining behaviour of people across nations. This paper addresses vocation-related variables that influence career decision-making among culturally-different Asians. This review suggests that merely applying Western psychological theories without taking into account culture-specific values, beliefs, concepts, and systems indigenous to Asian culture may not fully explain the complexities of work-related issues in Asia. With increasing research studies in developing indigenous psychology, psychology can offer more practical values in understanding human behaviours in Asian context.

With much insight offered from psychology into understanding human behaviour, its practicality has been increasingly recognized in Asia. In gaining such understanding though, researchers have long acknowledged the importance of ethnic culture as an important moderating variable. While the goal of psychology is to create inclusive and unbiased laws of human behaviour, in actuality, the foundations of the theories are much derived from Euro-American values that embrace the rational, liberal, and individualistic ideals [1]. Whereas, indigenous psychology, defined as "the study of human behaviour and mental process within a cultural context that relies on values, concepts, beliefs, systems, methodologies and other resources" rooted in the cultural group under investigation that can be used to generate psychological knowledge [[2], p. 94], has emerged particularly in non-Western countries, including Asia. The idea is that simply importing and applying Western-rooted psychological theories without recognizing and acknowledging the influence of deep-seated values that are

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embedded in Asian culture itself may not give a complete understanding of various phenomena related to human qualities in Asia.

Early research in cultural psychology has emphasized the difference in various psychological phenomena that are experienced in Western and non-Western societies. Markus and Kitayama [3] noted the existence of two distinct self-construals, namely *independent*, that is more prominent in American and Western European culture, and *interdependent*, that is more prominent in African, Latin-American, many southern European, and also, Asian culture. The independent self-construal asserts the importance of self as stable, distinct and separate from others or social context, whose behaviour is explained in reference to one's own internal thoughts, feelings, and action, and whose goal is to discover personal uniqueness and express it. In contrast, interdependent self-construal defines the self as changing, connected with others or social context, whose behaviour is explained by what the actor perceives to be the thoughts, feelings, and actions of others in relationship, and whose goal is to fit in and successfully fulfils the obligations that are expected of the person to do. They also believed that such a fundamental conception of self affects the way people think, feel, and act in their everyday lives, and such cultural differences have been confirmed in many research studies.

For example, Morris and Peng [4] found that in making a causal attribution of an event, Americans were more likely to attribute the behaviour of the actor as dispositional (internally driven), whereas Chinese were more likely to attribute the behaviour as situational (externally driven). Another study by Kitayama and colleagues [5] instructed American and Japanese participants to copy a line shown to them previously in either absolute length or in proportion to the height of the surrounding frame. They found that American participants were more accurate in the former task whereas Japanese participants were more accurate in the latter task, suggesting that Japanese tend to attend more to the surrounding context than American. Other studies have also shown differences among Westerners and Asians in forming voice-based impression from certain paralinguistic vocal qualities [6], processing and attending which information that is more salient (holistic versus analytic) [7], preference in utilizing low- or high-context communication style, and even in deriving meaning of emotions; for example, the rich Chinese vocabularies (up to 113 words) that denote the meaning of shame and embarrassment reflects the salience of these emotions among Chinese, which may not be the case in other cultures, given the cultural differences in the emotion lexicon.

The above examples illustrate how culture shapes the everyday lives of people in different parts of the world. Humans do not exist in vacuum; we live in a particular sociocultural context under which certain behaviours, values, and principles are regarded to be more meaningful than others, thus influencing our perception of reality. The cultural values endorsed by the American culture then, would also influence American psychologists in devising their psychological theories, as well as measures to capture the constructs that are built from the theories. These Western-based theories and measures have been regarded as "mainstream" due to their dominance in psychological science and practice in United States in comparison to other countries. In the past, psychologists from non-Western countries, who were trained primarily

in the United States, realized the limited practicality of Euro-American psychology, whose theory does not match with the cultural context of their home country. Thus, it is such a valid point for indigenous psychology to incorporate the cultural context as foundation in devising its own psychological theories and measures.

The goal of indigenous psychology is twofold: one, "to develop a psychological science based on the cultural features characteristics of the researchers' society", and two, to apply the theory such that it has pragmatic value to the society that is being investigated. According to Enriquez the embodiment of indigenous psychology can be identified in two ways: indigenization from within and indigenization from without. Indigenization from without involves modification of existing psychological theories, concepts, and methods to fit the local cultural context, though this type of indigenization is criticized for treating indigenous knowledge as secondary as opposed to the primary source of knowledge in generating psychological theories. Nevertheless, with psychology as a scientific discipline not being originated from Asia, Asian psychologists have to start from somewhere, hence indigenization from without. Indigenization from within, on the other hand advocates indigenous information as primary source of knowledge of which theories, concepts, and methods are developed within.

Indigenous psychology in Asian countries has been actualized in various ways. One particular example is the development of distinct personality measures that capture certain concepts that are salient in that particular culture. For example, Cheung et al. developed the Chinese Personality Assessment Inventory (CPAI) to provide a reliable and valid measure of personality specifically tailored to the Chinese population. They constructed the CPAI using the etic-emic approach, by including culture-comparable (etic) personality constructs (such as extraversion), and culture-specific (emic) personality constructs. To achieve such a goal, various means were used, such as reviewing Chinese novels, proverbs, and psychological literature and surveying students and professionals with regards to descriptions of self and close others to determine personality constructs that are relevant to the Chinese in general. Some particular indigenous constructs of interest to the Chinese culture were, for example, Harmony, measuring one's inner peace of mind, contentment, and interpersonal harmony, *Ren Qing,* measuring adherence to the reciprocity-based interaction such as exchange of social favours or affection, and Face, depicting concern for maintaining self-image through regulation of social behaviours. Filial piety, a concept that prescribes how children should respect their parents and ancestor among Hong Kong and Chinese college students was significantly predicted by Harmony and *Ren Qing* scales even after controlling for the effect of Big Five dimensions. In addition, the CPAI has also been found to have practical values in the industrial/organizational psychology among Chinese, as shown in the study by Cheung, Fan, and To whereby indigenous personality scales of CPAI, such as leadership and harmony significantly predicted customer-oriented work attitudes among Hong Kong hotel staff. Other examples of indigenous personality measures come from the Philippines, such as the Panukat ng Pagkataong Pilipino, (PPP) and Japan, such as the Five-Factor Personality Questionnaire.

The development of such indigenous measures can help Asian psychologists gain better understanding about their clients particularly in the context of counselling or industrial/organizational psychology whereby the use of psychological testing is prominent for purpose such as career planning and employee selection. Recently, a joint symposium of the International Association for Educational and Vocational Guidance, Society for Vocational Psychology, and National Career Development Association held in Italy, 2007 discussed the challenge that vocational psychology has to face in the changing world of work. One of the issues that were raised was "the need for indigenous theory, research, training, and practice, with the plea for globalizing and localizing research and practice, rather than Westernizing them" (p. 373). This issue calls for the need of the insight from indigenous psychology perspective, since the salience of career and vocational related issues across different cultures requires vocational psychology to have a set of universally valid and practical theoretical framework that is also augmented with culture-specific models. A mere transportation of Western-based career theories without any effort of indigenizing them may not meet the idiosyncratic vocational needs among non-Western clients.

Western models of vocational theories, while recognizing the importance of fit between individuals and the environment in predicting vocational choice, do not include the influence of culture on how individuals make decisions about their careers. Thus, many research studies have been conducted to investigate the cross-cultural validity of Western vocational theories on Asian population all over the world. For example, it has been found that while Holland's interest structure from RIASEC model (as measured using the Vocational Preference Inventory; VPI) was valid for Indian samples, Holland's construct of congruence, defined as correspondence between the workers' interest and his/her occupational environment code did not significantly predict job satisfaction in Indian workers. The validity of RIASEC interest structure has also been confirmed among Korean and Singaporean samples but not with mainland Chinese samples; the RIASEC ordering was not supported in this sample and in the Japanese sample as well. These equivocal findings on the cross-cultural validity of Western theories suggest that psychologists in Asia need to be careful in applying Western career theories and measures on their clients. In addition, even if a theory is found to be cross-culturally valid, its construct may not be understood equivalently across cultures. For example, Tan compared career interest patterns among Singapore workers with Americans using Holland's typology of vocational personalities, and found that there was some difference in job profiles between the two contexts. Specifically, musicians, an occupation that was more of artistic type in America was found to be more of a social than artistic type in the Singapore context. One possible explanation could be that Singaporean musicians sampled in the study came from a local symphony orchestra for which teamwork is important. As a nation with a greater proportion of Chinese, Singaporean orchestra musicians might pursue careers in music to achieve interpersonal harmony with others beyond the self-satisfaction of self expression that are more sought by the American musicians, as harmony is considered as an important personality construct for the Chinese, as mentioned earlier. The same structure of the RIASEC may exist in different cultures but possibly with dissimilar meanings in interest types. For example, the Investigative-type person to

Holland is one who values independence, scholarly achievement, openness and rationality; there is less emphasis on values such as family security, cheerfulness, and true friendship. Collectivistic cultures, like those in Asia, may value the latter.

Knowing cross-cultural validity of a theory is not enough; it is also as important to investigate what and how culture-specific variables affect its validity. For example, opportunities to work in a respected and professional job, as well as with people who share the same belief, and being able to contribute to the society in general were of greater importance among South Asian (Indian and Pakistani) students than for British students in considering a particular occupation as their future career. Even in the United States, Asian Americans students are more influenced by acculturation, family background, and self-efficacy in choosing occupations, rather than their own vocational interest. It is also worth noting that these Asian Americans who were less acculturated to the American culture tended to aspire working in realistic and investigation occupations (science and technology-related) which were seen as "typical" of Asians in the United States because of overrepresentation of Asians in these occupations. Such differences, according to Zhou, Leung, and Li occur because career development theories are lacking in addressing cultural variation of perception of meaning of work, one that has impact on individuals' belief and attitude towards work as well as how they choose certain occupation. Western approach on work in general insists that a match between individual and job would lead to satisfaction and happiness. The primary meaning of work seems to be the self-fulfilment. In contrast, with the more salient collectivistic values in Asia, personal satisfaction and happiness may be more of secondary importance for Asians, with family obligation and social expectations being more important. The study confirmed such a notion, in that among the top ten reasons for work to Chinese, none of them were from self-actualization category (self-expression or satisfaction) and that the most salient aspects of work were skill utilization, competition with others, and solving one's employment problem, with establishing family stability that was also as important. Similar idea was also proposed by Wong and Yuen, in which they believed that career choice is also determined by one's work values, but the conceptualization of specific value may differ across cultures. For example, while relationship is one key value shared by East and West, individualistic society (typical of Western) values good interpersonal relationship because of the personal satisfaction and sense of security it provides to the person, but in collectivistic society, particularly in Chinese context, relationship also provides a sense of membership, shared norm to maintain appropriate behaviour, and access to resources among members of the group. With Western models of work values tending to overlook these subtle differences, localized scales and contextualized measures that can better identify the relevant components of work values for a particular society could be developed (unfortunately, consensual definition of work values among researchers has not emerged yet. This construct may overlap with the perception of meaning of work mentioned earlier).

In addition, application of Western-based vocational theories also needs to consider other external factors such as education system and the condition of the nation that may limit its validity. For example, a study by Leung and Hou found that because academic subjects in Hong Kong high school was divided into art and science tracks,

there was a less clear prediction of vocational interest using Holland's RIASEC model among those streamed to the art track due to diverse subjects clustered in art track such as literature, economic, and public affairs, as opposed to those who streamed into science track who clearly express interest in investigative and realistic type of jobs (such as doctor and architect, respectively) due to more interrelated cluster of subjects in science track such as advanced mathematics, chemistry, biology, and physics. Primavera and colleagues also found that as a developing nation, Filipino's classification of occupations was better described in terms of prestige and sex-type, as opposed to the data/things and people/ideas that was commonly used. Prestige and socioeconomic level of an occupation is also one of the things that Filipino students consider before choosing a career path. Given that quality of education is inaccessible to the poor, the tendency for Filipino students to pursue a particular occupation with bright prospect may reflect their desire to move away from poverty. Especially strong familial ties in Filipino students may pressurize them to choose certain career paths regardless of their interest because of the sacrifice that the parents have to give to afford the education for them. Lastly, a study by Chia, Koh, and Pragasam found that affiliation with colleagues was found to be a higher career driver among Singaporean accountants, than for Australian and Hong Kong accountants. While the influence of Confucianism is still found in both Singapore and Hong Kong context, the fact that Singaporean accountants value affiliation more than the Hong Kong counterpart may reflect something that is more of a characteristic of Singapore society, which is more close-knitted as to provide more opportunity to form close friendship among the people such as the National Service that Singaporean male young adults have to go through. This experience may influence individuals to pursue occupations that allow the expression of such collectivistic values.

Research studies examining culture-specific variables that influence the cross-cultural validity of Western career development theories might serve as a building block of the development of indigenous vocational psychology. Another important step towards the development of indigenous vocational psychology is to develop indigenous measures to capture the person's particular orientation towards a certain career path. This is because most non-Western psychologists tend to just import the American tests, and so it may not measure culture-specific interest that one has in a particular culture. There has been an attempt in developing such measurements. For example, Primavera and colleagues investigated the structure of vocational interest in Filipino students using the emic approach by listing occupational titles and college majors in the Philippines and identify interests that emerged from them. They came up with nine interest scales, which are unskilled/semiskilled labour, male-dominated, engineering/technology, science, medical, arts, commerce, government/law, and education. These divisions reflect interests in Filipinos better because Philippines is a developing nation, and so Filipinos would have different interest structure as compared to people in more developed nations. In addition, in 1999, a Chinese version of the Career Key, the Chinese Career Key (CCK) was developed based on Holland's theory of vocational choice, with some modification to fit Hong Kong and Chinese cultures. The CCK was compared with the Vocational Preference Inventory (VPI),

Holland's original measure of RIASEC. The CCK was found to be a stable assessment of career interests, with support for its validity, reliability and user satisfaction among high school and university students in Hong Kong. This professional-quality career interest inventory may be suitable for use in China and countries having significant populations of Chinese speaking citizens. For VPI, a number of high school students reported difficulties understanding some occupations in the VPI. This implies that when the VPI is used for Chinese clients, there should be more care in making sure that the clients fully understand all occupations. The researchers concluded that there is a need to develop such instruments in the country's own language and culture. There is a great need among adolescents and adults for career guidance in Hong Kong and China. The CCK is the first instrument, though culturally adjusted, based on Western career theory, that has already shown to be successful in helping to fulfil that need.

What can be implied from these studies is that the assumptions under which Western-based career theories are built may not fit well with the Asian context, as shown in the cultural differences in vocation-related variables. Even with the influence from globalization in which Asians become more exposed to the individualistic values embraced by the Westerners, the collectivistic nature of the Asian culture remains strong and salient for us. Developing an understanding of the indigenous values, beliefs, and concepts, as well as societal influence that are salient to one's home country would be useful to generate the very own Asian indigenous vocational psychology. Perspectives offered from theories of Asian indigenous vocational psychology can be useful in providing insights on the work-related issues in Asia.

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Chapter 38
The Contradictory Nature of Vietnamese Society in Relation to Gender Equality

Ann McMillan

Abstract The inequalities in the status of women in Viet Nam have been addressed in many areas such as education and health and the Vietnamese government has gone further than many other countries within the Region to implement programmes to raise the status of women to promote gender equality. However, despite the progress as noted, traditional behaviour based on Confucianism is clashing with the movement towards gender equality especially in the area of gender selection. The gender selection in favour of the male gender is a main contributor to gender imbalance within Vietnamese society. The research being generated at present and which this paper is based on is, in the main, obtained from secondary sources across many disciplines. However, ongoing up-to-date findings obtained from surveys on youth and gender which is being undertaken by a NGO based in Hanoi will also be a contributory factor in this paper in that it will identify the continuance of the traditional behaviour argument.

38.1   Introduction

The inequalities in the status of women in Viet Nam have been addressed in many areas such as education and health and the Vietnamese government has gone further than many other countries within the Region to implement programmes to raise the status of women to promote gender equality.

However, despite the progress as noted, there is contradictory behaviour within Vietnamese society. Traditional behaviour tied to Confucian influence in Vietnamese society is clashing with the movement towards gender equality, especially in the area of gender selection. The availability of gender selection technology in the 1980s is a main contributor to the gender imbalance within Vietnamese society, although it is not the root cause of the gender preference for male offspring. It could be argued that this form of technology has progressed the gender imbalance further in what could be described as a backward step for gender equality in Viet Nam.

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Many countries have taken measures to address the problem of gender selection leading to gender imbalance within the society and Viet Nam is one such country that has instituted programmes and promulgated laws to do so. However, success has not been achieved in eliminating or even halting this practice. The practice of gender selection because the male offspring is more valued than the female offspring is deeply imbedded in Vietnamese society. Without a concerted campaign which involves changing the mindset of the people towards such practice and traditional mores, no programme or law is likely to change the situation.

38.2   Origins of Confucian Influence

The Confucian influence in Viet Nam is heaviest in the present day northern Viet Nam as far as the 18th parallel which is the region that the Chinese Han dynasty in 111 B.C.E. integrated into its empire. According to Nguyen Khac Vien in *Viet Nam: A Long History* "the feudal Han carried out a policy of systematic cultural assimilation; the empire having to be unified in all aspects and one aspect was the use of the ideographic script being enforced as a vehicle for the official doctrine, Confucianism"[1].

As Nguyen goes on to state:

A tightly-woven network of obligations and rites bound societal and individual life strictly governing relationships between parents and children, husband and wife, between friends and between subjects and the imperial administration which tried to replace old customs with laws and rites inspired by Confucian doctrine [1].

Huu Ngoc in *Sketches for a portrait of Vietnamese Culture* takes it further to provide an explanation of what Confucianism replaced in Viet Nam in that he states as does Nguyen that

"Chinese ideograms facilitated the entry of the official doctrine, Confucianism, and this doctrine wove a tight web of obligations and rituals that governed individual and social life, a web destined to replace the older ways of life of the Bronze Age" and according to Ngoc, "society was transformed little by little into feudalism and patriarchy gradually replaced matriarchy" [2].

John K Whitmore in *Social Organisation and Confucian Thought in Vietnam* put forward a slightly different point of view:

Writings on Vietnam have portrayed a country moulded by its northern neighbour in the "thousand years of Chinese domination" of the first millennium A.D. to such an extent that all things Vietnamese must needs be seen in a Chinese and indeed a Confucian light. Socially, this means domination by the male and the father, patrilineal succession, and clan organisation, that is, a certain rigidity in social organisation [3].

However, Whitmore does not totally agree with Viet Nam being portrayed in this way. He is of the opinion that:

We need instead to consider the characteristics of Vietnamese social behaviour before we try to place the social order of Vietnam in any category . . . and in the contemporary detail of

the seventeenth century, drawn from law codes and observers, one may argue, can be seen social behaviour more similar to that found elsewhere in Southeast Asia [3].

Whitmore above refers to law codes and one of the most important was the Hong Duc Code which was promulgated in 1483 with the purpose to group in a systematic way the rules and regulations already in force [3].

According to Nguyen in *Viet Nam: a long history*

This was the most complete code to be drawn up in traditional Viet Nam and remained in force until the end of the 18th century. Completed under subsequent reigns, it comprised 721 articles and was divided into six books [1].

Nguyen appears to argue one way that "the rights of the woman were protected" in various ways under this Code, but then makes the point that all the aspects that he mentions as being for the benefit of women "... were to be suppressed in its most reactionary form" [1].

Mai Thi Tu and Le Thi Nham Tuyet in *Women in Viet Nam* do not agree with Nguyen that the rights of women were protected in that they state:

... the Hong Duc code remains above all an institution created at the apogee of Vietnamese feudalism ... it bolstered the supremacy of patriarchy ... was inevitable that it should contain contradictions with regard to the position of women as it marked the transition from feudalism with markedly national characteristics to a period in which a backward and reactionary policy vis-à-vis women was applied primarily... it constituted a manifesto disfavouring women and foreshadowed their enslavement and oppression by the dominant feudal class [4].

Mai and Le argue that the different Codes incorporated from the Ly to the Nguyen dynasty did not protect the rights of women in any way; in fact, they argue the reverse as quoted below.

The Code of the Ly (11th century) the Hong Duc Code (15th century) and the Gia Long (19th century—a code which remained in force under French colonial rule until the 1945 August Revolution) with each Code being more reactionary and anti-national than the last and projecting more and more rigorous discrimination against women [4].

William Turley in *Women in the Communist revolution in Vietnam* analyses the claim by the Lao Dong Party of Vietnam that one of their "great accomplishments is the emancipation of women from oppressive feudal social structures and attitudes and the establishment of equality between the sexes"[5].

Turley states that:

At the time of Party's founding in 1930, liberalising trends regarding women were present only among urban intellectual elites and that throughout the countryside and among traditionalist aristocratic families the restrictive practices and prejudices typical of patrilocal societies and Confucian ethnics prevailed [5].

Turley provides a footnote which summarises the position of the female gender in Viet Nam succinctly and again, as seen time after time, there is a reference to contradictions in Vietnamese society that have come through the historical context and which are still prevalent in the 21st century Viet Nam.

> The role of women in traditional Vietnamese society was determined by a fascinating complex mixture of Confucian ethics, indigenous customs bearing traces of matriarchy, and contradictory legal codes, further complicated by the varying degrees to which different social classes were penetrated by each of these elements [5].

This brief overview of the arguments put forward by various authors assists in gaining a partial understanding into the contradictions associated with gender inequality which in turn is a prime factor leading to the gender imbalance in Viet Nam.

The main argument in this paper is that the practice of gender selection takes place because the male offspring is more valued than the female offspring and that this practice is deeply imbedded in Vietnamese society, but that there are contradictions and it is these contradictions which will be discussed in the following section.

38.3   Status/Value of Vietnamese Women in General

As referred to in the introductory section of this paper, apart from the aspect of gender imbalance, Viet Nam has a good track record when looking at other indicators which point towards Viet Nam taking enormous strides in addressing inequalities between gender in other areas such as education, health and infant mortality. The *World Bank Viet Nam Gender Assessment 2011* also points out that the "female labour force participation rate in Viet Nam is among the highest in the region with the gender gap in earnings lower in Viet Nam than many other East Asian countries" [6].

As the *World Bank Viet Nam Gender Assessment 2011* goes on to note:

> The contradictory nature of Viet Nam's performance in relation to gender equality testifies to a society characterized by cross-cutting historical traditions and contemporary forces. On the one hand, Viet Nam has outperformed many other countries in terms of gender equality with equivalent, or even higher, levels of economic development. Its government has gone further than most to use legislative changes and social programs to institutionalise gender equality. On the other hand, it not only continues to report old forms of gender inequality, such as high levels of gender-based violence, but also new forms such as the rising sex ratios at birth, indicative of the selective abortion of female fetuses.

Viet Nam has not yet fallen completely into the danger zone posed by an imbalance in the population which favours the male gender over the female gender and the following statistics whilst sounding an alarm also indicate that it is not too late for Viet Nam to take the necessary action to address the issue.

The *World Bank Viet Nam Gender Assessment 2011* addresses many of the issues, including concern over the rise of sex ratios at birth and provides valuable up-to-date, as far as possible, data on the issue of gender imbalance within the population in Viet Nam.

> One major concern is the rise in sex ratio at birth (SRB) from 106 male births for every 100 female births in 1999 (the approximate biological norm) to 111 in 2009. SRBs are highest for higher income groups with better access to sonograms and sex selected abortions. For example, for higher parity births among the richest quintile, the SRB is 133.1. At the current SRB, the UNFPA predicts a 10 % surplus of men by 2035. This is clearly linked to a culturally based preference for boys [6].

An article "*Assessing the Quality of Data for Analysing the Sex Ratio at Birth in Viet Nam*" goes much deeper into the issue by establishing a comprehensive framework that undertakes a detailed assessment of all collection points of SRB data in Viet Nam; argues that the three chosen datasets applied in the report are the only sources found to be reliable even though there is some inconsistency between the three and reaches the conclusion that "despite the differences, the three datasets point consistently to a high SRB in eight provinces in the north of Viet Nam"[7].

The identification of a connecting hub where the high SRB is sited is crucial because this may go some considerable way in the decision that the Vietnamese government needs to make in order to address the gender imbalance in Viet Nam. The reasons for this cluster are quite simply the Confucian influence emanating from the times of the Chinese tenure in Viet Nam.

Many scholars maintain that Viet Nam has more egalitarian gender relations similar to those of South East Asia where gender imbalance in favour of the male gender is not an issue and this viewpoint cannot be lightly dismissed.

However, the reality is that this point of view does not stand up to scrutiny when you look at what is happening with the gender selection taking place in Viet Nam; the general perception within society and the still heavy Confucian influences which impact on day to day life in Viet Nam or to be more precise, in the regions of Viet Nam where the influence of Confucianism has not faded. The influence of the Confucian belief systems and a culture of son preference which values sons not only for their economic contributions and support to parents in old age, but also on symbolic grounds to maintain the ancestral line is still overwhelming. While several decades of socialist government in Viet Nam have promoted a more egalitarian legal and policy framework, Confucian values about gender propriety, including essentialist constructions of women's nature have not disappeared from official discourse [6].

38.4   Countering the Confucian Influence in Gender Issues

Even if the Vietnamese government brings in the full range of measures that other countries such as South Korea have implemented in its efforts to successfully rebalance the SRB, it does not guarantee in any way that the mindset of people will change and the changing of the mindset is the only permanent solution to the problem of gender imbalance.

Perhaps the solution lies in the female gender claiming or re-claiming full control over their bodies and this would involve all females from grandmother to mother to daughter to the female members of the husband's/partner's family so that pressure to conform to patriarchal notions of the inferiority of the female gender over the male gender is broken and that full value is given to both genders equally. The female gender is to a large extent complicit in the practice of gender selection; they are following what has gone before and what in the main, has been dictated by so-called social and cultural norms.

Viet Nam is an economically and socially transitional society and as such many of the cultural norms as a matter of course through the impact of globalisation may well undergo change which in turn could impact on such practices as gender selection. But, as has been seen in other countries within the region, apart from South Korea which was only successful because of massive intervention from the Korean government, it is unlikely to get at the core issue. Interim findings that are emanating from a survey currently underway with youth in Viet Nam do not bode well for successful intervention.

Although the research being generated at present and which this paper is based on is, in the main, obtained from secondary sources across many disciplines, ongoing primary research currently being undertaken by NGOs based in Hanoi is incorporated into this paper [7].

The initial findings from this research project are disturbing in that there appears to be a persistent gender bias among young people, and that women are often the primary enforcers of gender roles. This particular project took place online with 2,206 young people between the ages of 14–30 from 64 cities and provinces throughout Viet Nam taking part. One of the criticisms could be that since this was, and is an ongoing online survey and debate, that it does not have the validity of a face-to-face survey. However, since the generation/s that is being surveyed is one that has grown up in a social media sphere and they are used to discussing/exposing all online, the counter argument could be made that this type of survey has more validity than a face-to-face encounter.

If the findings which need more extensive research are verified, to a certain extent this goes against the notion that as a developing country such as Viet Nam becomes more urbanised; standards of living rise and in general the population has more time and money for recreation, that along with these changes the mindset of the female gender would change. This does not, as far as can be established at this point in time, appear to be the situation and that is the aspect, as referred to above, that is disturbing. It is disturbing primarily because Viet Nam as already noted could be seen to be at a tipping point with its gender imbalance. If appropriate actions were put into place; it may go some way towards ameliorating the situation before it finds itself falling completely into the danger zone.

38.5   Conclusion

It has been argued by many authors including John K Whitmore that in order "to analyse Vietnamese social organisation, we must put aside our image of it as similar to that of China, with its patrilineal clans" and that we should not be looking at Vietnamese society through a Confucian lens but place it more in the range of the social behavior that is prevalent in the so-called Southeast Asian sphere [3].

However, what is presently occurring within Vietnamese society in relation to various forms of gender inequality especially of that which is related to gender selection does not substantiate this argument. To reiterate what is stated in the introductory

section of this paper; the practice of gender selection because the male offspring is more valued than the female offspring is deeply imbedded in Vietnamese society and the only permanent solution in order to address this issue is to somehow bring about a change of mindset in Vietnamese society.

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Chapter 39
Filial Parenting is Not Working!

Koong Hean Foo

Abstract Filial parenting (coined from the words filial piety and parenting style) is observed to be a parenting style emerging from Asia, specifically from the dynamics of the Chinese small families of today. This proposed construct refers to the almost unconditional devotion and care of both parents towards their one or two children. "Almost" in unconditional devotion and care means parents would add their demands or expectations of their children. Based on the parents' strengths and efforts, they would indulge and protect their children from conception to birth to growth and development. The ulterior motive of the filial parents is reciprocal devotion and care when they themselves reach old age. The consequences are worth consideration. The advantages and disadvantages of filial parenting, as well as implications for people managers and policy makers are discussed.

39.1 Introduction

Believably, family planning in Singapore has provided the impetus to the birth of the filial parenting style, particularly among Chinese Singaporeans; notwithstanding that the modernisation of the world and environment has contributed, in part, to its development [3]. More than a generation ago, Singaporean families were generally large with many children, and three or more generations living together was common practice. The atmosphere of living was more rustic than urban; in economic terms, the living standard was low to moderate. Nevertheless, large families saw mass enjoyment of meals, news, celebrations, mutual care and concern, among other benefits. Some setbacks of large families included less of individual moments, lack of privacy, and having to share one's possession(s) and time.

After World War Two, birth rates soared in Singapore. From 1970, the Singapore government imposed the 2-child family policy, codenamed Stop at Two, with the aim of population control for a viable economy. Many families abided by the policy, willingly or not. More than a decade later, the government realised that birth numbers

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had dropped below replacement levels; people in the older age groups would out-number the numbers of young who were required to work and support the economy. Pro-natalist policies in the 1980s and 1990s were introduced to entice Singaporean families to produce more children. There was no turning back. Even into the new millennia, with insufficient younger people to support the growing, ageing population economically, minds of most Singaporeans were made up to adhere to small families. Armed with better information on what is best for children, gleaned from medical and scientific publications on parenting, childcare and human development, and substantiated by affluence and modernisation, Chinese Singaporean parents dote and splurge on their one or two offsprings. The benefits to one and all in small families seemingly outweigh those of large families—better care, nurturance and education, to name the important few. Education is a crucial essence of Chinese society; the awe-inspiring belief that it is the gateway to a better life. In many ways, the running of Singapore by the better educated attests to this belief. Few Chinese Singaporean families of today would go back to the large family of yesteryears despite further governmental encouragements. The small family is here to stay and will continue into the future, given the socioeconomic conditions of the country, and the perception and experience of Chinese Singaporeans with small families. This trend of having small families is also a phenomenon observed worldwide, mostly in developed countries. The possibility of filial parenting may exist outside Singapore too.

The focus here is on a probable fifth parenting style—filial parenting (coined from the words filial piety and parenting style)—emerging from the dynamics of the Chinese small families of this present generation. Filial is taken from filial piety, but has a twist to it—see Section on "What is filial parenting?" Parenting is the usual meaning of looking after one's children. But the sum of the two words, filial parenting, speaks of a different parenting style, noteworthy of concern and investigation. The main aim of this paper is to inform concerned adults (e.g., parents, teachers, grandparents, doctors, allied health practitioners, clinicians, policy makers, and researchers) on the conditions and workings of filial parenting. The second aim is that this fifth parenting style will be verified, improved on, or refuted by concerned adults mentioned above. The third aim is to look at the consequences of filial parenting in managing the present generation of Chinese Singaporeans, and possibly other families in Singapore who have adopted the filial parenting style. The fourth aim is that researchers and allied health practitioners (e.g., psychologists and sociologists) across the world start investigate if a similar parenting style exists among small families of different cultures.

39.2 Parenting Styles

Parenting styles have been researched and developed since the 1930s [2, 3]. Many theoretical models on parenting have emerged. The four well established ones expounded in psychology books and taught in teaching institutions are discussed briefly here. In the authoritarian parenting style, there is low parental responsiveness and

high parental demand. Parents expect their children to follow their orders without explanation or question [2]. Failure to do so commonly results in punishment. The adoption of the authoritarian parenting style generally turns out children who are obedient and proficient, but are less happy, less socially competent, and low in self-esteem. In the authoritative parenting style, there is high parental responsiveness and high parental demand. Parents establish rules, guidelines and clear standards for their children to follow. They are assertive and approachable to their children. When children fail to meet expectations, these parents are more nurturing than punishing. The adoption of the authoritative parenting style endorses a more democratic, or child-centred type of development in which the child may assert his or her own sense of independence, and who may have a higher degree of emotional self-control2]. In the permissive or indulgent parenting style, there is high parental responsiveness and low parental demand. Parents rarely discipline their children because of low expectations for maturity and self-control. The adoption of the permissive parenting style often turns out children who are low in happiness and self-regulation, and control. These children are likely to experience problems with authority and tend to perform poorly in school. In the uninvolved parenting style, there is low parental responsiveness and low parental demand. Parents have little communication with their children. These parents fulfil their children's basic needs such as shelter, food and spending money, but are generally detached from their life. In the extreme, these parents may reject or neglect the needs of their children. The adoption of the uninvolved parenting style turns out children with a tendency for lack of self-control, with low self-esteem and is less competence than their peers.

Note that less emotion is not used in the three parenting styles other than the authoritative parenting style. Also note that in practice, parents may adopt different styles in bringing up their children. This is due, in part, to differences in personality of parents, social class or status, family size, culture, and religious affiliation, to name the important few. Besides, the parenting styles of individual parents may be different and then combine to create a unique blend in each family. Parenting children may, for some families, involve a significant other—a grandparent, an aunt, or a domestic helper. The inclusion of such a person will mediate the parenting style. As it turns out, quite obviously, authoritative parenting is most effective in leading to healthy adjustment for children. Studies have shown that authoritative parenting is associated with better psychosocial development and mental health of children across cultures.

39.3   What is Filial Piety?

Filial piety, an important ethic emphasised by Confucian philosophers throughout Chinese history, is associated with the development of Chinese culture over thousands of years. Put simply, filial piety is a traditional Chinese virtue that refers to children maintaining unconditional regard and care for their parents, and grandparents, and upholding the family's name, over and above worshiping one's ancestry. Related

to the virtue of filial piety is the value of face in Chinese culture. In a way, face is equated with reputation. Face is applied in personal and business relationships. For example, if someone has face or good face, it means someone has a good reputation among people. People with good face are generally dependable and reliable, and safe to do business with. Hence, it is important for Chinese to maintain face. Also related to the virtue of filial piety is the value of love, in this instance, parental love, the natural relationship between parents and their children. It is natural for parents to love their children but filial parents go beyond their parental responsibilities to rear their children. This is filial parental love.

39.4   What is Filial Parenting?

As observed, and through discussions between the first author and parents, and through many years of natural observation of Chinese parental behaviours, there are indications of a fifth parenting style emanating from the dynamics of Singaporean Chinese families, and perhaps from families of similar conditions in other parts of the world—that of filial parenting. Filial parent*ing* refers to the almost unconditional devotion and care of both parents towards their one or two children. The word "almost" needs further qualification here. Almost in unconditional devotion and care means parents would include their demands or expectations on their children. Due to having only one or two children in the family and the existing competitive environment, parents (grandparents as well) are now doting and splurging on their children such that these children should be nurtured with the best care and support, and not to be hurt at all. The outcome of such a parenting style has concerned professionals (for example, teachers, psychologists and policy makers) who have to deal with the behaviours of the resultant children.

The aims of filial parenting are twofold. First, it is to ensure future success of children. Secondly, it is to expect reciprocal respect, devotion and care when the parents reach old age. The second aim is an ulterior motive, which may be expressed or tacitly wished for earnestly. This motive is not a dreadful motive, rather a love wish between parents and their children. Preferably, filial parenting occurs from the time pregnancy is confirmed through the period of childhood, to young adulthood, up to 21 years of age, at least. Filial parenting could go beyond this age whether or not the children are living with the parents, and well maintained if they are living together.

Many conditions are present in parenting, but some are primary or necessary for filial parenting: Both parents be present; One or two children; All in the family are normal healthy individuals; Presence of filial piety; Presence of face and filial parental love; and A competitive environment.

The biological parents in the family are married legally to each other, and committed to the household. One parent must be working. Either the father or mother is holding a job with a steady income to sustain the family of three or four. What is essential is that the income is sufficient to run the family needs and provide for

adequate nurturance of the children. Given the current economy of Singapore, both parents are often employed. This constitutes dual income and provides more to the nurturance even indulgence of the children. The family has one or two biological children, who may be of any biological gender. As observed, filial parenting works ideally in a family of one or two children. With larger families or families of more children, there is a dilution of parental attention and care, sibling rivalry, competition for fixed finances, among others. Presumably, everyone in the family is a growing and developing person according to norms; healthy individuals. In other words, no one in the family has a permanent disability or illness or some other influential factor on the family dynamics. As have been observed, if a child has, say cerebral palsy or autism, the parenting style adopted will take on a different course.

Chinese people of yesteryears have been advocates of filial piety, though this virtue is losing its grip on present day Chinese people due to environmental changes and the influence of other cultures physically or through the media. Ideally, both parents are brought up with Confucianist teachings in filial piety. If the above situation is not present, in the least, both parents must have been exposed to features or workings of filial piety, like loving and caring for one's parents, being respectful, considerate, loyal, dutiful, and obedient. Should one parent come from another culture, he or she would subscribe to filial piety practices of the other parent. Put in another way, the parent with strong beliefs in filial piety is dominant in parenting the children in the family. Additionally, the two related values to filial piety, face and filial parental love, play significant roles in filial parenting, and have to be present in the dynamics of the small family. A competitive environment in which there is much emphasis on achievement and success in education, accumulation of wealth and material gains serve to propagate filial parenting. Singapore is such a competitive environment. In a big way, the Singapore government behaves like filial parents to their Singaporean "children".

Some other conditions are catalytic to filial parenting: The presence of a significant other; A metropolitan environment; Governmental policies; and Ease of communication.

Depending on the financial abilities and situation of the family, a domestic help, may be present in the household to augment the parenting role. Most of the time, filial parenting is enhanced through the domestic help. A grandparent too may be present in the household to augment the parenting role. In many ways, living in a city state, with few outdoor recreational areas for the people, has a significant effect on the lifestyles of the family and parenting behaviours. Coupled with hot humid weather, people choose to remain indoors in the comforts of cool air-conditioning. Coupled with the designs of online Internet games, indoors activities are preferred. Parenting seems much easier with children staying at home than being elsewhere. At least, filial parents feel their children are safe to be around them in the home. Presently, governmental policies greatly enhance filial parenting; for example, the practice of meritocracy in Singapore. Those who excel in education will be rewarded with top scholarships and prestigious positions in the public service. Parents craving for information to put their children into the best spots for nurturance and grooming

will find and put to full use the wealth of public information available in various forms and media made available through modern communication means.

39.5   Advantages and Disadvantages of Filial Parenting

Children brought up through the filial parenting style do have their advantages and disadvantages. These features may find overlap with other parenting styles, but what are discussed here are the observed features of the filial parenting style. A noteworthy point is that continual adoption of the filial parenting style by Chinese Singaporeans will serve to maintain the familial systems local parents are used to, and seen in the perspective of the present Singapore system, it may well characterise the image of Chinese Singaporeans. When the world consists of only small families, the filial parenting style may become a norm, and the advantages and disadvantages will become just normal features of family and parenting.

The advantages of filial parenting are: Children develop to filial parents' wishes; There is little or no sibling rivalry; and A sense of artificial filial piety is maintained.

Children get to develop mostly according to parental desires, or society's needs as perceived as the better way of success and survival by their filial parents. For example, if both parents are surgeons, the child is groomed to be one too. Exceptions to the aforementioned development do occur: for example, if the children are assertive sufficiently to seek their own developmental path, or supported by a scholarship to go through a special programme of choice, say, fine arts. On the whole, the child will grow up to be a respectable person in society. The disregard of personal interests itself is a self-sacrificing trademark of Chinese. For being members of a collectivistic society this sacrifice is small for the benefits of the society. If it is a one-child family, there is no sibling rivalry at all. That is, no brother or sister to vie for parental attention and care. The only child benefits wholly from both parents, and significant others present in the family or the familial circle. If it is a two-child family, there is little sibling rivalry, because there is often one parent for one child, there is enough at home to share 50 % of the time. If the two children are of different genders, they will have equal but quite different attention accordingly. Perceptibly, filial parents believe and trust that by looking after their children to the best of their abilities, their children would look after them when they are old, just as they would to their own parents; the continuation of filial piety. Remember, parental love with an ulterior motive. But, as many filial parents have found out, because of filial parenting, they have produced a crop of human beings who would care for themselves and have problems maintaining their own needs and demands than be able to meet those of their parents, given the present environment—higher costs of living, and healthcare, among others.

The disadvantages of filial parenting are: Loss of natural childhood; Loss of expression to develop self; Lack of awareness and empathy of others; Adopt "the world needs to provide for me" attitude; Loss of natural filial piety; and Lack of independence for parents and children.

With the overzealous care and protection from filial parents, coupled with a lack of open spaces in Singapore, and then with a planned schedule of activities beginning in childcare age, children of filial parenting have to endure a childhood of a very different kind—the loss of natural childhood; in Britain, this is termed *Nature Deficit Disorder*. The conviction of filial parents that with their style of parenting, with inclusions for outdoor activities for their children among the regimen of activities, their children would still be getting wholesome activities. As with loss of natural childhood, most children of filial parents do not get the opportunity to develop into a personality of their preference. With so much of indulgence and guidance, and indoctrination, the children will likely face difficulty identifying what they want to be in life; they cannot be true to their natural selves. Many children will grow up, having good education and a successful career, to find themselves asking the questions later on in midlife whether that is what they want in life. And given the rigid environment of Singapore, where only favourable jobs are frequently popularised, there is not much scope of one trying to find the "real-self" path in life.

For children of filial parenting, the self comes before anyone or anything else; in other words, they become self-centred. From the perspective of the filial parents or their children, they are not so. They are just not bothering others when they go about their activities. This self-centredness is difficult to change; it has become a trait, a belief on actions than simply an attitude. When the world of children is often provided for without a thought for payment and effort in obtaining goods and services, these children will develop a "provide for me" attitude. This is happening in all the filial families, especially with the well-to-do families. Affluence is the cause of this disadvantage [1]. Parent-child relationship the past Chinese way has been altered by filial parenting. It is unthinkable that children are able to look after their parents as we did in the past, given their present conditions—being one or two only, and being cared for and nurtured all their growing life. If they could sustain their own families, that is already a bonus. Given the continual care and nurturance of the parents, their children would not be able to stand up for themselves. They seldom make their own decisions, except perhaps for food and clothing, and material goods. Put it another way, the nurturance and care from their parents cause dependence of one another, a vicious cycle. Filial parents will claim that their children need them for care, love and support; whereas the children will claim their parents need them for company.

Overall, in the filial parenting style, parents expect their children to follow their guidelines and wishes, and to be their best in every aspect. Failure to do so regularly results in frustration on both sides. Filial parents are overly nurturing and communicative, and respond excessively, often mixing friendliness with assertiveness towards their children. Their disciplinary methods are weak. Filial parents are very attached to their children's life. The adoption of the filial parenting style generally turns out children who are obedient and proficient, but are less happy, less social competent, low in self-esteem, and less self-regulated. Reported in the New Zealand's Weekend Herald was that the one-child policy of China has produced children "who have grown up to be less altruistic and trusting, more timid, less competitive, more pessimistic, and less conscientious than children born before the policy".

39.6 Implications for People Managers, Policy-Makers and Researchers

People managers, policy-makers and researchers alike have their hands full with managing the resultant young adults of filial parenting given the characteristics above. Some areas are highlighted for discussion. For the home, filial parents live with children who are dependent, less sociable, prefer electronic gadgets, do not do housework, prefer to be served, take things for granted, etc. Education commands preference. When children are doing their studies, filial parents will ensure nothing comes between; there is no multi-tasking for the children. For teaching institutions, teachers have to put with students who are more dependent, more self-centred, cannot take much stress, seldom take "no" for an answer, among others. Spoon-feeding is necessary. Any lack of provision of materials or guidance from the teachers will lead to complaints of inefficiency. For the workplace, managers have to put up with employees, who prefer a comfortable environment, would work less for more, will job-hop if their desires are not met, etc. Evidence abounds. For example, only 150 people attended a job fair held at Suntec, which offered over a thousand retail, and food and beverage positions. A graduating intern gave up his job because he found having to clear up a workshop and help wash dishes demeaning. A probable reason is that if there are no "suitable" jobs, filial parents would not mind their children stay at home till something nice some along. For families with wealth, children are less motivated in life, and have not many personal goals to achieve. It is not surprising to find rich children taking bad habits, like drugs, to deal with the boredom of life. For the government, policy-makers have to put up with frequent demands and expectations of the present workforce. These include provision of: affordable housing; affordable healthcare; a selection of comfortable jobs; good private and public transportation system; good education; good childcare; a selection of shopping centres for foods and amenities; affordable outdoor and leisure activities. It is tantamount to "look after me because I am here" attitude.

39.7 Conclusion

This paper outlines in some details the fifth parenting style called filial parenting, derived from the Chinese virtue of filial piety and the psychological concepts of parenting styles. While it is couched in much negativity when compared to the definitions and standards of the world of the past, they do have strong points when viewed towards the future where possibly people will be of the same upbringing and development. Although filial is used in both terms, they are similar in the practical sense of the word but different in order. In filial piety, the hierarchy of children respecting their parents is the normal flow, whereas in filial parenting, having parents respecting children is the reverse order of events, in spite of the ulterior motive of reciprocity. Filial parents would argue against the reverse order that it is only reasonable and out of love that their children are reared the way they have chosen. If the resultant

behaviours of their children lean towards more advantages than disadvantages in the present society, filial parenting would be a preferred parenting style. However, as it stands, the present advantages are outweighed by the disadvantages. Filial parenting style is giving more headaches to the system than choices. The authors envisage that if the trend of the world is going the way of the small family system, filial parenting style is a concern for every people manager.

It is the authors' wish to learn more about the proposed filial parenting style from concerned adults around the world, in particular from Chinese cultures. The benefits of the research would provide concerned adults and the Chinese community at large the scientific evidence for the Chinese parenting style; it would also provide healthcare providers in ensuing recommended interventions. More research will be needed to understand how these interact and moderate each other to influence children's competence and development.

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Chapter 40
Borderless Psychology in South East Asia: History, Current State and Future Directions

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Abstract Psychology is well underway in becoming a borderless science and discipline, with universal knowledge that can be applied in countries across the globe. This study explores the history and current status of psychology education in Australia, Singapore and Malaysia as these are major areas in which transnational exchanges in psychology education take place. The data accrued from research for this article informs discussions on the universality of psychology education today and raises important questions about the future of the discipline in Asian societies.

40.1 Introduction

Psychology is no longer exclusive to Europe or the United States; psychological knowledge, education and services are increasingly important around the world. For example, in Australia, the number of people pursuing higher degrees in clinical psychology has risen [1]. In South Africa, over 8,000 psychologists are practicing clinical psychology [2], and across the South- American sub-continent the numbers of psychologists incorporated in business and clinics are increasing swiftly [3]. In Kuwait, a group of psychologists is raising awareness of the benefits of psychology for Middle Eastern societies [4]. Almost world-wide there is an emerging awareness of psychological issues, and psychologists are increasingly important in societies. Psychology education is in high demand and developing rapidly.

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Today, psychology education is increasingly embedded in 'non-western' universities. In Asia, 'western' and local universities are engaged in complex collaboration networks [5], in which psychology is offered by foreign and local universities in partnership. However, little consideration is given to the impact, or the suitability of these western programs for Asian societies. Staff, researchers and psychology graduates spread psychological knowledge that originated in the west, and clinical psychology applies this knowledge in Asian societies. Clinical psychology involves examination, treatment and prevention of psychological 'maladjustment, disability and discomfort' [6] and is intrinsically intertwined with norms of behaviour in society. People with undesirable thoughts, feelings or behaviour consult a psychologist for assistance to change [7]. Therefore, while psychology spreads from west to east, it is increasingly influential in Asian societies.

Psychology education has become borderless, and psychological knowledge and norms are increasingly de-territorialized. Psychology's roots in Europe and the United States seem almost forgotten [8–10], and psychology is applied as 'universal' knowledge. This opens up the question if psychology is able to meet the demands of the multicultural societies in which it is practiced. There is a need to scrutinize the impact of the globalisation of psychology education, with a special emphasis on clinical psychology. Firstly, this article outlines early international exchanges in psychology education between Europe and the United States. Second, it focuses on the tropics, as in this region, and especially Asia, massive expansion of education on transnational dimensions takes place. Case studies from Australia, Singapore and Malaysia will illustrate how psychology has spread to the region and how and where psychology is currently taught. This informs discussions on the future directions and practical utility of psychology education.

40.2 Psychology's Early Exchanges

Psychology originated in Europe and the United States. After Wilhelm Wundt opened his psychological laboratory at the University of Leipzig, Germany, in 1879, specialty education in psychology was gradually introduced in European universities [8, 9]. These developments were soon adopted in the United States; the first American psychological laboratory was opened at Johns Hopkins in 1883 by G. Stanley Hall. In 1896 an American, Lightner Witmer, introduced clinical training in psychology education at the University of Pennsylvania [11].

Standardization of clinical psychology training was accelerated when veterans with psychological trauma from the Second World War returned to their home countries [12]. Rapid expansion of the pool of clinical psychologists was necessary to cater for the needs of these traumatized veterans. In 1949, the scientist-practitioner model of clinical psychology training was developed at the Boulder Conference, USA [11, 12] and in 1973 a more practice- oriented model was developed in Vail, USA [11]. The Vail and Boulder models are currently taught in universities around the world as Master of Doctor programs in Psychology.

Psychology entered Australia through British-educated scholars who were appointed as chairs in 'Mental Philosophy' in universities in Melbourne, Sydney and Adelaide in 1890 [13, 14]. The first specialist psychology lecturer was appointed at the University of Western Australia in 1913 [13, 14]. These Australian psychology programs depended heavily on developments in the 'west'; lecturers were trained in Germany, the United Kingdom or United States [13, 14]. Psychology developed rapidly in Australia and by 1950 nearly all Australian universities offered psychology courses [13, 14], and most still do so (Table 40.1). After psychology was fully established in Australian universities, it was exported to Asia by Australian scholars.

Psychology education was brought to Singapore in 1952 by Beryl Wright, an Australian Colombo Plan visiting lecturer. The Colombo Plan was a developmental aid scheme for Asia, originally signed in Colombo by Australia, Canada, India, New Zealand, Pakistan, Sri Lanka, and the United Kingdom [15]. Wright taught psychology as part of the social work curriculum at the University of Malaya [16], later renamed National University of Singapore (NUS). The first specialty psychology program started in 1987, followed by a clinical psychology program in 1998, patterned after British programs [17]. Singaporean psychology education was thus dependent upon imported models [16]. Until the year 2000 all psychology lecturers in Singapore were trained in Canada, the UK or USA [17].

Psychology arrived more recently in Malaysia. The first psychology course was taught at the Anthropology and Sociology Department of the *Universiti Kebangsaan Malaysia* (UKM; National University of Malaysia) by two Malaysians [18, 19]. The first department of psychology opened in 1979 at the UKM [20]. Psychology has continued to develop and was adopted by other universities, such as the International Islamic University of Malaysia which integrated psychology with an Islamic outlook [21]. Despite significant growth, there is still a shortage of psychologists in Malaysia [20].

40.3   Psychology in Asia-Pacific Countries Today

40.3.1   Australia

Australia is a major exporter of psychology education in Asia. Psychology education in Australia is offered in 38 out of 40 universities, of which 32 offer clinical psychology in Boulder or Vail models (Table 40.1). Degrees are standardized in duration and curriculum, and quality checks are executed by the Australian Psychological Accreditation Council (APAC) [22]. Accreditation enables unconstrained exchange of psychology students across Australian universities. However, it complicates admittance to Australian psychology programs for foreign students with non-APAC diplomas.

Table 40.1 Psychology education in Australia (universities in alphabetical order)

University name (year of establishment)	Type	Undergraduate programs	Graduate programs
Australian Catholic University (1991)	Public	BA; BSc; Hons	MPsy-C; MPsy; DPsy; GD
Australian National University (1946)	Public	BPsy	MPsy-C; DPsy; R
Bond University (1989)	Private	BSc; Hons	MPsy-C; MPsy
Charles Darwin University (1988)	Public	BSc; Hons	MPsy-C; GD
Charles Sturt University (1990)	Public	BSc; Hons	MPsy-O; DPsy; R; GD; other
CQ University Australia (1992)	Public	BPsy; Hons	MPsy-C; R; GD
Curtin University (1987)	Public	BPsy; BSc (specializations)	MPsy-C; MPsy; R
Deakin University (1974)	Public	BA; BSc; Hons; other	MPsy-C; MPsy; DPsy; R
Edith Cowan University (1991)	Public	BA; BSc; Hons; DM	MPsy-O
Flinders University (1966)	Public	BA; BSc; Hons	MPsy-C; DPsy; R
Griffith University (1971)	Public	BSc; BPsy; Hons	MPsy-C; MPsy; DPsy-C; R; other
James Cook University (1970)	Public	BA; BPsy	MPsy-C; DPsy; GDs
La Trobe University (1964)	Public	BA; BSc; Hons	MPsy-C; MPsy; DPsy; R
Macquarie University (1964)	Public	BA; BSc; Hons; DM	MPsy-C; MPsy; DPsy; GD
Monash University (1958)	Public	BPsy	GD; other
Murdoch University (1973)	Public	BA; BPsy; Hons	MPsy-C; DPsy; R
Queensland University of Technology (1998)	Public	BSc; Hons; DM	MPsy-C; MPsy; DPsy; R; GDs
RMIT University (1992)	Public	BSc; Hons; other	MPsy; DPsy; R; GD
Southern Cross University (1994)	Public	BSc; Hons	GD
Swinburne University of Technology (1992)	Public	BA; BSc; Hons	MPsy-C; MPsy; DPsy; R
University of Adelaide (1874)	Public	BSc; BPsy; DM	MPsy-C; MPsy; R; GDs
University of Ballarat (1994)	Public	BSc; Hons	MPsy-C
University of Canberra (1990)	Public	BSc; Hons; DM	MPsy-C; R; other
University of Melbourne (1853)	Public	BA; BSc; Hons	MPsy-C; MPsy; R
University of New England (1954)	Public	BA; BSc	MPsy-C; R
University of New South Wales (1949)	Public	BA; BSc; BPsy; Hons; others	MPsy-C; MPsy; R
University of Newcastle (1965)	Public	BPsy	
University of Notre Dame (1990)	Private	BSc; Hons; Double	R; other
University of Queensland (1909)	Public	BA; BSc; Hons	MPsy-C; MPsy; DPsy; R; other
University of South Australia (1991)	Public	BSc; BPsy; DM; others	MPsy-C; MPsy
University of Southern Queensland (1992)	Public	BSc; BPsy; Hons; others	MPsy-C; DPsy-C; R
University of Sydney (1851)	Public	BPsy	MPsy; DPsy-C; R
University of Tasmania (1890)	Public	BA; BSc; BPsy; DM	MPsy-C; DPsy; R
University of the Sunshine Coast (1999)	Public	BSc; Hons; DM	MPsy-C; DPsy; R

Table 40.1 (continued)

University name (year of establishment)	Type	Undergraduate programs	Graduate programs
University of Western Australia (1911)	Public	BA; BSc; Hons.	MPsy-C; R; other
University of Western Sydney (1989)	Public	BA; BSc; Hons	MPsy-C; MPsy; GD
University of Wollongong (1975)	Public	BPsy	MPsy-C; R; GD
Victoria University (1992)	Public	BSc; Hons	MPsy-C; DPsy-C; R; GD; other

BA Bachelor of Arts, *BSc* Bachelor of Science, *BPsy* Bachelor of Psychology, *Hons* Honours, *MPsy-C* Master of Clinical Psychology, *MPsy* Master of Psychology Other Than Clinical, *DPsy-C* Doctor of Clinical Psychology, *DPsy* Doctor of Psychology Other Than Clinical, *R* Research Master or PhD, *GD* Graduate Diploma or Postgraduate Diploma

40.3.2 Singapore

Singapore's higher education landscape is very diverse as a result of its internationalisation efforts [23]. This study is confined to campuses offering on-site degree education. Psychology programs are offered in two national universities, three foreign universities and in four joint-degrees. Clinical psychology specifically is offered in two universities: one national public university and private university from Australia (NUS and JCU Singapore respectively; Table 40.2). Clinical psychology is also available in a joint degree from NUS and University of Melbourne. Two out of the total three clinical psychology programs are at least partly Australian and are APAC accredited.

Psychology degrees in Singapore are not as standardized as in Australia. Although degrees have the same name as the Australian ones (Table 40.2), their duration or content may vary slightly. The Singapore Psychological Association does not at present accredit degrees. Regardless, the three clinical psychology programs in Singapore are similar to each other and to their Australian counterparts in terms of their duration, curriculum, and the selectivity of their admission procedures [24, 25]. Importantly, the majority of clinical psychology students are local Singaporeans; these programs greatly contribute to the city-state's clinical psychology workforce [17, 25].

40.3.3 Malaysia

In Malaysia psychology is offered in eight national universities and nine private universities, of which two are international campuses (Monash University and University of Nottingham; Table 40.3). Clinical psychology is offered in two Malaysian

Table 40.2 Psychology education in Singapore (universities in alphabetical order)

University name (year of establishment)	Type	Undergraduate programs	Graduate programs
EASB East Institute of Management (1984)	Private	BSc; Hons (joint with CMU)	
JCU Singapore (2003)	Private	BA; BPsy; Hons	MPsy-C; DPsy-C
Melior International College (2007)	Private	BPsy; Hons (joint with CQU)	
Nanyang Technological University (1991)	Public	BA; BSc	R
National University of Singapore (1905)	Public	BA; BSc; Hons	MPsy-C (also joint with UOM); R
SIM University (2005)	Private	BA; BSc (joint with UOW)	
Singapore Management University (2000)	Public	BSc	

BA Bachelor of Arts, *BSc* Bachelor of Science, *Hons* Honours, *MPsy-C* Master of Clinical Psychology, *DPsy-C* Doctor of Clinical Psychology, *R* Research Master or PhD, *CMU* Cardiff Metropolitan University, UK, *UOM* University of Melbourne, Australia, *CQU* Central Queensland University, Australia, *UOW* University of Wollongong, Australia

universities (UKM and HELP University). Both of these clinical psychology masters are similar to Singaporean and Australian in terms of duration and curricula. Quality assurance has yet to be fully integrated with the Malaysian Psychological Association.

Noteworthy in the two Malaysian clinical psychology programs is the attention to psychological processes related to society and culture [18, 26]. This sociocultural focus was stated to be one of the aims of the psychology program when it was first established at UKM [19].

40.4 Future of Psychology Education

The data described above provides evidence for the de-territorialisation of psychology education and its curricula. Psychology education is highly similar across countries, and programs and knowledge are standardized. Clinical psychology is preparing students to work with imagined 'global citizens' [27], rather than with real Singaporeans, Malaysians or Australians1 whose mental health needs are shaped by their societal, cultural, interpersonal and physical contexts. Clinical psychology curricula focus on human universals, rather than specific cultural or societal knowledge about wellbeing.

Psychology curricula in Australia, Singapore and Malaysia are historically based upon psychology traditions from Europe and the United States. In the past psychology staff was trained in the west; today Asian universities are collaborating with Australian and other foreign universities who are advocating 'western' and or 'real Australian'[24] psychology programs in Asia. The spread of the de-territorialized

Table 40.3 Psychology education in Malaysia

University name (year of establishment)	Type	Undergraduate programs	Graduate programs
HELP University (1986)	Private	BSc, BPsy (also joint with Flinders University)	MPsy-C; MPsy
International Islamic University Malaysia (1983)	Public	BSc	MSc; R
International Medical University (1992)	Private	BSc; Hons	
Monash University Sunway Campus (1998)	Private	BSc; Hons	GD; R
Sunway University (1987)	Private	BSc; Hons; other	MSc; R
The University of Nottingham Malaysia Campus (2000)	Private	BSc; Hons; other	MSc; R
UCSI University (1986)	Private	BA; Hons	
Universiti Kebangsaan Malaysia (1970)	Public		MPsy-C; MPsy
Universiti Malaysia Sabah (1994)	Public	BPsy; Hons; other	MPsy
Universiti Pendidikan Sultan Idris (1997)	Public		MSc; R
Universiti Selangor (1999)	Private	BPsy	
Universiti Teknologi Malaysia (1972)	Public	BPsy	MSc, other
Universiti Tunku Abdul Rahman (1972)	Private	BSc; Hons	
Universiti Utara Malaysia (1984)	Public		MSc; R
University College Shah Putra (1997)	Private	BPsy; Hons	
University Tun Hussein Onn Malaysia (2000)	Public		MSc; R

BA Bachelor of Arts, *BSc* Bachelor of Science, *BPsy* Bachelor of Psychology, *Hons* Honours, *MPsy-C* Master of Clinical Psychology, *MPsy* Master of Psychology Other Than Clinical, *MSc* Master of Science, or Coursework/Research Combined, *R* Research Master or PhD, *GD* Graduate Diploma or Postgraduate Diploma

curricula in Asia could therefore be regarded as a continuation of the incorporation of foreign knowledge into Asian society, which, in today's postcolonial time, is more implicit than in colonial times.

The accuracy of these western psychology programs to Asian societies can be questioned. Its application in non-western contexts has been increasingly criticized. The rationale is that because psychology's knowledge base is mainly founded on research among western subjects it might be inapplicable in other cultures [28–30]. Furthermore, psychology spreads and applies western norms of behaviour and criteria for mental disorders in non-western countries [7]. This may even invite the occurrence of specific western mental health problems in these countries as these western mental health disorders become part of the symptom pool by which people express their mental distress [31].

40.5   Directions for Research

University education serves an important function in preparing students to address societal needs [32–34]. There is a need to scrutinise the viability of western psychology in Asian countries. Three research directions are apparent.

Firstly, an ethnographic perspective in which 'felt experiences' [35] of psychology students, psychology trainers and lecturers and clinical psychology practitioners are mapped. An ethnographic perspective can help identify specific mental health and training needs in Asian societies and inform further study on how to integrate those mental health needs into psychology teaching, research and community services.

Secondly, a postcolonial perspective on the import/export of psychology education, in which adoption of western psychology in Asian countries can be regarded as a continuation of the incorporation of educational and knowledge models from previous colonial powers. This perspective may shed light on how Asian countries deal with geopolitical and socio-cultural influence of former colonizing powers in defining norms for behaviour and psychology practice. These insights may illuminate how we ensure that psychology programs are contributing to knowledge sharing, rather than to knowledge imposition, or western hegemony [33, 36, 37].

Finally, there is a need for an interdisciplinary perspective on psychology education in Asian countries, in which perspectives from psychology, cultural anthropology and sociology are synergistically combined. Future research should focus on how universities can prepare students, staff and practitioners to question, recognize, diagnose and practice psychology to meet the mental health demands of the globalising world where commonalities and differences need to be recognised and understood. This question has the potential to inform the training and practice of clinical psychologists in Asian countries, and may also shed light on geopolitical relations in transnational education, globalisation and post-colonialism that are influencing the incorporation and application of psychology in the region.

40.6   Notes

1. Including large populations of Indigenous Australians, Hmong and other ethnic groups in Australia, as well as various ethnic groups in Singapore and Malaysia.

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Part V
Emerging Retail and Service Industries

Chapter 41
Job Satisfaction and Organizational Commitment—Retail Banking Services in Hong Kong

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Abstract The purpose of this research is to investigate the impact of job satisfaction and organizational commitment on the quality of retail banking services provided by customer contact employees of Chinese banks in Hong Kong. 109 responses from customer contact employees of ten Chinese licensed banks were gathered through a structured questionnaire survey. Factor analysis and multiple regression analysis were deployed and the results indicated that intrinsic job satisfaction and affective commitment contributed to service quality as expected, but unexpectedly, extrinsic job satisfaction and normative commitment did not. The analysis also showed that continuance commitment was negatively related to service quality. This research provides insights to the retail banking service management from the perspective of human resource management. It also demonstrates the importance of setting service quality as a management priority for Chinese banks in order to survive and prosper in the highly competitive Hong Kong banking industry.

41.1 Introduction

Retail banking sector is of paramount importance in the Hong Kong banking industry. As a core service industry, the robust retail banking business can be noted from the strong growth of deposit volumes, expanding considerably from HK$ 3,242 billion in 2005 to HK$ 5,004 billion in 2009. Fierce competition started since 2001 when the Hong Kong government further opened up the financial market and accompanied by serious price wars. Under such competitive environment, there is a good reason for management to place customer service at the central focus of retail banking business as banks are 'pure' service organizations.

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This research paper aims to test the impact of job satisfaction and organizational commitment on the service quality of customer-contact employees in Mainland Chinese banks (hereafter as "Chinese banks"). These Chinese banks refer to the Hong Kong branch outlets of Mainland-incorporated banks, and the Hong Kong operating subsidiaries of Mainland banking groups. As of 30 November 2009, Chinese banks in Hong Kong have reached a high number of 15 and five of these banks do not carry out retail banking business. Thus, the other 10 Chinese banks that offer retail banking services in Hong Kong fall within the target context of this study.

Nowadays, service industries are paying more attention to customer-contact employees to achieve company objectives by adopting a people-oriented rather than a profit-oriented approach. To enhance competitiveness, Chinese banks have to make radical changes to their business orientations and become more market-driven. One of the key ways will be to enhance the service delivery to customers by relying on satisfied and committed customer-contact personnel during the service encounter. This research provides insights as to the relative importance of job satisfaction and organizational commitment of customer-contact employees in relation to the service quality delivered to customers.

To the best of the researcher's knowledge, scant research on service quality has been located in the context of Chinese banks in the Hong Kong retail banking sector. Although previous studies have placed considerable efforts to explore the concept of service quality, little attention had been devoted in the target context and it provides the basic motivation for this study. Keeping the foregoing in mind, this study explores two important questions: What is the impact of job satisfaction on service quality? And what is the impact of organizational commitment on service quality?

41.2 Literature Review

The focus of the literature review is anchored in service quality, job satisfaction and organizational commitment. As a prelude to the theoretical discussion, service-profit chain is first explained and serves as a basis for the whole conceptual framework. By reviewing and synthesizing the relevant theories and previous research findings, five hypotheses are formulated in correspondence with the research questions.

41.2.1 Service Profit Chain

The concept of a service-profit chain was developed by the Service Management Interest Group at the Harvard Business School. This theory presents a high correlation between service quality and profits, stretching from inside out like a chain. It starts with an internal organizational functioning to run quality service operations, and then, links to the external functioning to deliver service value to customers, and ultimately, connects to revenue growth and profitability. Particularly, the concept

shows a significant and positive relationship by bridging employee satisfaction and loyalty to service quality. The value of service-profit chain is highly recommended in service management literature.

In service-profit chain, the 'chain of events' means each preceding event has an influence on the succeeding event. Reference [27] emphasizes that these linkages are mutually reinforcing, that is, employee satisfaction and loyalty contribute to customer satisfaction and loyalty, and ultimately to profits. The concept of service-profit chain assists to theorize the impact of job satisfaction and organizational commitment on service quality.

41.2.2 Nature of Service and Service Quality

Service, as the 'core product' of service industries, is far more difficult to manage and evaluate than goods. Pure services focus on customers' psychological experiences of the service process and outcome. Services have four typical attributes—intangibility; heterogeneity; perishability; and inseparability. Reference [56] argues that intangibility and heterogeneity are the two most distinctive ones. Intangibility means service does not exist physically and it is perceived in the minds of customers, while heterogeneity signifies that service outcome is influenced by people during the service delivery. Collectively, these two characteristics pose great challenges to service management on how to produce 'good product' in the minds of customers. In a different view, Reference [36] suggests that the most important feature of service lies at the inseparability of production and consumption, denoting the significance of service encounter at the moments of truth.

Although service quality has been defined in a variety of ways, common to all is that it is deemed as a comparison of customers' perceptions of the actual service received with their expectations of the desired service. For the purpose of this study, service quality refers to an overall evaluation of the retail banking services provided by customer contact employees of Chinese banks in Hong Kong.

Owing to the characteristics of services as mentioned earlier, the measurement of service quality is a challenging matter to firms. The most frequently reported set of dimensions of service quality was pioneered by Parasuraman et al. known as the SERVQUAL model or Gaps model. It defines quality as the difference between customers' expectation and their perception of the service delivered. This method uses SERVQUAL instrument that incorporating five service quality dimensions (i.e. tangibles; reliability, responsiveness, assurance and empathy). Reference [56] agrees that SERVQUAL dimensions are evidenced to be relevant to assess banking services, thus, all five dimensions are considered in this study.

The SERVQUAL model is also known as Gaps model, this model functions as a diagnostic approach to examine the differences (i.e. five gaps—Gap 1 as Expectations Gap; Gap 2 as Design and Specifications Gap; Gap 3 as Service Performance Gap; Gap 4 as Communication Gap; and Gap 5 as Service Quality Gap) between

perceptions and expectations of service quality on the part of management, employees and customers. According to Zeithaml et al. Gaps model can be divided into external gap (Gap 5) and internal gaps (Gap 1 to 4).

Since this research is confined to retail banking services provided by customer contact employees, it is particularly referring to Gap 3, that is, the service performance gap. Gap 3 refers to the difference between actual service delivery and a firm's service quality specifications (i.e. a performance discrepancy). Indeed, Gap 3 is the most difficult to close as there are many people variables affecting service delivery, but it has significant effects on the Service Quality Gap (Gap 5) as service performance is directly correlated to service quality. It is believed that the customer-contact employees during the service encounter will largely determine the level of service quality delivered to customers. Thus, many service management researchers have invested heavily on human resource management practices in the hope of closing Gap 3. Reference [36] mentions the need to strengthen human resource practices to foster employees' service abilities (e.g. through adequate training) and encourage employees' service willingness (e.g. through appropriate motivation and rewards systems). According to Burger et al. it is the customer-contact employees, not the services themselves, who provide a source of differentiation and create firms' competitive advantage.

41.2.3   Job Satisfaction and Service Quality

As service quality is of high importance to firms, it is imperative to identify the key factors that shape employees' attitudes towards service excellence. A key factor is employees' job satisfaction. This concept can be considered from two attitudinal dimensions: intrinsic job satisfaction and extrinsic job satisfaction. Intrinsic job satisfaction means employees' affective responses to a job and addresses the key characteristics of a job itself, such as, variety, autonomy, creativity, challenge, achievement, opportunity to use one's skills, and so forth. In relation to extrinsic job satisfaction, it refers to those features external to the job including pay, compensation, recognition, company policies, and supervision-human relations. Indeed, Reference [23] concludes that the intrinsic nature of a job is more important in predicting job satisfaction.

It is strongly believed that satisfied employees lead to satisfied customers. Employee satisfaction significantly links to service quality, and greatly contributes to customer satisfaction and higher profits. Since this study focuses on the service performance gap (i.e. Gap 3), job satisfaction is therefore deserved in-depth consideration.

Many previous studies have placed considerable efforts on job satisfaction in conjunction with performance and mostly supported a positive relationship between the two concepts. In particular, customer-contact jobs demand vast amount of emotional labor in the service transactions, while failure to conform to the emotional display rules may undermine customer satisfaction. In fact, job satisfaction has been found to

be antecedents of customer-oriented behavior, and thereby influencing service quality experienced by customers. As the overall job satisfaction contains both intrinsic and extrinsic dimensions, it is hypothesized that:

Hypothesis 1 (H1): Intrinsic job satisfaction has a significant positive effect on the service quality of customer contact employees.

Hypothesis 2 (H2): Extrinsic job satisfaction has a significant positive effect on the service quality of customer contact employees.

41.2.4 Organizational Commitment and Service Quality

As there has been comparatively little research investigating the effect of organizational commitment and work-relevant behavior, especially in the Chinese context, this study is motivated to study the concept of organizational commitment. Broadly speaking, organizational commitment is explained as the varying combinations of psychological forms of an individual's attachment to the organization. It is how an individual identifies and involves with his or her organization and/or is willing to leave it.

It is the notable three-component of organizational commitment anchored in this research. In Reference [39]'s study, their core conclusion is that the more the employee is committed to the organization, the longer he/she would stay, and vice versa. They further propose three components of organizational commitment in terms of employees' emotional feelings (i.e. affective commitment—employees' emotional attachment to, identification with, and involvement in the organization; and their intention to stay due to "want to do so"); cost perception (i.e. continuance commitment—employees' awareness of the costs associated with leaving the organization; and their intention to stay due to "need to do so"); and moral obligation (i.e. normative commitment—employees' feelings of obligation to stay with the organization; and their intention to stay due to "ought to do so").

According to Reference [55], during the crucial service encounter, the willingness of the employees to engage in discretionary effort will determine the service quality level delivered and affect customer satisfaction. In this frame, the logic of service-profit chain has clearly illustrated this interrelated relationship between employees and services. Employee attitude and behavior are developed and mirrored in the process of delivering value to customers and producing profits to firms. Hence, organizational commitment of frontline employees has a crucial role in determining the service quality level delivered to customers and building long-term customer relationships. Both Ghiselli's work and Karatepe's work report that committed employees tend to be committed to the provision of service standards.

This research focuses the efforts on the three components of organizational commitment and it is believed that not all forms of commitment can be associated with high service quality and job performance. It is argued that affective commitment is found to be the most effective driver of desired work behavior relating to attendance;

in-role job performance (i.e., the required performance by fulfilling organizational policies and job descriptions); citizenship behavior (i.e., extra-role behaviors towards organizational success); and work improvements. Of which, the significance of in-role job performance and extra-role behavior to the organizational success is highly valued, and both are strongly related to affective commitment. Similarly, normative commitment is found to have a direct effect on positive work behavior because employees with high normative commitment tend to see jobs more from the responsibility perspective. As to continuance commitment, Meyer and Allen mention that this form is least likely to correlate positively with performance as employees continue employment based on the cost-related concerns and are less likely to engage in discretionary efforts, and indeed, a negative relationship between continuance commitment and performance is found in the literature. Hence, it is hypothesized that:

Hypothesis 3 (H3): Affective commitment has a significant positive effect on the service quality of customer contact employees.

Hypothesis 4 (H4): Continuance commitment has a significant negative effect on the service quality of customer contact employees.

Hypothesis 5 (H5): Normative commitment has a significant positive effect on the service quality of customer contact employees.

Based on the above hypotheses, this study regards job satisfaction and the three components of organizational commitment as independent variables and service quality of the customer-contact employees as the dependent variable. The study will utilize the SERVQUAL scale to measure the dependent variable.

41.3   Methodology

A quantitative approach, using a structured questionnaire survey, was adopted in this study to investigate the impact of job satisfaction and organizational commitment of customer contact employees on their service quality.

41.3.1   Sample

In Hong Kong, a typical three-tier banking system is adopted, where banks are categorized into licensed banks (LBs), restricted license banks (RLBs) and deposit-taking companies (DTCs). Specially, only licensed banks are authorized to carry on a full range of banking business in Hong Kong. As such, the target frame of this research is set in Chinese licensed banks, which refer to Hong Kong branch outlets and subsidiaries of Mainland incorporated banks, registered as LBs under the Hong Kong Banking Ordinance.

Table 41.1 Coding of variables

Instrument	Research constructs	Labels of construct	Range of scale items
SERVQUAL	Service Quality	SQ	SQ1 to SQ12
Job Satisfaction Questionnaire (JSQ)	Intrinsic Job Satisfaction	IJS	IJS1 to IJS7
	Extrinsic Job Satisfaction	EJS	EJS1 to EJS8
Organizational Commitment Questionnaire (OCQ)	Affective Commitment	AC	AC1 to AC6
	Continuance Commitment	CC	CC1 to CC6
	Normative Commitment	NC	NC1 to NC6

41.3.2   Data Analysis

Out of the 150 distributed questionnaires, 109 useable ones were obtained, yielding a response rate of 72.6 %. Each of the six research constructs was given a label and each question item under the respective constructs was assigned a corresponding number (see Table 41.1).

41.3.3   Exploratory Factor Analysis

In relation to the dependent variable, with the rule of eigenvalues-greater-than-1, only factor 1 met the criterion with an eigenvalue of 5.827, accounting for 48.56 % of the variability in the original set of data. Hence, it suggested a one-factor solution for SERVQUAL. By observing, the KMO of 0.891 was far greater than the cut-off value of 0.5. The significant value ($p = 0.000$) of Bartlett's test indicates there were close relationships between the variables. Hence, all the data collected from SERVQUAL was suitable for proceeding with factor analysis. Conclusively, it found that the 12 items of SERVQUAL loaded on one factor significantly. All the values were above the recommended threshold of 0.5 for satisfactory factor loadings. Therefore, a one-factor solution for the dependent variable (service quality) was confirmed. This result was consistent with that obtained by Malhotra and Mukherjee's work.

Regarding the independent variables, a total of 33 factors explained a cumulative 100 % of variance. There were five factors with eigenvalues greater than 1 and accounted for a substantial amount (68.56 %) of variance towards what the instrument purports to measure. Hence, it showed a five-factor solution was logical in the combination of the original 33 variables. KMO value was 0.897 (> 0.5), indicating no concern with multi-collinearity. The value of Bartlett's test ($p < 0.001$) implied significant relationships existing between the variables. Therefore, all the data collected from JSQ and OCQ was appropriate to continue with factor analysis. In factor analysis, it was noted that the items loaded to the respective factors consistent with the original scales. Hence, exploratory factor analysis provides support for the construct

validity based on statistical procedure. It confirms construct validity by determining the contribution of each factor to the total variance observed.

41.3.4 Hypothesis Testing

The composite measure of multiple regression analysis was employed to assess the soundness of the research model, where a set of independent variables (IVs) comprise intrinsic job satisfaction, extrinsic job satisfaction, affective commitment, normative commitment and continuance commitment, and one dependent variable (DV) refers to service quality.

Service quality was statistically significantly correlated with intrinsic job satisfaction ($r = 0.333$, $p < 0.001$) and affective commitment ($r = 0.261$, $p < 0.01$) in a positive direction. However, service quality was statistically significantly correlated with continuance commitment in a negative fashion ($r = -0.229$, $p < 0.05$). Besides, it showed that service quality had no significant correlations ($p > 0.05$) with both extrinsic job satisfaction and normative commitment. Also, it indicated the five IVs were not correlated with each other, hence no multi-collinearity concern with this regression model.

The multiple correlation coefficient ($R = 0.505$) signified an above-moderate relationship between IVs and DV, while the R-Square ($R^2 = 0.255$) meant that approximately a proportion of 25.5 % variance in the DV can be explained by the combined effect of the five IVs. The ANOVA table showed the regression model was significant and reported that $F (5, 103) = 7.06$; $p < 0.001$, indicating the IVs did have an effect on the DV in varying degrees.

The coefficients table was used to compare the influence of each IV made on the DV. The largest influence on service quality came from intrinsic job satisfaction that showed the most significant Beta weight along with the highest t-test value and the significant p-value ($\beta = 0.333$; $t = 3.912$; $p < 0.001$), and next was affective commitment ($\beta = 0.261$; $t = 3.068$; $p < 0.01$). It denoted more than 99 % of confidence level for concluding that when either intrinsic job satisfaction or affective commitment increased, service quality increased as well. Thus, both H1 and H3 were supported.

As expected, continuance commitment reported a negative Beta weight associated with the same negative t-test value but a significant p-value ($\beta = -0.229$; $t = -2.691$; $p < 0.01$). It meant a certain amount of variance in continuance commitment will result in a corresponding amount of inverse effect on service quality. Thus, H4 was supported. As for extrinsic job satisfaction and normative commitment, the analysis reveals that they were neither correlated with service quality at less than 5 % significance level nor have significant contributions to service quality (EJS, $\beta = 0.155$, $t = 1.825$; $p > 0.05$; NC, $\beta = 0.007$, $t = 0.084$; $p > 0.05$). Thus, both H2 and H5 were rejected.

41.4   Conclusions and Implications

The research framework integrates all components of job satisfaction and organizational commitment into service quality investigation within a specific research context. Through quantitative research, the findings suggest that intrinsic job satisfaction and affective commitment are of definitive importance in affecting service quality. Hence, they qualify as the key drivers of service quality. In other words, the results indicate that promoting these two specific forms of job satisfaction and organizational commitment can effectively drive customer contact employees towards superior quality of service delivery. The two factors are critical for service quality management in the light of human resources management. Therefore, the overall research objective is achieved satisfactorily.

41.4.1   Implications

Satisfied and committed employees drive service value to customers and economic value to organization. Understanding this linkage is of paramount importance to service-profit-chain management. The findings of this research suggest that intrinsic job satisfaction and affective commitment, as the key drivers of service quality, contribute to closing Gap 3, while continuance commitment should be largely eliminated. Therefore, management efforts shall be placed more on promoting desirable performance derived from these key drivers, with a view to instituting consistent service performance with the prescribed standards.

41.4.2   Limitations

From a theoretical point of view, the research framework is strictly structured based on its own objective. As such, service quality is merely considered as a function of job satisfaction and organizational commitment, while other factors that may also affect service quality, e.g., stress and leadership, information technology and service climate, have not been taken into account. A direction for future research may ponder other factors that drive service quality. In terms of a methodological perspective, this research used a solely quantitative method, which might restrict the flexibility in the research process.

Chapter 42
The Influence of Brand Image and Brand Attitude Toward Buying Interest (The Case of Garuda Indonesia and Lion Air)

Hendro Lukman and Stevanus Adree Cipto Setiawan

Abstract This paper describes the competition on aviation industry in Indonesia. A phenomenon occuring in this industry that causes the decline in Purcashing Power will bring negative impact on domestic aviation industry. On the other hand the number of airplane passengers increases significantly, but this is not followed by increments of airline industry. Research was focused on two domestic airlines that have relatively large market share in this industry, Garuda Indonesia and Lion Air. Garuda Indonesia carries punctuality and convenience strategies both in aircraft and ground with target segmentation of passengers who are not sensitive to prices. Lion Air has a strategy of low cost carrier (LCC) with segmentation of passengers who have price sensitivity. This study analyzes if the brand image affects brand attitude, and if the brand attitude will affect buying interest. The result of this study describes that the brand image can enhance the perceived quality and advertising quality. Furthermore, the brand image will influence better attitudes toward the brand and buying interest.

42.1 Introduction

Business environment changes rapidly. Companies must be able to adapt to the changes with accurate identity as the aspects of competition in the market to win the competition. Corporate should be changed to fit with the environment and to maintain the loyalty of customers. The research was carried out in domestic aviation market. Aviation industry experiences an interesting phenomenon. Despite a decline in purchasing power that has negative impact on the domestic aviation industry, the number of domestic air passengers continues to increase and this is not followed by the growth of aircraft companies. The current growth of airline industry in Indonesia

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is competed by the 28 companies which serve domestic and international routes. This research was conducted on two airlines, Lion Air with a strategy of low cost carrier (LCC) and Garuda Indonesia which is more concerned with the differentiated strategy targeting on segmented passengers who are not sensitive to price but more concerned with the accuracy of the flight schedule and service in both the aircraft and the airport.

What influences people in choosing on airline? The first thing is a brand which is not only embedded with a product name and a name but also a "promise". Hence, companies want to build strong brand equity, because of the positive correlation between strong brand equity with profits and this gives future net profits for the company as well as the potential revenue in the future. Secondly, Buying Interest is derived from learning and thinking processes that form a perception. The interest creates a motivation that is kept in mind and becomes a very strong desire in the end when the consumers must satisfy their needs to actualize what is in their mind. Hierarchy of buying interest effects is used to describe the sequence of the emergence of beliefs. Attitudes serve as a reference that gets the influence from the environment. The state of brand which is known by the buyer will create an interested in making a purchase decision. Another thing is advertising. By using advertising, people can have opinions and create appeal to a product. Appeal is used to create things such as quality and expensive products. Basically, quality of a product or service may make an impulse buying behavior of consumer who determines the final decision about products on the market.

This research was conducted on gaps of researchers that gave stated that Buying Interest is not influenced by the perception of quality, but the other statement said that the quality perception will influence buying interest, purchasing decisions and brand loyalty directly. Therefore, this research will attempt to explain empirically about the factors that influence the buying interests. The factors examined in this study are the perception of quality, the quality of the advertising messages, brand image, attitudes towards the brand and purchasing interests to Lion Air and Garuda Indonesia.

42.2 Literature Review

42.2.1 Attitude Toward to a Brand

An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Attitude plays a major role in shaping the behavior (either positive of negative), attitudes to evaluate the marketing activities to be carried out, to understand the attitude of today's society, and it helps in better advertising activities. Attitude towards the brand is consumer behavior that is closely related to the value of the brand for consumers and consumer expectations. Positive attitudes toward the brand assessed depend on the brand preferred, the memorable brand.

42.2.2   Brand Image

Brand is a name, term, sign, symbol, design, or a combination of all of these. A brand is intended to identify products or services of a person or a group of sellers and to differentiate from the competitor or it can be said to be something related to the appointment, acceptance, trust, and hope, so that a brand of a strong product will make consumers feel more confident, comfortable, and safe when they buy the product (Kotler 2000). The brand is easily recognizable entity, and promising specific values. The brand image is a rational and emotional perception of a particular. Furthermore, dimension of the corporate image can effectively influence the brand equity which consists of product attributes, benefits, and behaviors in general. Product is related to the quality and innovation; people and relationships, consumer orientation; Value and programs are related to environmental awareness and social responsibility; the corporate credibility, and they are also related skills, confidence, and fun.

42.2.3   Quality Perception

The quality can make an impulse consumer. It is because the consumers determine the final decision about the quality of products on the market. Perceived quality can be defined as consumer perceptions of the overall quality or superiority of a product or service to relevant alternatives and in accordance with the objectives. The dimensions of the quality of the product are: (1) performance, (2) features, (3) conformance quality, (4) reliability, (5) durability, (6) serviceability, and (7) style and design. Consumer confidence in these dimensions often underlies the perception of the quality of a product, which eventually can influence the attitudes and behaviors toward a brand.

42.2.4   Quality Messages of Advertising

Advertising has a strong influence in persuading and is able to introduce new products or new uses. It can help consumers to differentiate one brand with other brands and it is able to demonstrate how to use the product. Advertising can be used to build brand association and to bring the message of improving quality of the product. Furthermore, advertising is one way in the formation of brand equity, and it can provide insight/ knowledge of the brand to consumers and increase the likelihood of a brand embedded in the minds of consumers that will give contribution in the formation of the association of the brand by consumers and when it is embedded, it can be translated into people mind of a position of a consistent behavior.

42.2.5 Purchasing Interest

Hierarchy of buying interest effect is used to describe the sequence of the emergence of beliefs. Attitudes and behavioral cognitive knowledge that consumers are acquired attributes, benefits, and the object (by evaluating information), while it refers to a feeling or attitude of effective response. Attitudes serve as a reference that gets the influence from the environment. Behavior is everything conducted by consumers to buy, discard, and use products and services. Theoretically, the third component of hierarchy effects can vary depending on the level of his involvement or even each element may be either partially. According to previous researcher, product evaluation can be a effected by price, brand and embedded information. However, in this research, the third component that engages in standard formation, i.e. cognition, attitudes, and behaviors can not separated from the information received by consumers.

42.3 Research Method

42.3.1 Population and Sample

The population is composed of generalization of regions for objects or subjects that have certain qualities and characteristics which are determined by the researchers to be studied, and then they make conclusions. Due to a very large population, the method becomes very sensitive, so that it is difficult to obtain a goodness of fit.

Sampling technique used here is a combination of accidental sampling and purposive sampling. This is done considering the number of samples that is very few in determining the number of samples, and the samples selected in the study were done by spreading the questionnaire. Respondents were randomly and accidentally selected by researchers with various considerations, including the representatives of the population and compliance with the terms of the instrument analysis. This research, sample is used 102 respondents with at least 18 years old, who living in Jakarta and interested in buying or using the services of Garuda and Lion Air.

42.3.2 Data Analysis Method

The method chosen to analyze the data must conform to the pattern of the study and the variables to be studied. To analyze the data, The Structural Equation Modeling (SEM) of the statistical software package AMOS 16 is used in the assessment of model and hypotheses. The analysis used is the analysis of the Structural Equation Model (SEM). The variables in this research are:

No	Indicator construct	Indicator variable
1	Perceived quality	X1: core capabilities
		X2: feature
		X3: quality conformity
2	Quality of advertising messages	X4: understanding of the message
		X5: memorable ad
		X6: advertisements provide reliable information
		X7: ads provide clear information
3	Brand image	X8: professional impression
		X9: modern impression
		X10: serving all segments
		X11: attention to consumer
4	Attitude towards the brand	X12: brand in mind
		X13: preferred brand
		X14: brand selected
5	Buying interest	X15: find information about where to purchase
		X16: looking for information about prices
		X17: immediate desire to buy

42.4   Results and Conclusion

42.4.1   Result

42.4.1.1   Hypothesis Model & Result

The results of tests in the confirmatory factor analysis of the overall model shows as below:
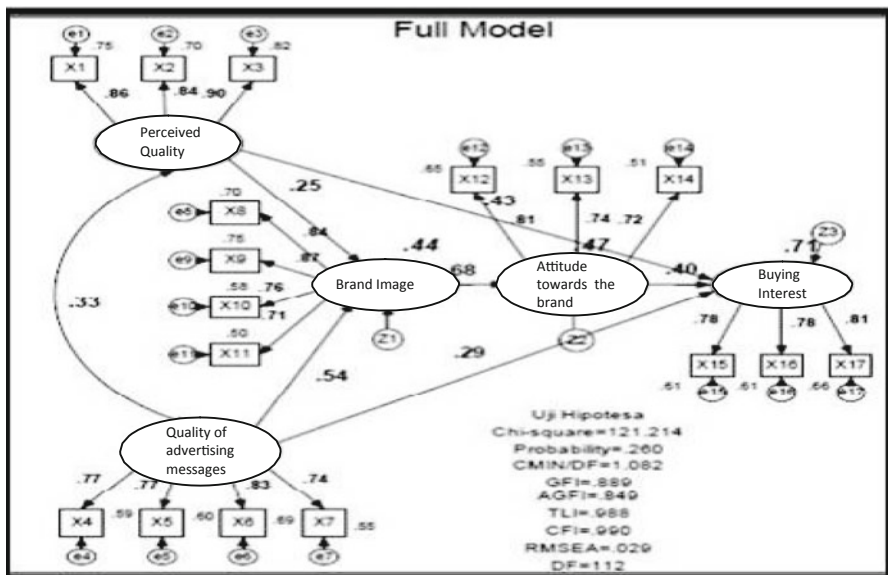
42.4.1.2   Perception Has a Quality Effect on Brand Image

The study is consistent with Zeithaml who suggested that the perceived quality of a product or service is closely related to reputation associated with the name of the brand. Under certain conditions, the consumer will only associate a product with its brand. It also said that the quality of the product received is related to the reputation associated with the brand name.

In business, the brand is often associated with a reputable company rather than the product itself. Anderson and Sullivan, proved that the reputation of a company in the consumer's point of view can be used as collateral for consumers to assess the quality of the product or service. Lau and Lee, consider the company's reputation as one of the most important factors of the characteristics of companies that can establish consumer confidence in the brand. Hoeffler and Keller point out, the creation of consumer perception that the company creates products and high quality services will affect the consumer's perception of the corporate image, and vice versa, for example, with rising airline Lion Air, the perceptions of consumers only focus on the term of low prices due to the strategy of low cost, while consumers flying with Garuda have created perceptions of maximum comfort and punctuality.

42.4.1.3   The Effect of Advertising Messages Quality on Brand Image

This study is in line with Mudiantono and Purnomo, whose research shows that companies in competitive markets put more attention on spending on advertising because of the instrument's effectiveness in maintaining brand loyalty. The good and popular brands are generally created by companies which spend more in the field of advertising to maintain the usefulness of the product information. The research was also supported by Mudiantono and Purnomo in their study of the decision to compete on the basis of competitive advertising, new varieties, and prices. The decision generally tends to overspend in promotional spending. Steenkamp et al. also said that advertising can be used to build brand association and bring the messages of improving quality of the product.

On the other hand, Krishnan and Chakravarti, and Shapiro and Krishnan, said that advertising is one way in the formation of brand equity, and it can provide insight/ knowledge of the brand to consumers and increase the likelihood of a brand to be embedded in the minds of consumers that will contribute in the formation of the association of the brand by consumers and when it is embedded, it can be translated into people's mind but has a position of consistent behavior. This is in line with Garuda's promotion, that communicates its product image by using the slogan "Proud to Fly with Garuda". Meanwhile, Lion Air uses the slogan "We Make People Fly".

42.4.1.4   Brand Image Has Effect on Attitude Toward the Brand

The results are in line with Chaundhuri that stated that attitude toward the brand is the overall evaluation of the consumer to the brand. The model found that increased

brand equity occurs when the market shows increasingly positive attitude toward the brand. Attitude toward the brand (brand attitude) will affect the attitude toward, and the brand brand equity can be used to predict future business performance. Ruth, Hilliar and Alper (2002) noted that attitudes toward a particular brand or image are influenced by the impressions of the brand itself.

42.4.1.5   Attitudes Toward Brand Has Influence on Buying Interest

In conclusion, there is a positive relationship between attitudes toward the brand and decision consumers to buy. According to Assael ([1], p. 82), attitude toward the brand which is a statement that assesses the mental whether it is positive or negative, whether it is good or not good, whether it likes or not. Research conducted by Wu and Lo (2009) shows that attitude toward the brand influence buying interest.

42.4.1.6   The Effect of Quality Perceptions on Buying Interest

The results showed that according to Zeithaml, Berry, and Parasuraman (1996), there are five dimensions of behavioral intentions or consumer interests, loyalty, switch, willingness to pay more, external response and internal response. This research developed by Mittal, Kumar, and Tsiros (1999), found that the function of behavioral intention or interest of consumers is a function of the quality of products and quality services. The better the quality of products or services, the more interested the consumers to the product.

42.4.1.7   The Influence of Advertising message Quality on Buying Interest

This study is also in line with Stigler in the Cobb-Walgren (1995), who states that a brand which is known by the purchaser will cause interests in making purchasing decisions. The impact of a product symbol gives meaning in consumer decision making because the symbols and images are important in advertising and they have an influence in the buying interest.

42.4.2   Conclusions

The research model developed consists of six hypotheses are: a positive effect on the perceived quality of the brand image (Hypothesis 1); quality advertising messages that have a positive effects on brand image (Hypothesis 2); positive effect on the brand image of the brand attitude (Hypothesis 3); attitude toward the brand to bring positive effect on buying interest (hypothesis 4); positive effect on perceived quality buying interest (hypothesis 5), and the quality of advertising messages which has a positive effect on buying interest (hypothesis 6).

The principle of the brand shows that brand equity is formed when consumers perceive that the brand is relevant to the needs, desires and purchasing power, so the branding strategy should follow the development of the consumer requirements, for example, if the trend of consumer preference shows that consumers want affordable but quality, memorable of air transport services, then the airlines should have a competitive advantage with two strategic position as well, which are low cost and differentiation. Airline industry with high competitive intensity shows that innovation strategy should be continued to create brand equity and to keep consumer loyalty. What do Garuda Indonesia and Lion Air do to win in airline industry battle? Garuda Indonesia operates low cost air transportation with "City Link" brand. On the other hand, Lion Air operates "Batik Air" (launching on April 26, 2013), airline transportation with full services aircraft to compete with Garuda Indonesia.

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Chapter 43
The Effect of Product Quality and Service Quality Towards Customer Satisfaction and Customer Loyalty in Traditional Restaurants in East Java

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Abstract This study aimed at investigating the effect of product quality and service quality on customer loyalty through customer satisfaction. This research found that product quality and service quality has significant effect on customer satisfaction. Customer satisfaction has a significant effect on brand loyalty. And customer satisfaction act as a mediator between exogenous variables to consumer loyalty. These results indicate that exogenous variables significantly influencing on brand loyalty are product quality and service quality. These results suggest that company should improve product quality and service quality that affect customer satisfaction and customer loyalty.

43.1 Introduction

Traditional restaurant becomes a very popular product among Indonesian. The traditional restaurants are in competition so they should increase quality of product. In the restaurant industry, the quality of products is a factor to consider. Even so it is with traditional restaurant that is required to produce the products according to international standards, particularly in terms of product quality. Traditional restaurant is always trying to sell a quality product and has more value compared to competitors' products. It has been proved that traditional restaurant has the best product quality in comparison with others. In addition to product quality is other factors that also can influence the brand loyalty, the quality of service. Associated with both of these, the product quality and service quality in the implementation of two things will greatly affect brand loyalty to the product.

Based on the background above, the formulations of the problems are: 1. Does product quality affect customer satisfaction at traditional restaurant in East Java? 2. Does service quality affect customer satisfaction at traditional restaurant in East Java? 3. Does customer satisfaction affect brand loyalty in traditional restaurant in East Java?

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43.2   Literature Review

43.2.1   Product Quality

Garvin (1987) has revealed the presence of eight dimensions of product quality that can be played by marketers. They are: performance, features, reliability, conformance, durability, serviceability, aesthetics and perceived quality. In this study will be used three indicators that characterize confident (Kotler 1995): 1) It tastes good, 2) Product Features, and 3) Packaging.

43.2.2   Service Quality

Zeithaml (1990, p. 19) said that the service quality is a mismatch between the expectations or desires of consumers with consumer perception. Another opinion was also expressed by Reid and Bojanic (2001, p. 39). From the above notions, it can be concluded that service quality is the difference between consumer expectations with the services received.

According Ziethaml et al. (1985), service quality is divided into five factors, namely: Reliability, Responsiveness, Assurance, Empathy, Tangible.

43.2.3   Customer Satisfaction

Oliver (1981) suggests that customer satisfaction is an evaluation of the surprise inherent in or attached to the acquisition of products and consumption experiences. Churchill and Suprenant (1982) formulate customer satisfaction as a result of the purchase and use of that obtained from comparison between reward and cost of purchasing unanticipated consequences. Westbrook and Reilly (1983) argue that customer satisfaction is an emotional response to experiences related to specific products or services purchased. Day (1984) defines customer satisfaction as post purchase evaluative judgments regarding specific purchase option. Cadotte et al. (1987) conceptualize customer satisfaction as the feelings that arise as a result of evaluation of the use of product or service experience. Tse and Wilton (1988) define customer satisfaction as the customer response to evaluation of perceived discrepancy between initial expectations before purchase and perceived actual performance of product after use or consumption of the product concerned. Mowen (1995) formulates satisfaction customer as the overall attitude towards a product or service after the acquisition (acquisition) and its use (Tjiptono 2005, p. 349).

43.2.4   Customer Loyalty

Customer loyalty is a measure of customer connection to a brand. This measure may be able to give us an idea of whether or not a customer to switch to another product

brands, especially if the brand is good there is a change regarding price and other attributes. Brand loyalty is a core indicator of brand equity that is clearly associated with sales opportunities.

The functions of customer loyalty are: Reduce marketing costs, Increase trade, Attract new customers, Giving time to respond to the threat of competition.

43.2.5   Effect of Service Quality on Customer Satisfaction

Oliver (2004) argues that "Satisfaction or dissatisfaction (satisfaction formation) can impact on repurchase intention, recommendations, word of mouth and loyalty (Consequences)". Formation of satisfaction can affect the intensity to buy again, recommend, word of mouth communication and loyalty. Bitta (2004) said that "the level of global satisfaction linkages with word of mouth communication, other behavioral responses and repeat purchase behavior" (global satisfaction level regarding with mouth-to-mouth communications and other behavioral responses repurchase behavior).

43.2.6   Effect of Product Quality to Customer Satisfaction

Merli (1990, p. 6–7) states that "customer must be a organization's top priority. The organization's survival depends on the customers. Reliable customers are the most important customers. A reliable customers is one who buys repeatedly from the same organization. Customer who are satisfied with the quality of their purchases from an organization become reliable customers. Therefore, customers satisfaction is essential. Customer satisfaction is ensured by producing a high quality of product. It must be renewed with every new purchase. This cannot be accomplished if quality, even though it's high satisfaction implies continual improvement. Continual improvement is the only way to keep customers satisfied and loyal. "

According to Kotler (1996, p. 583), "customer satisfaction and company profitability are closely linked to product and service quality. Higher levels of quality result in greater customer satisfaction, while at the same supporting higher price and lower cost."

43.2.7   The Influence of Customer Satisfaction on Customer Loyalty

The theory of the influence of customer satisfaction on brand loyalty is supported by Mowen (1995, p. 531). Mowen stated that "Brand loyalty is directly influenced by the consumer's satisfaction or dissatisfaction with the brand that has accumulated

over time". The statement explains that brand loyalty is influenced by satisfaction or dissatisfaction with a brand that has been accumulated in a long time. This can be reinforced by a statement Hawkins (1996, p. 699) that state "brand loyal consumer express greater levels of satisfaction than less loyal and non-loyal consumer." It is clear that if consumers are not satisfied with a product brand, the consumer may be occasionally switch to another brand, "or even to switch to other brands were deemed to meet the criteria of satisfaction so we can say the level of loyalty towards a lower level of satisfaction with their low."

43.2.8 Hypothesis

1. There is an influence of product quality to customer satisfaction at traditional restaurant in East Java.
2. There is an influence of service quality to customer satisfaction at traditional restaurant in East Java.
3. There is an influence of customer satisfaction to brand loyalty at traditional restaurant in East Java.

43.3 Research Method

43.3.1 Research Design

Research design that used in this study is hypothesis research. Design research conducted in this study is a survey to determine the factors that influence brand loyalty.

43.3.2 Identification of Variables

1. Independent variables (independent) used in this study are: Product quality (X1) and Service quality (X2).
2. Dependent variable (dependent) were used in this study are: Customer satisfaction (Y1), Customer loyalty (Y2).

43.3.3 Operational Definition of Variables

1. Product quality. Is the ability of a product to perform its functions, includes durability, reliability, ease of operation and improved accuracy, as well as other

valuable attributes. The construct is measured by indicators (Kotler 1995): It tastes good, Product Features, and packaging.

2. Service quality. Is a form of consumers' assessment of the level of service received by the expected level of service. The construct is measured by indicators (Czerniawski & Maloney 1999): tangibles, reliability, empathy, responsiveness, and assurance.

3. Customer satisfaction. Is a situation where expectations, wants and needs of customers are met. The construct is measured by indicators (Spreng, Mackenzie & Olshavsky 1996): suitability expectations, perceptions of performance, and customer assessment.

4. Customer loyalty. A sense of satisfaction for what they want according to what is expected during the use of a particular product. The construct is measured by indicator (Cadogan & Foster 2000): Consumers always prefer a specific brand for products purchased, Consumers are always trying to find your favorite brands, Consumers are very concerned with the purchased brands.

43.3.4   Types and Sources of Data

Data used in the study is qualitative data. The primary data source used is questionnaires distributed to respondents. Measurement data used in the study by scoring as follows: very good $= 5$, good $= 4$, moderate $= 3$, less good $= 2$, not good either $= 1$.

43.3.5   Tools and Data Collection Methods

The tools used in the study is questionnaires that contains questions that will be investigated. Questions as outlined in the questionnaire include respondents' opinions about the product quality and service quality traditional restaurant in East Java in question and also how loyal consumer attitudes toward the product. Data collection methods used in the study are as follows:

1. Observation. A data collection techniques that have specific characteristics compared with other techniques, interviews and questionnaires.
2. Questionnaires. Is a way to give a set of questions to the respondents to answer.

43.3.6   Population, Sample and Sample Collection Techniques

Population in this study are all consumers of traditional restaurant in East Java. While the sample in this study is 100 respondents. The number of samples taken 100 people are to meet the requirements to use SEM methods i.e. minimum 100 respondents. The sampling technique used was non-probability sampling in which the sample

is not randomly drawn, so that all people have the same opportunity to become members of the sample. The sampling technique used was purposive sampling, with a minimum age criterion of 17 years because at that age are considered adults and can make decisions, and at least once in a month visit the traditional restaurant in East Java.

43.3.7 Data Analysis Techniques

Data analysis techniques used in this study is Structural Equation Model (SEM). SEM measurement in testing the model, the model overall and structural models.

43.4 Analysis and Discussion

43.4.1 Validity

Based on Table 43.1, it seems that a significance value less than 0.05. It shows that the data is valid and worthy for further analysis.

43.4.2 Reliability

From Table 43.2, all variables visible alpha value greater than 0.6. It shows that the data is in a reliable and decent conditions for further analysis.

43.4.3 Structural Models and Structural Equation Analysis

Based on the analysis of the data can be determined from the structural equation model of the study as follows:

Equation 1: $Y_1 = 0.538\,X_1 + 0.302\,X_2$

Equation 2: $Y_2 = 0.431\,Y_1$

In Equation 1, the variable product quality, has a positive sign. Positive sign indicates that the direction of change that is if the variable increases, the Product Quality Customer Satisfaction will increase the value of the path coefficient of 0.538. Variable Quality Service, also has a positive sign. Positive sign indicates that the direction of change that is if the variable quality of service increases, customer loyalty will increase the value of the path coefficient of 0.302.

In Equation 2, Customer Satisfaction variable has a positive sign. Positive sign indicates that the direction of change that is if the variable increases, customer satisfaction Customer Loyalty will increase the value of the path coefficient of 0.431.

Table 43.1 Validity (Source: Data, processed.)

No. Item	Validity		Explanation
	Correlation	Sig.	
Product quality (X_1)			
$X_{1.1}$	0.868	0.000	Valid
$X_{1.2}$	0.873	0.000	Valid
$X_{1.3}$	0.868	0.000	Valid
Service quality (X_2)			
$X_{2.1}$	0.839	0.000	Valid
$X_{2.2}$	0.678	0.000	Valid
$X_{2.3}$	0.865	0.000	Valid
Customer satisfaction (Y_1)			
$X_{3.1}$	0.896	0.000	Valid
$X_{3.2}$	0.868	0.000	Valid
$X_{3.3}$	0.795	0.000	Valid
Customer loyalty (Y_2)			
$Y_{1.1}$	0.843	0.000	Valid
$Y_{1.2}$	0.810	0.000	Valid
$Y_{1.3}$	0.775	0.000	Valid

Table 43.2 Reliability with Cronbach Alpha Test (Source: Data, processed.)

Variable	Alpha	*Cronbach' Alpha*	Explanation
Product quality (X_1)	0.8878	> 0.6	*Reliabel*
Service quality (X_2)	0.7059	> 0.6	*Reliabel*
Customer satisfaction (Y_1)	0.8111	> 0.6	*Reliabel*
Customer loyalty (Y_2)	0.7279	> 0.6	*Reliabel*

Table 43.3 Index structural equation modeling (Source: Data, processed.)

Goodness of fit measure	Cut-off value	Results of analysis	Evaluation model
χ^2-chi-square	Kecil,	286.630	Good fit
Significant probability	≥ 0.05	0.070	Good fit
RMSEA	≤ 0.08	0.052	Good fit
GFI	≥ 0.90	0.915	Good fit
AGFI	≥ 0.90	0.907	Good fit
CMIN/DF	≤ 2.0	1.002	Good fit
TLI	≥ 0.95	0.968	Good fit
CFI	≥ 0.95	0.971	Good fit

43.4.4   Goodness of Fit Test

Based on Table 43.3 that the SEM test requirements have been met, apparently the result of a Structural Equation Modeling index indicates a good values, the following is an explanation of each:

Value of c2-chi-square obtained at 286.630. The smaller the value Statistics Chi-Square (χ^2), the better the model (as in the chi-square difference test, $\chi^2 = 0$, meaning absolutely no difference, H $\leftarrow$ 0 received) and accepted by the probability of the cut-off value for $p > 0.05$ or $p > 0.10$.

Table 43.4 Loading values from each of each variable (Source: Data, processed.)

Variable			*Standard loading*	t value	t table
Product quality (X1)	→	Customer satisfaction (Y1)	0.538	3.730	1.96
Service quality (X2)	→	Customer satisfaction (Y1)	0.302	2.184	1.96
Customer satisfaction (Y1)	→	Customer loyalty (Y2)	0.431	3.706	1.96

1. RMSEA value (The Root Mean Square Error of Approximation) of 0.052, so it can be concluded that the acceptability of a model that shows a good model, because the value of RMSEA is less than or equal to 0.08 is an index to the acceptability of the model shows a close fit of the model based on degrees of freedom.
2. GFI value of 0.915, so that the model is good (better fit), where the value of GFI is between 0 (poor fit) to 1.0 (perfect fit). Value ≥ 0.90 is a good model (better fit).
3. Value of AGFI (Adjusted Goodness of Fit) of 0.907, which is the recommended level of acceptance when AGFI ≥ 0.90, so that it can be interpreted that the models are at levels that are less well-good overall model fit.
4. Value of CMIN/ DF (The Minimum Sample Discrepancy Function) of 1.052, while the relative value of $\chi^2 \leq 2.0$ or ≤ 3.0 is sometimes an indication of acceptable fit between the models with the data, so it can be concluded that there is no indication of acceptable fit between models with data.
5. Value of TLI (Tucker Lewis Index) of 0.968, which is recommended as a reference value for the receipt of a model is receiving ≥ 0.95, so it can be concluded that the model was tested against a model is a good baseline.
6. Value of CFI (Comparative Fit Index) of 0.971, which is the recommended value of CFI ≥ 0.95, so it can be concluded that the model is very good for measuring the level of acceptance of a model.

43.4.5   Hypothesis Testing

Based on Table 43.4 the results of hypothesis testing can be described as follows:

1. Product Quality significant effect on the value of the Customer Satisfaction CR was 0.538 with a significance level of 3.730 (greater than 1.96).
2. Service Quality significant effect on the value of the Customer Satisfaction CR was 0.302 with a significance level of 2.184 (greater than 1.96).
3. Customer Satisfaction significantly affect the value of the Customer Loyalty CR at 0.431 with a significance level of 3.706 (greater than 1.96).

43.4.6 Discussion

1) There is influence of product quality to customer satisfaction at traditional restaurant in East Java Product quality variable has an average value of 13.38 and this value indicates that respondents strongly agree with the statement that there is product quality variable. It is mainly related to the attitude of the respondents were referring to the statement that the shapes and colors of traditional restaurant is very interesting. Hypothesis 1 product quality is a significant positive effect on customer satisfaction at traditional restaurant in East Java acceptable. It can be seen from the value of CR at 0.538 with a significance level of 3.730 (more than 1.96). This means that it is consistent with the results of previous studies stating that product quality affects brand loyalty. In addition, product quality is the only variable that is important for consumers to be loyal to a brand.

2) There is influence of service quality on customer satisfaction at traditional restaurant in East Java Service quality variable has an average value of 10.9. This value indicates that respondents strongly agree with the statement that there is service quality variable. It is the attitude of respondents referred to the statement that traditional restaurant employees always have spare time to assist consumers in finding needs. Hypothesis 2 quality services is a significant positive effect on customer satisfaction is acceptable. It can be seen from the value of CR was 0.302 with a significance level of 2.184 (greater than 1.96). The result is consistent with prior research that explains that the service quality influences brand loyalty. It can be concluded that the service quality is an important variable for consumers to be satisfied.

3) There is the influence of customer satisfaction on brand loyalty at traditional restaurant in East Java Customer satisfaction variable has an average value of 12.24. This value indicates that respondents strongly agree with the statement that there is customer satisfaction variable. It refers to the attitude of respondent claim that consumers are satisfied with the prompt and proper service provided by traditional restaurant employees. Hypothesis 3 customer satisfaction is a significant positive effect on customer loyalty can be accepted. It can be seen from the value of CR at 0.431 with a significance level of 3.706 (greater than 1.96). The result is consistent with prior research that explains that customer satisfaction affects brand loyalty. It can be concluded that customer satisfaction is an important variable for consumers to be able to draw their attention to repurchase a brand.

43.5 Conclusions and Recommendations

43.5.1 Conclusions

1. Based on respondents' answers regarding the product quality variable, it is known that respondents strongly agree. Based on the calculation, product quality affects on customer satisfaction. It means that hypothesis 1 is accepted.

2. Based on respondents' answers regarding the product quality variable, it is in mind that respondents strongly agree. Based on the calculations in mind, service quality influences customer satisfaction. It means that hypothesis 2 is accepted.
3. Based on respondents' answers regarding customer satisfaction variables, it is in mind that respondents strongly agree. Based on the calculations in mind, customer satisfaction affects on customer loyalty. It means that hypothesis 3 is accepted.

43.5.2   Suggestions

1. In order for companies trying to maintain the quality of existing products so that consumers can purchase goods of traditional restaurant and make consumers loyal to the brand of traditional restaurant desired.
2. In order to keep the company providing the best quality service so that consumers can remain loyal to the brand of traditional restaurant.
3. In the future studies in order to add information about the effect of product quality and service quality through customer satisfaction on customer loyalty at traditional restaurant in East Java.

43.5.3   Limitations of Research

There are several limitations to this study as follows:

1. The lack of clear grouping of respondents to the knowledge of traditional restaurant.
2. The lack of clear language of the proposed research to the respondent so that the respondents find it difficult to understand the questionnaire.

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Chapter 44
The Importance of Attributes in Customers' Buying Decisions: A Case of Bridal Business

Chun Meng Tang

Abstract This paper describes an application of the best-worst scaling method to identify attributes that are perceived important by customers shopping for a bridal package. The best-worst scaling method requires respondents to choose from a set of attributes one attribute which is perceived the most important and one the least important. A total of 239 valid responses were collected during a three-day wedding exhibition and analyzed. Besides the importance of attributes, analyses showed that some of the attributes had high heterogeneity. A high heterogeneity among attributes generally indicates a probable niche market. A two-step cluster analysis was also performed to explore if the respondents could be further categorized into clusters. Two clusters were identified. One cluster appreciated tangible attributes, whereas the other appreciated intangible attributes. The findings provide valuable customer insights for the formulation of business and marketing strategies in the bridal business.

44.1 Background to the Paper

The purpose of this paper is to illustrate an application of the best-worst scaling method in a research study. The research study was intended to understand attributes that were perceived important by customers in the decision-making process of signing up for a bridal package. Specific objectives were to: (1) differentiate importance of individual attributes, (2) examine heterogeneity of the attributes, and (3) identify likely clusters of customers.

It is vital for companies in the bridal business to enlarge their customer base to ensure continued business growth. To achieve this, a good starting point is to understand what attributes are perceived important by customers when making a buying decision [1–3]. A deeper understanding of the attributes provides excellent inputs for the formulation of business and marketing strategies. Best-worst scaling method has been suggested effective in understanding customer perception better [4, 5].

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Table 44.1 Summary of the results of best-worst scaling analysis

Attribute	Total best (B)	Total worst (W)	B-W	Avg B-W	Ratio scale	Relative importance (%)	Mean	SD
v1	171	364	− 193	− 0.202	0.685	46.28	− 0.808	1.935
v2	239	293	− 54	− 0.056	0.903	60.98	− 0.226	1.851
v3	329	186	143	0.150	1.330	89.80	0.598	1.871
v4	318	209	109	0.114	1.234	83.29	0.456	1.697
v5	246	244	2	0.002	1.004	67.80	0.008	1.763
v6	279	153	126	0.132	1.350	91.18	0.527	1.517
v7	244	182	62	0.065	1.158	78.18	0.259	1.663
v8	296	137	159	0.166	1.470	99.25	0.665	1.608
v9	285	130	155	0.162	1.481	100.00	0.649	1.424
v10	106	512	− 406	− 0.425	0.455	30.72	− 1.699	1.861
v11	203	248	− 45	− 0.047	0.905	61.09	− 0.188	1.521
v12	165	286	− 121	− 0.127	0.760	51.29	− 0.506	1.739
v13	226	163	63	0.066	1.177	79.51	0.264	1.688

v1 positive recommendation from people, *v2* prices of bridal packages, *v3* good selection of wedding gowns, dresses, and accessories, *v4* flexible bridal package options, *v5* good variety of photography themes, *v6* highly professional and competent staff, *v7* pleasant and courteous staff, *v8* effective customer problem-solving skills, *v9* high-efficiency customer services, *v10* nicely decorated and cozy business premises, *v11* well-equipped photo shooting studio, *v12* equal treatment of all customers, *v13* highly ethical business conduct

Least important (tick only one)		Most important (tick only one)
□	Positive recommendation from people	□
□	Prices of bridal packages	□
□	Flexible bridal package options	□
□	Nicely decorated and cozy business premises	□

Fig. 44.1 Sample question

The following sections explain data collection, summarize results of data analysis, and conclude the paper.

44.2 Research Design

After several interviews with people who were familiar with the bridal business, 13 attributes commonly perceived by customers as important when shopping for a bridal package were identified. These 13 attributes are listed in Table 44.1. Following a balanced incomplete block design [5], 13 questions were designed. In each question, four of the 13 attributes were shown (Fig. 44.1). Each attribute was shown four times across all 13 questions. For each question, the respondents would tick one attribute perceived the most important and one the least important.

Fig. 44.2 Importance of attributes—ranked by ratio scale
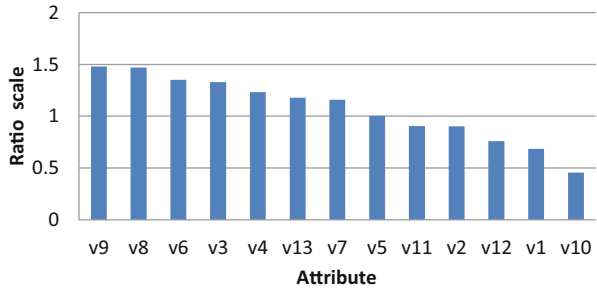
The study targeted respondents who were shopping for a bridal package during a three-day wedding exhibition. Two part-time helpers distributed a total of 1,000 paper questionnaires when the respondents approached the exhibition counters to register for exhibition entry. To encourage response rate, a small gift was given to the respondents when a questionnaire was returned. A total of 684 questionnaires were returned. After carefully examining the returned questionnaires, it was found that only 239 responses were valid. The rest of the questionnaires were discarded as they were negligently filled.

44.3 Data Analysis and Findings

44.3.1 Summary of Results

Table 44.1 presents a summary of the results of best-worst scaling analysis. Column one of the table lists the 13 attributes. Column two indicates the total number of times an attribute has been selected as the most important. Column three indicates the total number of times an attribute has been selected as the least important. Column four indicates the difference between the total best and total worst. A positive number means that an attribute has been selected as the most important more times than as the least important, whereas a negative number means otherwise. Column five indicates average B-W, calculated by dividing B-W by 239 (239 responses) and then 4 (four choices per question). Column six indicates ratio scale, calculated by first dividing the total best by total worst, and then taking the square root of the result. Column seven indicates the relative importance of individual attributes in percentage, in relation to the attribute with the highest ratio scale (v9, 1.481). Column eight indicates the overall mean of individual attributes. Column nine indicates the overall standard deviation of individual attributes.

Figure 44.2 ranks the importance of individual attributes by ratio scale. The five attributes rated the most important are: high-efficiency customer services (v9, 1.481), effective customer problem-solving skills (v8, 1.470), highly professional and competent staff (v6, 1.350), good selection of wedding gowns, dresses, and accessories

Fig. 44.3 Heterogeneity of attributes
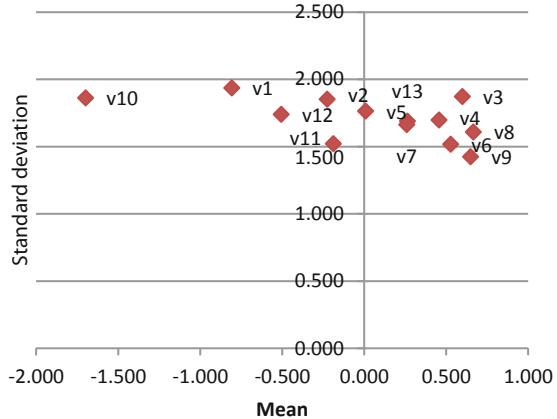
(v3, 1.330), and flexible bridal package options (v4, 1.234). The five attributes rated the least important are: well-equipped photo shooting studio (v11, 0.905), prices of bridal packages (v2, 0.903), equal treatment of all customers (v12, 0.760), positive recommendation from people (v1, 0.685), and nicely decorated and cozy business premises (v10, 0.455).

44.3.2 Heterogeneity of Attributes

Figure 44.3 plots the means and standard deviations of the attributes. The five attributes with the highest standard deviation are: positive recommendation from people (v1, 1.935), good selection of wedding gowns, dresses, and accessories (v3, 1.871), nicely decorated and cozy business premises (v10, 1.861), prices of bridal packages (v2, 1.851), and good variety of photography themes (v5, 1.763). For marketing purposes, not only it is necessary to identify those attributes that are of importance, it is also essential to examine heterogeneity of the attributes. The larger the standard deviation the more the disagreement among the respondents; whereas the smaller the standard deviation, the more the agreement [6].

It is evident that of the five attributes with the highest standard deviation, the attribute good selection of wedding gowns, dresses, and accessories (v3) is the only attribute having a large positive mean (0.598). The attribute good variety of photography themes (v5) also has a positive mean (0.008), but its mean is too close to zero. Thus, it can be safely ignored. The attributes positive recommendation from people (v1), nicely decorated and cozy business premises (v10), and prices of bridal packages (v2) have some of the highest standard deviations but they also have large negative means—a clear indication that although not perceived important by many customers, these three attributes might be key in influencing the decisions of some customers.

Table 44.2 Cluster distribution

		N	Percentage of combined (%)	Percentage of total (%)
Cluster	1	106	44.4	44.4
	2	133	55.6	55.6
	Combined	239	100.0	100.0
	Total	239		100.0
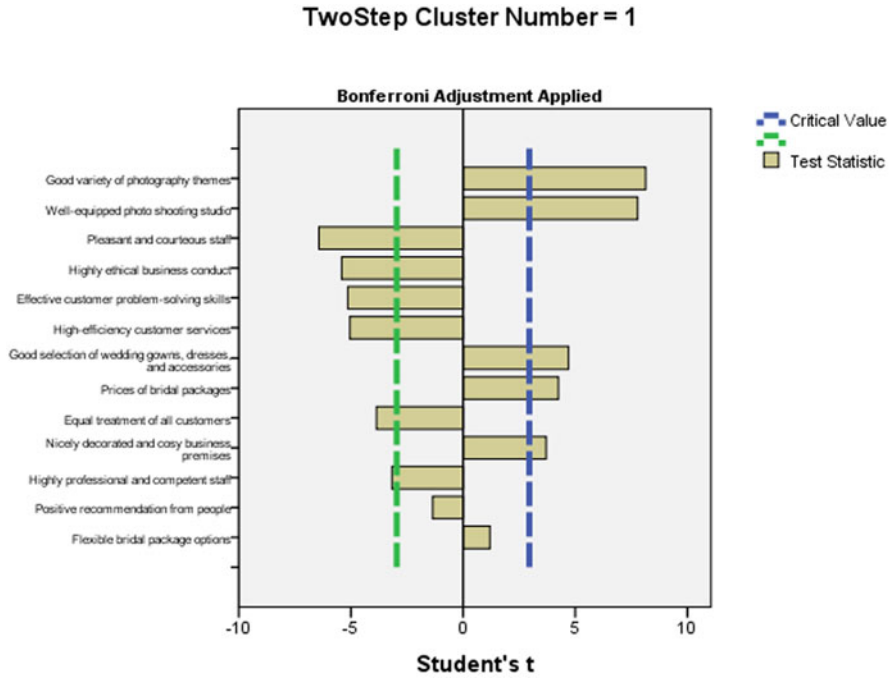
Fig. 44.4 Cluster 1

44.3.3   Cluster Analysis

To explore if the respondents could be further categorized into different clusters, a two-step cluster analysis was performed. In the study, the Bayesian Information Criterion (BIC) was used as the clustering criterion. Following the rule that the smallest BIC indicates a better model, a two-cluster model was selected [7].

Table 44.2 shows the cluster distribution. Of the 239 cases assigned to clusters, 106 were assigned to cluster 1 (44.4 %) and 133 (55.6 %) to cluster 2.

1. *Cluster 1*: Figure 44.4 shows cluster 1. The two dashed lines indicate the critical values which determine the significance of individual attributes. To be significant, the t-statistic of an attribute should exceed the dashed line either positively or negatively [8, 9]. It is evident that there are 11 attributes that are significant.
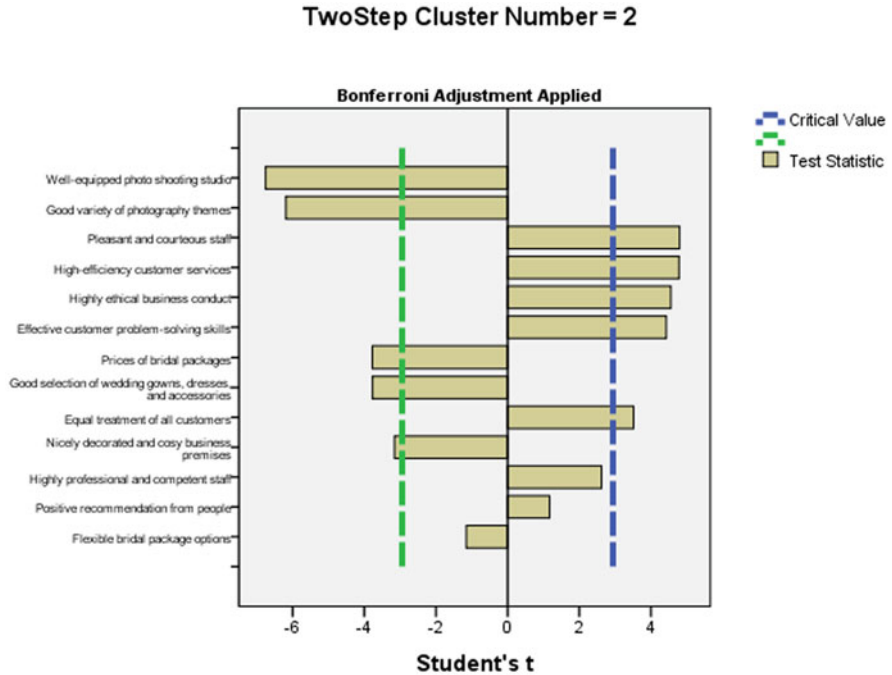
Fig. 44.5 Cluster 2

A positive t-statistic indicates that an attribute in the cluster has a mean which is larger than the overall mean, whereas a negative t-statistic indicates that an attribute has a mean which is smaller than the overall mean. Therefore, Fig. 44.4 shows that respondents in cluster 1 appreciate such tangible attributes as good variety of photography themes; well-equipped photo shooting studio; good selection of wedding gowns, dresses, and accessories; prices of bridal packages; and nicely decorated and cozy business premises.

2. *Cluster 2*: Figure 44.5 shows cluster 2. There are ten attributes that are significant. Respondents in cluster 2 clearly appreciate such intangible attributes as pleasant and courteous staff; high-efficiency customer services; highly ethical business conduct; effective customer problem-solving skills; and equal treatment of all customers.

44.4 Conclusion

This paper demonstrates how best-worst scaling method can be applied successfully in a research study to better understand the attributes perceived important by customers who are shopping for a bridal package. Study findings show that the attributes

differ in terms of importance. In addition, there is a high heterogeneity among the attributes. Further analysis reveals that there are two clusters of customers. One cluster appreciates attributes that are tangible in nature, whereas the other appreciates attributes that are intangible in nature.

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Part VI
Entrepreneurship, Creativity and Innovation

Chapter 45
Inquisitiveness in Organisational Life: Finding Things in Unusual Places

Ananda Wickramasinghe, Helan R. Gamage and Ayon Chakraborty

Abstract The purpose of this conceptual paper is to explore organizational approaches to creativity and innovation. This makes organization more competitive and sustainable in complex world of business. In this study, we review existing literature on creativity and innovation, and provide an account on the state of the art. Organizational culture and management strategy nurture creativity and innovation is characterized by organizational leadership, strategies, policies, processes, systems and structure. The culture of organization should promote and practice harmony and tolerance by giving employees the freedom to take risks and explore new ideas and allocating considerable amount of time for their personal experiments within the organization.

45.1 Introduction

Organizational learning and knowledge generation processes and practices are essential driving forces for the creativity and innovation processes in organization [1, 2]. Similarly, in today's knowledge-driven economy creativity and innovation is paramount element and key issue for competitiveness [3, 4]. Coordination, collaboration and implementing innovative friendly environment within organization in connecting people, appreciating new ideas, and accessibility of resources are critical for creative organizational life. Zdunczyk and Blenkinsopp argue that 'organizational learning and learning organizations' promote 'innovation and creativity, and the organizational cultures that support or inhibit these' processes (26p). Knowledge creation will evolve when corporate culture is encouraging to learning, flexibility that organization enjoys on emergent strategies, flexible and non-hierarchical structure that promotes learning by mistakes, experiments and being inquisitive to bring new

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insights, and how the organizational leadership connect and interact with the environment to exploit opportunities in unusual places and address social and environmental issues. Somechv and Drach-Zahavy conclude that level of innovation and implementation of innovation depends on team composition and team's climate for innovation. However, it is evident that managers' characteristics and their engagement in particular senior managers on creativity and innovation influence organizational life being a creative firm through their effect on employees' creativity and innovation. This requires means of idealization, inspirational motivation and intellectual stimulation, and providing confidence and protection from management for employees from practices such as being inquisitive and bringing new insights, learning from mistakes, allowing personal experiment times in working hours, collaborative and interdisciplinary teams to work on projects or in teams, being critical and creating positive tension within the work life for creativity and innovation. This paper attempts to elaborate above theories, concepts and practices to develop framework for organizational creativity and innovation.

45.2   Revisiting Creativity and Innovation

It is argued that 'there is no innovation without creativity'. As we discuss in elsewhere in this article, essence is for creativity and innovation is how leaders and managers workout simple and yet powerful ways of enhancing the pre-conditions for such organizational life. Hence, senior managers' one of the great challenges is the generation of organizational culture that value creativity, innovation and change. Creating positive tense creativity and innovativeness consents the organization to go beyond the limits of individual employees and collective knowledge through organizational learning, skill, and ability to respond complex unarticulated consumer needs effectively and efficiently avoiding unhealthy and unnecessary competition.

Creativity is the ability to bring something new such as an idea that makes a new solution to a problem, a new method or device, or a new artistic object or form. Okpara states that 'creativity is moving from the known to the unknown' while 'innovation is the successful exploration of new ideas'(1p.). Hence, any innovation arises with creative ideas. Though creativity is the precondition for innovation but not sufficient for effective innovation. It requires successful exploitation of creative ideas supported by many other strategies, factors and conditions outlined above briefly and in details in the next sections. Creativity requires an attitude towards inquisitiveness to find things in uncommon situations, the willingness to accept change and novelty, an ability to try ideas, scenarios or possibilities, passion for experiments, enjoying looking forward and outward to see future first for looking solutions or improvements of issues in society and social well-being, and more broadly in sustainable innovation for ecological sustainability for generations to come. Creativity is novel same time it should be appropriate and help to solve social problem for new idea to be sustainable.

Innovation is an outcome of making the best ideas into reality through a series of exploitation processes. Innovation brings new value for the organization. Innovation fosters from flexible and continuous support and allocating generous amount

of resources, supportive learning organization, effective teams and projects, generating new forms of connections and being vigilant on environmental changes and being creative and innovative in exploiting appropriate opportunities even converting threats as opportunities for social wellbeing which has both the social and economic value.

Nations, societies, communities, and enterprises throughout the world are experiencing huge crisis of rising global warming, high energy and material costs, fierce international competition, short life cycle of new technologies, increasing outsourcing even core businesses, staggering high cost of security, civil unrest, interesting changes in demographics such as aging population, increasing digitalized communities and the convergence of consumer lifestyles are name a few. Organizations and their employees require responding proactively to exploit opportunities within these major challenges to be survived and prosper. When everything is going be expensive and leading crisis, organizational life needs passionate and compassionate to be creative and innovative and requires pushing ever before as first mover advantages and continuity of creative and innovative lifestyle of the organization bring the rewards for such organization, people and society at large. Hence, organizations require moving from technical innovations towards more strategic innovations to address social, demographic, political, ecological, market and industry changes efficiently and effectively.

45.3   Organisational Life for Innovation

New paradigms of industrial production in industrially advanced countries have been codified into a number of models—flexible specialization, lean production, systemofacture, post- Fordism and industrial districts, among many others. These models are abstractions which highlight the elements which are presumed to be crucial to the success of a particular firm, sector or region. It is often claimed that the model represents a decisive break with established forms of production offering substantial improvements in performance.

The experiences of Japan and Italy have been codified into two widely diffused models of industrial development: the lean production model, and the industrial district model. The lean production model abstracts from the case of Toyota in Japan to define a set of principles which are held to be a new standard of best practice widely applicable across industries and across the world. According to Womack et al., "the fundamental ideas of lean production are universal—applicable anywhere by anyone—and that many non-Japanese companies have already learned this" (p. 9). Lean production, therefore, constitutes a new production paradigm which should replace mass production wholesale. According to the authors, "Clearly, we think that it is in everyone's interest to introduce lean production everywhere as soon as possible, ideally within this decade" (p. 256). The belief in the new paradigm establishes a strong prescriptive element at the heart of this analysis. This is one of the reasons for the book's enormous popularity.

Studies of the process of technological innovation are concentrated mainly in the US and UK. But the findings of these studies cannot necessarily be generalized to both NICs and LDCs. Limited number of research of this type has been done in newly industrializing countries. A few exceptions might include studies conducted in Latin America, Taiwan, and Korea. These studies either focus primarily on the process of assimilating imported technology or test research frameworks developed in DCs.

The source of initiation (user initiated versus innovator initiated) appears to be an important variable to understand difference in the innovation behavior of firms. Firms (or project teams) that respond to specific orders or inquiries from users are likely to have better ideas about users' needs, but less information about technical feasibility, while firms that deliberately search for new markets and techniques for innovation are likely to have less information about potential users and the marketability of the ideas. But they are apt to have better ideas as to how a technically feasible product can be developed, because technical feasibility must have been considered at the start of the project. Accordingly, their information searching and problem solving behaviors plus communication patterns with markets and technical sources associated with user initiated innovations are expected to differ significantly from those with innovator initiated innovations.

Recent research on the dynamics of growth and development has focused not merely on input-output analysis in the neoclassical sense of relegating the contribution of innovation and technological progress to a residual status, but more significantly, on technological learning and the network of relationships between the various 'actors' directly or indirectly involved in the production system. The latter is particularly crucial as it provides a sustainable and systemic basis for knowledge production, knowledge sharing, learning and the development of innovation capability. Long-term or sustainable growth is essentially a function of innovation. The absence of innovation would limit the extent beyond which even improvements in returns to scale and the rate of capital utilization cannot be expected to warrant sustained expansion of output. Hence the growing policy concern with innovation initiatives.

In theory, joint ventures offer the best mechanism for effective technology transfer to developing countries because of the potential for learning arising from the interactions between expatriates and local counterparts. In practice, however, carriers of FDI to developing countries would rather that they had little or no joint venture involvement at all for fear of the high transaction costs due to the cultural and technological distance of prospective local partners. Generally speaking, joint ventures would be effectives promoters of innovation when implemented in countries at higher levels of economic development where the industrial culture is well-established and the institutional mechanisms for learning from the technologies transferred are in place.

For all the policy support afforded and regulatory measures adopted, however, joint ventures have generally been found wanting as a vehicle of technological learning and innovation for the host countries. Much of this is ultimately due to the

limitations of the 'import substitution' culture underlying the industrialization experience of many developing countries. Import substitution was applied in these countries largely as a 'supply push' exercise aimed at market extension for the products of existing technologies. The strategy was also implemented, if by default, in compliance with the prevailing social, economic and political ethos, thus consolidating the status quo rather than challenging it in the Schumpeterian sense through the onset of waves of 'creative destruction'. Two factors, in particular, reinforced the sustainability of the status quo consequent upon import substitution. First, implementation of the import substitution regime was supported by a system of learning that was for the most part geared to enabling individuals to operate imported technologies, and rarely to building on these technologies through critical appraisal and reverse engineering. This was further reinforced by the restrictive terms and conditions that characterized conventional agreements of technology transfer to developing countries. Second, technology transfer and import substitution occurred in the absence of an integrated system of institutional development that is capable of promoting innovation on the back of technologies obtained through transfer arrangements. The result was the emergence of a dual system of social, economic and technological structures that consolidated the culture of fragmentation and militated against prospects for innovation and sustainable development.

Against this background, we posit the view that it is not the growth in the number and variety of technologies a country obtains through transfer arrangements that is crucial for innovation, but rather the cultural and institutional context within which these technologies are applied. The following section explores how effectively leaders inspire and facilitate pre-conditions for creativity and innovation using five senses (sees, listen, touch, smell, and taste) mindfully and attentively, and suspending routine thinking and work (free mind), forward and out word looking, and connectivity to find creative solutions for social and environmental issues as sustainable innovation.

45.4 A Framework for Organisational Creativity and Innovation

Every organization has its own context and unique way of promoting, cultivating and managing creativity and innovation. However, many studies and organizational practices found that there two key factors that keep organizational life creative and innovative, they are culture and talent that organization requires finding the right people and engaging them in the tension environment. It may not be the case that organization's innovation process is structured, centralized or completely flexible or in-between, but how managers generate culture to engage in creative and innovative ideas, works and assure such risk taking and experimenting environment. In essence, managers inspirational organizational culture that shape the working environment, attract insightful and competent people that can work individually and in teams that nurture creative and innovative engagement without much effort as once such systems and processes and practices established. Every levels of managers has role

to play to inspire employees towards creativity and innovation and allowing them for room for improvements and challenging the way of doing things on day to day basis. Top management constant engagement and communication of their philosophy on innovation across the organization thrives and glues entire organization together. It is important that managers are also creative and innovative and being an exemplar for employees by promoting curiosity and practicing it by themselves. Question is that how many managers or leaders prepare to take this challenge and communicate their creative and innovative intension and processes effectively for their employees. It is very significant to understand perspective gaps between employees and managers to make a genuine commitment on creativity and innovation in work organization.

Managers who work with creative people cannot be fully flexible and allow complete freedom to do whatever they wish to do, they need to maintain discipline while allowing creative freedom, providing space for intrinsic motivators such as curiosity, enjoying risk-taking and joy to grow while providing appropriate extrinsic motivators, such as compensation, recognition—and sometimes consequences for continuous failures. Research reveals that managers' characteristics impact on creativity and innovation, and in turn innovation effects on employees. Employees' creativity is shaped by top managers' idealization, inspiration and intellectual simulation (p. 344). It is evident that manager's values and personality influence organizational creative life which translates via their influence on employees' creativity and innovation. Managers require creating and sustaining supportive organizational climate through their values on creativity and innovation to reap most out of employees' creativity and commitment on innovation. Creative and innovative organizational life generates flexibility to respond quickly for market forces, improve quality of product and lowing cost. Therefore, essential capabilities lead effective innovation.

Organizational strategy needs to be centered in creativity and innovation by understanding what really innovation means to the organization; exploring or crafting vision that reflects creativity and innovation; developing organizational and business model that reflects organizational chemistry and biology for effective governance to deliver innovation; formulating indicators to measure how healthier the innovation is for the organization and society; and taking initiatives and providing inspirational motivation systems for sustainable creative and innovative practice and environment.

Organizational structure should be flexible and aligned to promote and generate strategic ideas such as looking forward and outward; creative and flexible mind for room for improvements that is staring from existing products, processes, or systems; idealizing for social issues/unarticulated demand; go beyond boundaries i.e. industry paradigms; value chain partnerships. Creating culture of learning is paramount to sharing and grow together in entrepreneurial and competitive organization.

Processes and systems are critical to coordinate effectively and efficiently. Simple systems need to be in place to promote and capture creative and innovative ideas throughout the organization and create interdisciplinary and inter-functional groups. It is equally important to filter and manage promising ideas from projects to develop further and implement.

As we discussed above, organizational culture and climate is in and around successful creativity and innovation. Senior managers and supervisors need to be

inspirational on innovation and be exemplar for employees. Organization life requires cultivating smart risk-taking and experimenting new ideas. Learning and sharing is fundamental around the organization for creating generosity and learning from others. This requires challenging existing perspectives, and encouraging and appreciating challenging perspectives. For all of these, Senior managers need find ways to attract, develop and retain (reward and appreciate) human capital that meet organizational vision on creativity and innovation.

In essence, how effectively leaders inspire and facilitate pre-conditions for creativity and innovation using five senses (sees, listen, touch, smell, and taste) mindfully and attentively, and suspending routine thinking and work (free mind), forward and out word looking, and connectivity to find creative solutions for social and environmental issues as sustainable innovation.

45.5 Conclusion

Creativity and innovation within organizations is influenced by management processes, systems and practices which will be governed by senior managers' philosophy and commitment on creativity and innovation through vision, strategic goals, strategy and structure with culture of learning, and carefully select, develop and retain creativity-oriented group of employees.

However, every organization has its own context, strategy, goals and unique ways for creativity and innovation. Therefore, shaping and reshaping its own contextual and unique processes, systems and practices are most important for effectively managing and cultivating from innovation.

Finally, it is necessary to replicate this study in different environments. The pattern observed in one country which has adopted conservative policies toward foreign investors does not necessarily prevail in other newly industrializing countries, where liberal policies toward foreign investments by multinational companies have been adopted. Even within one country different patterns may be observed indifferent industries. For example, consumer electronics firms can easily purchase related foreign products in the international market; therefore, their idea generation and problem solving patterns are expected to differ.

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Chapter 46
Profile of Entrepreneurs of SME Sector in Sri Lanka: Motivations, Perceived Success Factors and Problems

B. Nishantha and K. P. J. M. Pathirana

Abstract Seventy six entrepreneurs in Colombo district, Sri Lanka were surveyed to determine their motivations for business ownership; the perceived success factors, and their problems. Data was collected through personal interviews from the list of entrepreneurs who were following certificate course on entrepreneurship at Open University of Sri Lanka. Based on survey responses, the primary reasons for starting a business are to increase income, to obtain personal freedom, and to secure job security. According to the factor analysis, small and medium-sized enterprises owners are driven more by income related rewards than intrinsic rewards. The most important business success variables are entrepreneur related characteristics, product and finance issues, social connections and human capital. Management skills and government connections were also cited as critical success factors. The most serious problem faced by small entrepreneurs in Sri Lanka is the unreliable employees. Other important problems include weak economy, unable to obtain long term finance, and too much competition.

46.1 Introduction

Similarly to other developing countries, Small and Medium Enterprises (SMEs) are playing a vital role in Sri Lankan economy. "Sri Lanka's economy is predominantly a Small and Medium Enterprise economy where over 50 % of GDP is produced by the SME sector" [1]. Sri Lankan government recognized that small enterprises as the engine of growth of the economy and has made various measures to promote entrepreneurial culture in Sri Lanka. This study examines the motivations, success factors and problems of small entrepreneurs in Sri Lanka. A better understanding

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of the motivators, success factors and problems will help policy makers to design policies that encourage and promote small enterprises. On the other hand, knowledge on success factors and potential problem areas will be useful for practicing entrepreneurs to keep their organization on right track.

46.2   Motivators, Perceived Success Factors and Problems

Substantial numbers of researchers in developed countries have taken various approaches to explain important motivators of entrepreneurs that have influenced them to start their own businesses [2]. According to some researchers, motivation for entrepreneurial career is determined by inner personality traits such as the need for achievement, a desire for innovate, propensity for risk taking, and a preference for locus of control. Simultaneously, some researchers believe that external/situational factors are more important than personality factors. Situational factors classified in to two sub factors namely, push factors and pull factors. Pull factors such as desire to be one's own boss, change life style, increasing wealth and getting the advantages of prior work experience are attracting individuals to enter to entrepreneurial career. External negative conditions such as unemployment, losing job and low paying job with little upward mobility also attracting individuals for entrepreneurial career and those situations are considered as push factors.

Business success can be defined as the ability to survive or remain in the business. Researchers in entrepreneurship area have concerned success factors in three different aspects. The first group looked into psychological and personality traits, while substantial numbers of researchers in second group have been focused on variables related to external environment. Researchers in third group have argued that managerial skills and training are important success factors. This study is primarily focused on managerial skills, training and external environment related factors which small entrepreneurs perceive as instruments for business success.

Problem can be defined as the individuals' perceived difference between a current and a desired state of reality. Organizational problems can be classified into different categories namely, human relations and technical issues, organizational inputs and outputs or as strategic and operational issues. At the macro level, the problems facing entrepreneurs in Sri Lankan small enterprise sector are similar to those facing entrepreneurs in other emerging economies. First, entrepreneurs in emerging countries face an unstable, highly bureaucratic business environment. The laws governing private enterprise, especially business registration and taxation systems, are overly complex and difficult to understand. As highlighted in the white paper on SMEs development in Sri Lanka, Sri Lankan SMEs are facing number of problems or constraints in areas such as less access to credit, information technology and markets. A research carried out on Malaysian SMEs have found that small enterprises in food processing sector are encountering issues with internal and external environments, institutional, availability of both tangible and intangible resources, organizational and managerial that most likely affect the growth of firms. In a study of Turkish

entrepreneurs, researchers have found that complex and confusing tax structure, unreliable employees, and the inability to maintain good records, and a weak economy as are most critical problems.

46.3   Methodology

46.3.1   Sample and Data Sources

The definition of an SME is differs from organization to organization and from country to country. This study used the definition given by Industrial Development Board (IDB) of Sri Lanka, *"an enterprise with annual turnover less than 1 million and/or full time employees not exceeding 50 employees"*. By using convenience sampling method 80 entrepreneurs were selected who registered for Certificate Course in Entrepreneurship Development at the Open University of Sri Lanka. Four of respondents were excluded because they answered in an inappropriate manner. Thus, the final sample contained 76 SMEs. The data has been collected through face-to-face individual interviews.

46.3.2   Instrument Development

Motivation factors, perceived success factors and problems were measured using a 5-point Likert scale. The variables were selected based on previous surveys as described in previous section. Responding entrepreneurs are asked to indicate which motivation, success factors and problems are strongest and which problem was most severe. Respondents were encouraged to add their own motivation, success factors and problems if it was not on the list. Similar method was used by Benzing et al. to collect data for similar study from Vietnamese entrepreneurs.

46.3.3   Data Analysis

The data analysis had three stages. Stage one consisted of a descriptive analysis of variables belongs to motivation for entrepreneurial career, perceived success factors and perceived problems. A mean score for each motive, success variables, and problems were calculated and higher mean score reflects the importance of that variable. Phase two involved a principle component factor analysis and it determined whether or not a stable and reliable set of motivators, success factors and problems existed. An item factor loading of at least.40 was required for an item to be included on a factor. Phase three devoted to compare mean score of summated scales of each research dimensions and identify and rank the most important factors.

Table 46.1 Mean scores of Sri Lankan small entrepreneurs by factor related to motivation

Summated scale	Mean	SD	No. of variables	Rank
Scale 1–Factor 1: Intrinsic rewards	3.281	1.117	3	4
Scale 2–Factor 2: Security	3.842	0.875	3	1
Scale 3–Factor 3: Independence	3.662	0.976	3	2
Scale 4–Factor 4: Income	3.289	0.826	2	3

46.4 Results

Majority of the respondents (81 %) identified themselves as male, and 9 % as female. This finding is consistent with previous studies on Sri Lankan entrepreneurs. The mean age of the respondents was 40.62. More than 57 % have passed the GCE A/L examination and around 28 % respondents in our sample have passed the GCE O/L examination. While 8.5 % entrepreneurs have received university degree, 6.4 % of respondents replied that they have not passed GCE O/L. Considering the characteristics of enterprises the average number of employees is 5.11. A total of 88 % of the businesses were sole proprietorships, 10 % were partnerships, and 1 % was limited liability companies.

46.4.1 Motivation

Respondents were asked to provide10 reasons for selecting entrepreneurial career by using five- point likert sacle with one (1) being the "least important and five (5) being" extremely important. The results of the factor analysis for the motivation for entrepreneurial career suggested a four factor solution. The resulting factors were interpreted as *Intrinsic Rewards* (three items), *Family Security* (three items), *Independence* (three items) and *income* (two items). The resulting factor solution accounted for 69.6 % of the variance.

We used summated scale to see the most important motivating factor of small entrepreneurs in Sri Lanka and the results is shown in Table 46.1. The highest mean score (3.842) was for factor 2, the "*security*" factor and that factor include three variables namely, build a business to pass on, maintain personal freedom and job security. "Independence" emerged as the second most important motivating factor reporting a mean of 3.662 with 0.976 SD. It comprised with variables namely, to be own boss, use past experience and job security. The only motive that emerged concerning earnings is "income" and it reports a mean of 3.289 (SD = 0.976), thus becoming the third most important factor. The least important motivation factor is factor 1, *intrinsic Rewards* (Mean = 3.281) which relates to *satisfaction and growth*, *having fun* and *proving the abilities*.

Table 46.2 Summated scales of factors related to success variables

Summated scale	Mean	SD	No. of variables	Rank
Scale 1–Factor 1: Entrepreneur related characteristics	4.671	0.517	6	1
Scale 2–Factor 2: Management skills	4.168	0.806	5	5
Scale 3–Factor 3: Human capital	4.243	0.893	2	4
Scale 4–Factor 4: Government connections	2.507	1.072	2	6
Scale 5–Factor 5: Social connections	4.263	0.789	2	3
Scale 6–Factor 6: Product and finance issues	4.401	0.554	2	2

46.4.2   Perceived Success Variables

Factor analysis indicates that 17 success variables could be grouped into six factors. The first factor can be called "entrepreneur related characteristics" and include six success variables namely, hard work, reputation for honesty, position in society, customer service, friendliness and social skills, and explains 29 % of the variability. The second factor relates to "management skills" and comprises with five variables. Namely, previous business experiences, maintenance of accurate records, marketing, managing personnel, and good management skills. Factor 3 can be referred to as a 'human capital' because it consists with two success variables; good management skills and appropriate training. Factor 4 can be called as 'government connections' and includes two variables; political involvement and government support. Factor five comprises with two variables namely, social skills and support from family and friends. This factor might best be called 'social connections'. Factor six is called as 'product and finance issues' and it consists of two variables; access to capital and good product at competitive price.

Table 46.2 shows the summated scale score for each factor. The summated scale is the average score of the items in that factor. The mean score of 4.671 for the entrepreneur related characteristics factor is significantly higher than any other success factor. This indicates that among the six reported factors, Sri Lankan small entrepreneurs believe their success is most closely related to entrepreneur related qualities such as their hard work, reputation for honesty, position in society and customer service. The second highest mean score recorded by the product and finance issues. It implies the importance of supplying good product at competitive price and access to capital for business success. Social connections are the third highest important perceived success factor and it highlighted the importance of social skills and support from family and friends. Interestingly, factor four (government connections), which includes government support and political involvement is viewed as the least important factor among the six factors.

46.4.3   Problems

The analysis of the 13 variables yielded four significant factors which explained 69.516 of the total variance. The first factor was represented by three variables. They

Table 46.3 Summated scales of perceived problems of entrepreneurs

Summated scale	Mean	SD	No. of variables	Rank
Scale 1–Factor 1: Lack of business training	3.473	1.197	3	3
Scale 2–Factor 2: Government problems	3.313	0.886	5	4
Scale 3–Factor 3: Lack of finance	3.553	0.769	3	2
Scale 4–Factor 4: Lack of employees	3.651	1.033	2	1

are lack of marketing training, lack of accounting records and lack of management training. The first factor can be named as 'lack of business training' and this factor accounted for 32.81 % of the rated variance. The second factor consists of five variables namely, high interest rates, poor transport, difficult at finding raw materials, too much government problems and complex tax structure. This factor explained 15.17 % of the rated variance and this factor may be termed as 'government problems'.

Three variables namely, unable to obtain short term finance, unable to obtain long term finance and too much competition load on third factor and that factor could be called as " Lack of Finance" as the two variables are related to shortage of funding. Fourth factor comprised of two variables associated with employees and it was termed as "lack of employees."

The summated scales on perceived problems are showing in Table 46.3. These scales were calculated as average score across items contained in factors and identified factors were ranked based on the mean values reported for four problems. 'Lack of employees' which reported a mean of 3.651with 1.033 SD emerged as the most crucial problem. 'Lack of finance' emerged as the second most crucial problem reporting a mean of 3.553 with 0.769 SD. The next two major problems are 'lack of business training' and 'government problems' which reported a mean of 3.473 (SD = 1.197) and 3.313 (SD = 0.886) respectively.

46.5 Discussion

"Entrepreneurs have multiple motives for creating their enterprises (Cromie 1987)." According to the survey results, Sri Lankan small entrepreneurs are motivated to enter into entrepreneurial career by four different motives: security; independence; income and intrinsic rewards. Although the mix of motivations is very similar in different countries, their levels of importance are different. Cromie has conducted a survey on entrepreneurial motivation in Northern Ireland and has found that entrepreneurs are primarily motivated by autonomy, achievement, a desire for job satisfaction and other non-economic rewards. Based on the study conducted in three African countries (Ghana, Kenya and Nigeria), Benzing, Cynthia and Hung found that the strongest motivator across countries was the opportunity to increase income. Some researchers are arguing that entrepreneurs in developed countries are motivated by independence and self-fulfillment more than income. This study also supports the idea that entrepreneurs in developing countries are primarily 'pushed' into entrepreneurial career by security, independence and income factors.

According to the survey results, Sri Lankan small entrepreneurs believe the most important success factors are entrepreneur related characteristics, product and finance issues and social connections. Based on the factor analysis, a factor we called the "entrepreneur related characteristics" factor, which included hard work, reputation for honesty, and position in society was the most important success factor. As these variables are mainly associated with personality of an individual it means that entrepreneurs in Sri Lanka believe they can influence their own business success. According to the results of the study, it is interesting to note that, entrepreneurs view government connections in terms of political involvements and government support as relatively unimportant factors to venture success. Benzing and Chu also have experienced same results on similar studies in Turkey.

Similar to other developing countries, Sri Lankan entrepreneurs are also facing multiple problems. "Understanding the problem patterns can make policy makers of small business in designing and implementing appropriate small business assistance programs." The item analysis of problems indicates that small entrepreneurs in Sri Lanka perceive that unable to attract and retain reliable employees as the most serious problem. Educated young people in the workforce are reluctant to join small enterprises due to their uncertainties of survival and they are trying to find more secured jobs in reputed private sector organizations or government sector. At the same time, substantial numbers of employees who are working in small enterprises are joining to the large enterprises after they receive sufficient work experiences. In addition to the lack of employees, other critical problems facing Sri Lankan entrepreneurs were lack of finance, lack of business training and government related problems. Entrepreneurs are facing problems at obtaining long term finance and short term finance. On the other hand, access to finance has been identified as one of the perceived success factor. Due to the lack of collateral, financial institutions are reluctant to finance for small entrepreneurs and many entrepreneurs are borrowing money from other informal sources at high rates of interest. Therefore, government needs to establish specialized banks for small entrepreneurs and introduce new loan scheme to provide short and long term finance at concessionary interest rate. Government and other supportive organizations need to focus attention to addressing the crucial problems such as lack of business training and government problems. Especially, the government has to take measures to implement training programs for entrepreneurs and that training should cover the areas such as marketing, record keeping and business management.

46.6   Conclusion

Small and medium enterprises have a fruitful role in job creation, innovation and socio-economic development in developing countries such as Sri Lanka. Motivations for business ownership, perceived success factors and problems come from several factors and the degree of importance of these factors may be varied from country to country. The result of this study identified four principle motivators

namely, security, independence, income and intrinsic rewards. Major perceived success factors in their order of importance are as follows: entrepreneur related characteristics, product and finance issues, social connections, human capital, management skills, and government connections. As most of the success factors seem to be related with entrepreneurs' characteristics, supportive organizations can take measures to promote this sector by embedding those characteristics among practicing entrepreneurs. In the case of problems face by SMEs n Sri Lanka, this study identified four problems namely, unable to attract and retain employees, lack of finance, lack of business training and government problems.

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Chapter 47
Identification of Positive Deviance—Methodology Development

Ayon Chakraborty and Harshini Siriwardane

Abstract Corporate efforts to improve the bottom line traditionally focus on shortcoming and issues. A comprehensive set of analytical tools and methodologies (e.g., Lean Management, Six Sigma) have been developed and are deployed in attempts to fix identified problems. However, little guidance is available on how to actually come up with improved organizational and process designs. Organizations tend to rely on approaches such as brainstorming that do not lead to consistent and reliable outcomes. It is proposed to benefit from conducting a dedicated study on internal sources for business improvement. This so-called positive deviance approach utilizes internal best practices and converts successful, but hidden best practices into widely deployed, corporate practices. The paper develops a methodology to identifying exceptional performers and map their behaviors and activities which made them successful. The objective was to identify practical quick wins which can be implemented through existing account auditing activities.

47.1 Introduction

Corporate efforts to improve the bottom line traditionally focus on shortcoming and issues. A comprehensive set of analytical tools and methodologies (e.g., Lean Management, Six Sigma) have been developed and are deployed in attempts to fix identified problems. However, little guidance is available on how to actually come up with improved organizational and process designs. Organizations tend to rely on approaches such as brainstorming that do not lead to consistent and reliable outcomes.

The organizations generally use various ways for process improvement. Various quality management techniques are widely used in organizations including Lean and Six Sigma. There are also other ways through which organizations improve their existing processes. These are more pragmatic approaches than the established

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methods. The approaches can vary from enhancing or utilizing their own resources to learning from others through derivation or creating the approaches in their own context. Another way of improving the process is also to apply some of the previous best practices similar to legacy systems.

The positive deviance approach, as adapted for use in health care, presumes that the knowledge about 'what works' is available in existing organizations that demonstrate consistently exceptional performance. It is proposed to benefit from this framework and related experiences by conducting a dedicated study on internal sources for business improvement. This so-called positive deviance approach utilizes internal best practices and converts successful, but hidden best practices into widely deployed, corporate practices.

In this paper, we propose a two phase approach to identify positive deviants. The first phase is about initial screening of positive deviants based on a single criterion and understanding their performance on various process metrics. The focus is more on second phase where positive deviants were identified, analyzed and compared on multiple process performance metrics. Comparative analyses of the proposed findings from both phases are discussed. This will help readers in understanding the study as a whole.

47.1.1 Positive Deviance Approach—Overview

Ideas for new processes can be derived by enhancing existing practices, deriving better practices, utilizing available practices and innovating new practices. The identification of internal positive deviance is one way to utilize available practices and benefiting from making advanced practices common practice. Positive Deviance describes a practice that stands out from a pool of comparable practices as it shows better performance under the same environmental conditions. Examples are an accountant that verifies invoices faster, a set of warehouse processes with fewer mistakes in picking items or a store that constantly makes purchasing decisions at lower prices.

According to [1], the positive deviance approach accomplishes two goals: the identification of practices that are associated with top performance, and promoting the uptake of these practices within an industry, using the following steps:

- Identify 'positive deviants,' i.e., organizations that consistently demonstrate exceptionally high performance in the area of interest (e.g., proper medication use, timeliness of care);
- Study the organizations in-depth using qualitative methods to generate hypotheses about practices that enable organizations to achieve top performance;
- Test hypotheses statistically in larger, representative samples of organizations; and work in partnership with key stakeholders, including potential adopters, to disseminate the evidence about newly characterized best practices.

Drive to Succeed
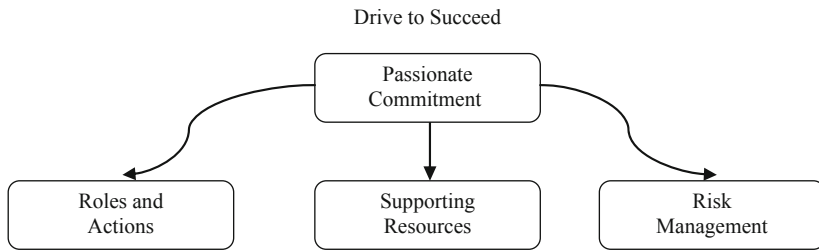
Fig. 47.1 Positive deviant wisdom

47.2 Theoretical Background

Positive deviants as a concept were first introduced by Richard Pascale and Jerry Sternin. According to them, the positive deviants are more consistent and significantly successful than the norm, irrespective of having similar resources and circumstances. As positive deviants, go beyond conventional wisdoms and without creating a conflicting situation still discovers and innovate ways to function, makes them a source of innovation. The positive deviants' innovation is driven by their social commitment but they are also highly practical. They are well aware of the actions needed, ways to mitigate or manage risks and utilization of resources to produce maximum impact with their innovation [2]. Figure 47.1 provides a schematic view of positive deviance wisdom.

According to, "positive deviants are more efficient than anyone else at driving change". Identification of PDs has developed now into a systematic methodology and since its initiation by Pascale and Sternin.

As there are different variations for positive deviance approach so we focused on modifying the existing methodologies to align with our needs. Our approach consists of the following key stages:

- Definition of positive deviance practices based on a joint definition of relevant key performance metrics.
- Identification and validation of positive deviance practices based on an analysis of relevant performance data across auditors.
- Root-cause analysis of positive deviance practices based on in-depth comparative case studies (through interviews, focus groups, etc.) of identified positive deviance auditors in comparison to average and under-performing auditors.
- Contextualization of positive deviance practices based on an analysis of the identified root cause factors and identification of environmental conditions that contribute to the positive deviance but that cannot be altered such as location, seasonal effects, etc.
- Development of process improvement recommendations based on the identification of replicable principles that leads to performance increase in auditors.

47.3   Positive Deviance Study

47.3.1   Phase I

We propose to start with auditors at varying level of experience.

47.3.1.1   Positive Deviance Identification

Using IBM SPSS ver21 we will be analyzing the data through scatter plot (Fig. 47.2). The main measure will depend on performance metric decided by the firm to evaluate auditors. All the auditors will be evaluated based on their performance along this measure. The positive deviants will be identified as those who are above 99 % of the selected performance metric. In addition to identification of positive deviants, we will also identify mid-range and low-range performers. The purpose will be to identify the root causes such as process, culture, behavior, infrastructure, policies, and other contextual factors. In order to understand the root causes we will also conduct interviews and observation of audit process carried out by auditors.

Figure 47.3 provides a possible percentage distribution of overall performance of the auditors at different ranges. This will be determined based on the selected performance metric. The range of the performers can be identified from the above graph which helps us in understanding exceptional, average and below average performers.

After identifying the positive deviants, further analysis will be done to understand their performance across various metrics. The next step will be to analyse the data from observation of the auditors from different performance ranges. This will help us in identifying the root causes of performance of positive deviants and triangulate the findings.

47.3.2   Phase II

In this phase, we will look at all round performance of auditors based on selected metrics. The previous phase concentrated solely on single performance metric to identify positive deviants. Similar to earlier analysis, in this phase our focus will be to identify positive deviants and understand their successful behavior and strategies.

47.3.2.1   Positive Deviance Identification

Similar to Phase I, we will again do the analysis to identify positive deviants. Unlike the previous phase, here we can focus on more stringent criteria for selecting the auditors. The criteria can evolve more from business than research driven. In order to understand this phase we explain the concept through an example. Assume a travel

Fig. 47.2 Positive deviant identification based on selected metric
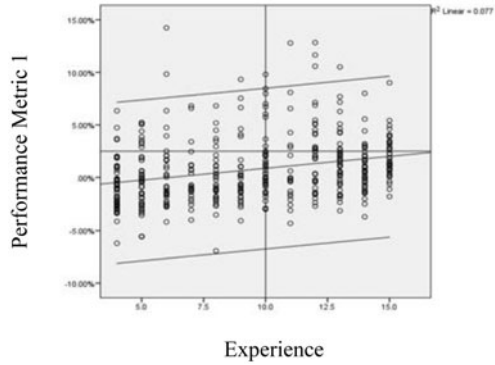
Fig. 47.3 Overall performance based on selected metric
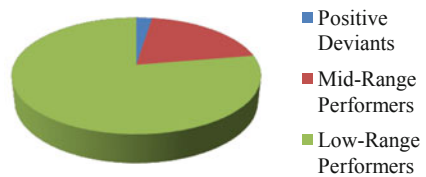
agency scenario which has dedicated travel agents to cater to customer. The focus is more on sales. We concentrate more on travel agents with at least clients calls per month, more than 3 months of tenure (assuming first 3 months is spent in early training and acclimatizing to the work environment), and more than 50 total sales. Based on these criteria we select only 50 travel agents for analysis. After analysis we are able to identify 4 positive deviants where only one was outside our 99 % cut-off limit.

Figure 47.4 shows the identified positive deviants. These positive deviants were identified based on the selected performance metrics. We can observe that majority of travel agents sit below zero percent for one of the selected metric.

47.4   Discussion

Once we identify the positive deviants our objective then will be to identify their behaviors and strategies. The analysis will now focus on how identified positive deviants perform across different metrics of the organization. Figure 47.5 provides an illustration of the performance of positive deviants identified from both the phases.

As can be observed form the above figure, the positive deviants identified from phase I have very high on selected metric in comparison to other group. There performance is also note worthy as it is way above the average of all the travel agents. But we like to caution here about direct comparison of both the groups as they are selected on different criteria.

Fig. 47.4 Positive Deviant identification based on selected metric
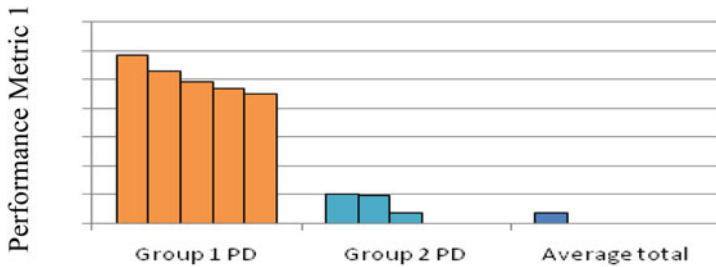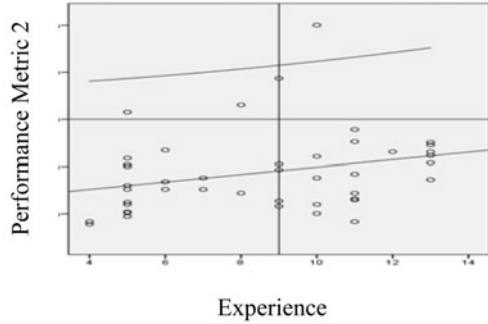
Fig. 47.5 Positive deviant comparison based on selected metric

The difference in the performance of two groups can be observed once another performance metric is considered. Figure 47.6 shows that group 2 is higher on this performance metric in comparison to other group.

This justifies our second phase analysis and the need to consider more than one metrics while identifying positive deviants. Once the groups are identified based on their performances, another metrics which is very important is average total clients per positive deviant (PD). The analysis helps us in understanding that those sales executives in travel agency have performed well on securing total sales actually have taken more clients (refer Fig. 47.7).

A look at the three graphs (refer Figs. 47.5, 47.6, and 47.7) shows us that the positive deviants in group 2 have high number of sales and also have high total average clients. Now let us assume, our performance metric 2 is conversion ratio of sales to transaction with customers. This probably explains why this group has not performed well in performance metric2. The difference in criteria for selecting the two groups also justifies this finding. In the first group, one of the criterions for selection of travel agents was more than 50 transactions whereas for group 2 it was 500. On this basis, we can interpret that the positive deviants in group 1 are better performing than those in group 2. But, before drawing any conclusion we also have to look at other metrics which may play a role in determining overall performance. The next metric, which we analyzed, is the experience.
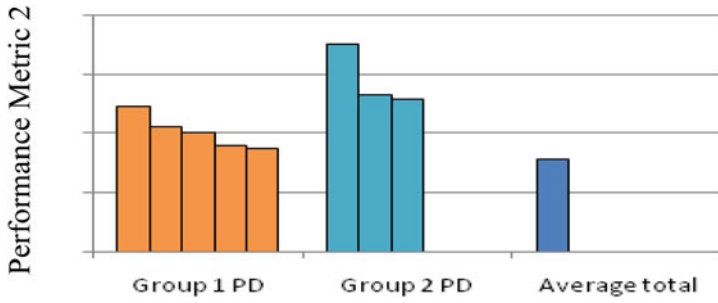
Fig. 47.6 Positive deviant comparison based on selected metric
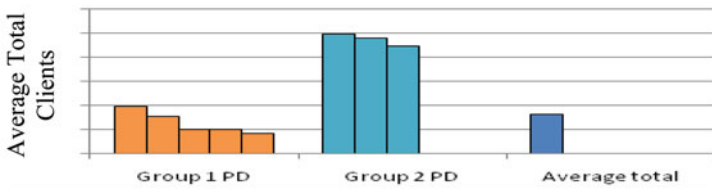
Fig. 47.7 Positive deviant comparison based on average total calls
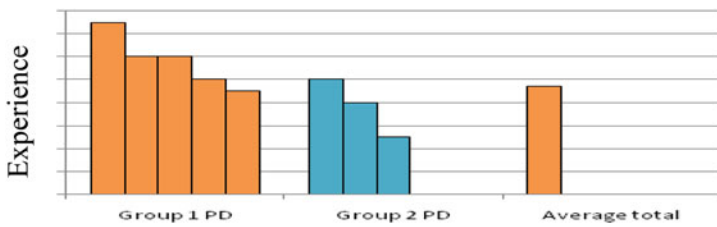
Fig. 47.8 Positive Deviant comparison based on experience

Figure 47.8 shows that the experience of positive deviants in group 1 is higher. This is probably the reason why the positive deviants in group 2, have more total calls and low conversion ratio.

47.5 Conclusion

The objective of our study is to develop procedural steps in identifying positive deviants. There is a belief that positive deviants exist and the organization can benefit from them based on their behavior and strategies. These positive deviants can a help to roll-out the best practices under the same environmental conditions. Our study provides a pragmatic approach to do positive deviance study in an organizational set-up and utilize the concept in process improvement an innovation. Identification

of positive deviants is a very important aspect for organizations. They generally have performance awards to identify individuals. The significance of our study does not lie in identifying the individuals but in understanding why they are positive deviants and how we can learn from them and make it a best practice example for the organization.

Our analysis identified two groups of positive deviants. One group is best in sales performance, i.e. they perform well by converting the transactions to sales. The other group (group 2 of our study) performed well in selling travel packages. This group is relatively inexperienced and takes a high volume of transactions. The objective for them is probably to achieve the sales target. This reflects in their low average holding time and after discussion works time. Thus, from our study patterns emerged and reflected how positive deviants worked. The practical implication of our study is in helping the organizations identify positive deviants based on criteria emerging from the business. From research perspective, this shows that there are specific patterns which emerge in identifying positive deviance. The further work for our study is to investigate further into these patterns from research perspective and assist organizations in understanding specific behaviors and strategies to not only learn from positive deviants but also retain them to spread the best practice throughout the organization. The next step of our research is to apply these procedural steps in account audit set-up to identify positive deviant auditors.

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Chapter 48
Classification Based Reliability Growth Prediction on Data Generated by Multiple Independent Processes

Vishwas M Bhat, Rajesh P Mishra, Sainarayanan Sundarakrishna and Ayon Chakraborty

Abstract Reliability Growth is a modeling process for product quality characterization over the lifespan for both hardware and software products and has been explained by multiple models like Duane, Crow-AMSAA, Lloyd Lipow etc. Our research proposes a framework for case-based/scenario based model estimation and prediction, by supervised learning of historical data. In this proposed framework, the case base is generated from historical data and Crow Model is applied in a novel sense to extract information from the historically labeled occurrences. With our framework, we draw in a comparative advantage over the traditional predictive modeling using a Crow's Growth Model.

48.1 Introduction

Reliability growth models have been in use in various fields for the purpose of tracking and monitoring a system's reliability over time. Reliability growth modeling involves the process of drawing a measured comparison of reliability at a number of points of time with known functions that show possible changes in reliability. To predict the trending reliability over a certain time, the conceptual reliability growth model must be translated into a mathematical model by supervised learning of the historic quantitative data of a system.

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There are various reliability growth models that have been derived from reliability experiments in a number of different application domains. Quality characterization over a product's lifespan in both hardware and software domains have been explained by multiple models such as Duane, Modified Duane, Crow-AMSAA (Army Materiel Systems Analysis Activity -USA), Lloyd Lipow and many others. Among them Duane and Crow-AMSAA have been the most prevalent ones.

48.1.1   Reliability Growth Models

Reliability growth models can be classified on the domain of application into hardware or software models. Hardware growth models are used in studying the reliability growth in hardware equipment such as electronic systems, functional blocks, mechanical systems etc. without direct connection to any software modules. These models are more specifically used to identify the improvement in the reliability in the development phase where the random early failure count tends to be higher. Software growth models typically address the reliability of the developed software early in the life cycle at the preliminary design level or even at the detailed design level in a waterfall life cycle process or in the first spiral of a spiral software development process.

Growth models can also be described as *Probabilistic reliability growth models* or *Statistical reliability growth models*. In probabilistic models, the parameters associated are known and thus historical data obtained cannot be incorporated in the reliability prediction. The probabilistic model represents the failure occurrences according to probabilistic assumptions over the system's reliability growth. Examples include various failure rate models, curve fitting models, Markov structure models and non-homogeneous Poisson process (NHPP) models. In statistical models, unknown parameters are associated with these models. In addition, these parameters are estimated throughout the development of the product or system in question, such as Duane, Modified Duane, and Morand growth models.

The two most widely used reliability growth models are the empirical Duane model and the analytical Crow/AMSAA, which both use the mean time between failures (MTBF) to estimate the reliability growth rate.

48.1.2   Duane and Crow-AMSAA Model for Reliability Growth

Crow-AMSAA growth model which caters to the varying failure rate over the reliability improvement process is a statistical extension of the Duane model. J.T. Duane, an engineer with the Aerospace Electronics department of the General Electronic Company in the year 1964 developed the most commonly used model which is called the Duane model. The Duane model basically is a graphical approach to perform analysis of reliability growth data. Duane published a report on different repairable failure data during their development programs and proposed that learning could be mathematically described by an exponential function which can be

observed when the cumulative failure rate and cumulative operating time plotted on log-log paper follow a straight line. Duane model is parametrically represented as a relational function between cumulative failure rate and the total accumulated unit hours of test.

$$E(\lambda) = \tfrac{1}{b}.T^{-\alpha} \tag{48.1}$$

Where, the expected value of the failure rate is represented as function of aggregated operating time T, the exponential improvement rate α and $\tfrac{1}{b}$. represents the cumulative failure intensity at the beginning of the program.

Duane's postulation was based on empirical observations. The model's parameters cannot be accurately computed as compared to a statistic model. Duane's approach does not consider the change in the failure rate over time and assumes a constant failure rate over the testing process time. Crow [1] proposed that Duane's model can be represented stochastically as a Weibull process allowing for statistical procedures to be used in the application of this model in reliability growth. The model analyses the reliability growth over a system on a continuous scale. The failures are modeled as a Weibull process or a power law non-homogeneous Poisson process with an assumption that the failure rate intensity is structured on a Weibull failure rate. Following the assumptions, the failure intensity function can be represented as a two parameter Weibull failure rate,

$$u(t) = \alpha \beta T^{\beta - 1} \tag{48.2}$$

where, $\alpha, \beta > 0$ and T is the age of the system. The nonhomogeneous Poisson process with intensity in (2) has the mean value function,

$$E(N(T)) = \alpha T^{\beta} \tag{48.3}$$

which is the expected number of failures for a system during its operating hours (0, T). α and β are the shape and scale parameters of the undermining Weibull process describing the failure rate. An assumption of $\beta = 1$, which is constant failure rate, gives the homogeneous Poisson process described by the Duane's model.

48.2   Framework for Classification Based Reliability Growth Prediction

48.2.1   Overview

In this paper, we establish a framework that would enable accurate prediction modeling by supervised learning from case-based historical data. This framework has been discussed in section B and D. The framework would enable us to extract valuable information regarding issue-wise growth trend, assuming that overall process is a

union of individual Poisson sub-processes and each of the sub-process can be practically labeled as individual failure type. The Crow's postulate is applied to estimate the parameters governing the overall process as well as the individual labeled sub-processes. Moreover, Inferences regarding the probabilistic occurrence of the defect types at a given time instance are made from these observations. The proposed framework has been explained and conclusions are arrived upon with numerical data sets simulated by Monte-Carlo method in R in section IV. The results are discussed with the two case-wise simulated datasets representing failure instances and case wise classifications.

48.2.2   Framework Methodology

The methodology is based on the Crow-AMSAA model of NHPP describing failure events [1] but is extended with the notion of multiple independent sub-processes described as failure modes providing causation to the failure data. The main objectives of the model discussed in this paper are to be able to continuously evaluate and accurately assess the reliability growth of a system with multiple modes of failures. The framework begins with a set of prior assumptions on the process.

48.2.3   Mathematical Skeleton

48.2.3.1   Crow (AMSAA) Reliability Growth Model

Expected number of failures and Failure Rate

A quantity of immediate interest in developing a RG plan following a Crow-AMSAA model is the cumulative failure times (0, T). Expected number of failures is given by,

$$E(N(T)) = \alpha T^{\beta} \qquad (48.4)$$

α, β are the shape and scale parameters of the undermining Weibull process describing the failure rate.

$$\lambda(T) = \alpha\beta T^{\beta-1} \qquad (48.5)$$

(2) is the representation of a two parameter Weibull failure rate describing the process. These parameters can be computed for a given dataset by the process of *maximum likelihood estimation.*

Probability of failures

Since, the Crow's model assumes the failures to follow a Poisson process, statistical procedures for the Weibull distribution do not apply. Therefore, the probability that exactly 'n' failures occur by time T is

$$P(N(T) = n) = \frac{(\alpha T^{\beta})^{n} e^{-(\alpha T^{\beta})}}{n!} \qquad (48.6)$$

48.2.3.2   Time Between Events and Probability

In a Poisson process the time between events is described by the exponential distribution. Thus, assuming the first occurrence of an event at time $t = t_a$, the probability of an event occurring before time $t = t_b$ (time $t_b - t_a$) assuming the events follow a Poisson process with rate λ is given as,

$$P(t_a, t_b) = e^{-\lambda t_a}(1 - e^{-\lambda(t_a - t_b)}) \tag{48.7}$$

48.2.4   The Model

The interests hover upon failure times and the data is a sequence of aggregated successive times between failures represented by $t_1, t_2, t_3 \ldots ..t_m$. The times are cumulative given total number failures is '*m*'. The observations are a result of the Test Analyze and Fix (TAAF) method prescribed by Duane.

48.2.4.1   Assumptions

a) The process is described by failure times with a failure intensity represented by the Weibull failure rate as and the number of failures described as a non-homogeneous Poisson Process.
b) The historical data observed for supervised learning represents cumulative failure times and failure modes causing the process failure.
c) Each of the failure modes are assumed to attribute to the overall estimation process and the parameters for the underlying sub-processes resulting from these failure modes are modeled separately as nhpps. For example, assuming that in the overall observed data, issue 1 and issue 10 with cumulative operating times 10 hours and 1023 hours to failure respectively are the result of a failure mode A, then these times can be segregated to predict the estimates of the parameters describing the individual sub-process using the NHPP power law.
d) Each of the failure modes is assumed to be independent of the other. Thus, an event failure due one model does not have an impact on the occurrence of another.
e) The overall generating process describes only a given set of known failure modes, and an introduction of a new mode would result restructuring the dataset as well as the parameters.

48.2.4.2   Notation

Model Parameters

T_o = vector of overall cumulative failure times = $t_1, t_2, t_3 \ldots ..t_m$
m = overall count of issues

i = issue type/failure mode indicator = $1, 2, 3 \ldots x$

T_i = Cumulative failure times of issue type 'i' = $\{t_{i1}, t_{i2}, t_{i3} \ldots t_{ij}.\} \in T_o$

J = total number of issues of type 'i'

Issue Wise Parameters (for reference see (eqs. 48.1 through 48.6))

λ_o = Failure rate describing the failure times for the overall process; λ_i = Failure rate describing the failure times for the issue 'i'; α_o = scale parameter for the undermining Weibull failure rate λ_o describing overall process; α_i = scale parameter for the undermining Weibull failure rate λ_i describing failure times for issue 'i'; β_o = shape parameter for the undermining Weibull failure rate λ_o describing overall process; β_i = shape parameter for the undermining Weibull failure rate λ_i describing failure times for issue 'i'; T^* = Cumulative time instant after which prediction of issue type and parameters is to be estimated; T^{**} = Cumulative time instant before which prediction of issue type and parameters is to be estimated. This is the next event time given the process as not characterized by the probabilistic prediction of failure mode.

48.2.4.3 Case Wise Model Estimation

The important consideration of this framework is the probabilistic prediction of the failure mode undermining the future failures along with the estimation of the parameters of the mathematical model descriptive of the growth in reliability. This is achieved via a variation of the statistic giving the probability of occurrence of a failure event with a certain time interval as described in sections below.

The failure events are observed as a result of 'x' different failure modes. Since the observations are drawn based on the TAAF method, the time instances are recorded irrespective of the failure cause/mode. Once failure is observed, reparative actions are undertaken and the system is placed under test again.

The occurrence of the failure events is assumed to follow a random process. The failure mode causing the event is also assumed to occur randomly. The NHPP power law applied to the historical data enables a predictive learning and estimation of the parameters fitting the complete dataset with T being the overall time cumulated till the final failure event. Parameters $\propto_o, \beta_o$ are computed by stochastically fitting the points using the expression in (1). The failure rate generating the dataset, λ_o is calculated by (2).

Independent Poisson Processes

The dataset can be classified based on the failure modes recorded. The prior assumption of failure mode independence can also infer to the individual modes describing separate random processes. Hence, the dataset can be broken based on different
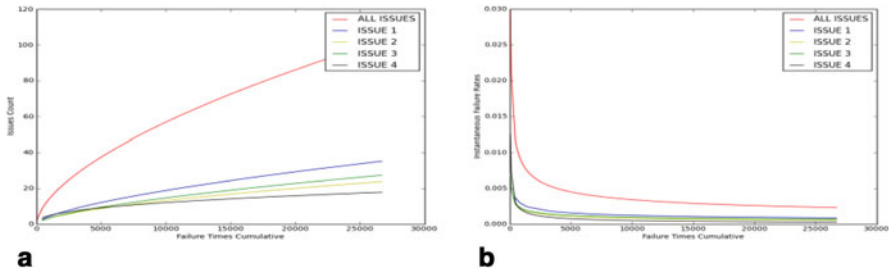
Fig. 48.1 A non-homogeneous poisson process describing the overall process. **a** varying growth of counts of failure **b** failure rates describing the process—Overall data and individual failure modes

modes into in $T_i = \{T_1, T_2, T_3 \ldots ..T_x\}$ with each value of T_i being a vector dedicated to cumulative failure times for each individual mode 'i' for i $= \{1,2 \ldots ..x\}$.

Thus, the simplest approach would be to model these modes as independent Poisson processes. The power law can be fit on these broken datasets in $T_i = \{T_1, T_2, T_3 \ldots ..T_x\}$ to stochastically arrive at the parameters generating each of the datasets. The parameters can be computed as α_i, β_i for each mode 'i' for i $= \{1,2 \ldots ..x\}$ and the failure rate generating this data is given by

$$\lambda_i(T) = \alpha_i \beta_i T^{\beta_i - 1} \qquad (48.8)$$

It is important to note that the NHPP power law is also applied with failure time data concerning each failure mode and not the complete dataset. This is an important distinction between our framework and other growth models based on Crow-AMSAA postulate.

The plots in Fig. 48.1 give a scenario with labels describing the process. The comparisons also show a plot for the changing failure rate for the overall dataset as well as the individual modes describing the process. These are the plots solved for the examples discussed in section III.

The plot (a) shows the varying count data in red with the individual modes undermining the same process as different colors. The plot in (b) shows the comparison of failure rates of the overall process and the undermining failure modes.

Standard Problem—Probabilistic Approximation

Because the mode type causing the future failure cannot be known exactly, the question that remains is how is it that we can capture the best approximation of a failure mode that might be the undermining process responsible for a futurity's failure. We use the property of the Poisson process where the inter-arrival times can be modeled to follow an exponential distribution as described in the mathematical skeleton section.

This can be explained with a scenario based example. Assume that we are interested in predicting the undermining failure mode that can cause the next issue after

a certain cumulative time T^*. Hence, the region of interest in the overall dataset is beyond a certain time T^*.

Training In training, we seek the parameters of a NHPP that best fit a given set of data. The training data consists of the shape and scale coefficients of an observed dataset describing the whole process; the parameters of the failure data (independent NHPP) of each failure mode. Thus at any instant in the data, the failure rate responsible for generating the data preceding T^* can be computed from this training process as λ_b. Similarly, considering the next failure occurring after the time T^* is of mode type *'i'*, we can safely assume that this is the first instant of the failure of this mode occurring after T^*.

Approximation By fitting NHPP over the overall training data, It is simple to predict the next failure after T^* to be some point T^{**} given it is being generated by the same process defined by the failure rate λ_b. But since the training data can also enable us in predicting the failure rates of individual failure modes, the point T^{**} can needlessly be inferred less accurate. In simpler terms, Assuming mode 1 has a failure rate $\lambda_1 \gg \lambda_0$, the overall failure rate, and the next failure event after T^* can be by a failure mode 1, the failure event could occur at an instant much earlier to time T^{**}. The graph in Fig. 48.2 helps us understand this better.

Similar to what is shown in the graph and assuming mode 3 has a failure rate $\lambda_3 \ll \lambda_0$, the overall failure rate, and the next failure event after T^* can be by a failure mode 3, the failure event could occur at an instant much later to time T^{**}. The plot in Fig. 48.3 describes the above scenario aptly.

Thus we arrive at the core of our framework, which is described in (6). The probability of an event *'i'* with a failure rate $\lambda_a = \lambda_i$ succeeding an event with failure rate $\lambda_b = \lambda_x$ after a time $T_1 = T^*$ before a time event $T_2 = T^{**}$ is given as,

$$P_i(T_1, T_2) = e^{-\lambda_b T_1}(1 - e^{-\lambda_a(T_1 - T_2)}) \tag{48.9}$$

The time event $T_2 = T^{**}$ is computed assuming that T_2 is the next event time give the process is still generated with the preceding failure rate $\lambda_b = \lambda_x$. Thus, the probability index would give the possibility of the occurrence of a particular event type *'i'* to occur within the given time T_2. This probability index would ascertain the possibility of predicting the future event given a failure mode.

In this way, we obtain more reliable parameter estimates by increasing the quality characterization of training data associated with failure. We use it to more robustly estimate transition probabilities of our failure modes. By tying across failure modes, we can train the data to predict multiple mode observations.

48.3 Numerical Example

We have explained the application of the framework with datasets simulated by monte-carlo simulations. The simulation is performed assuming initial estimates

Proposed Framework
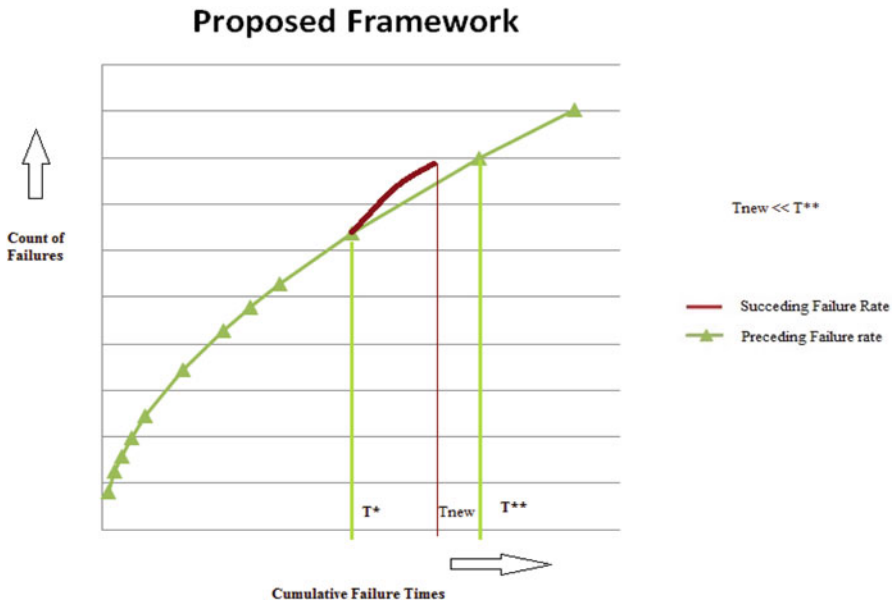
Fig. 48.2 Plot describing the framework where a succeding mode failure rate is higher than the preceeding overall failure rate. Hence Failure occurrence is seen much earlier than T**
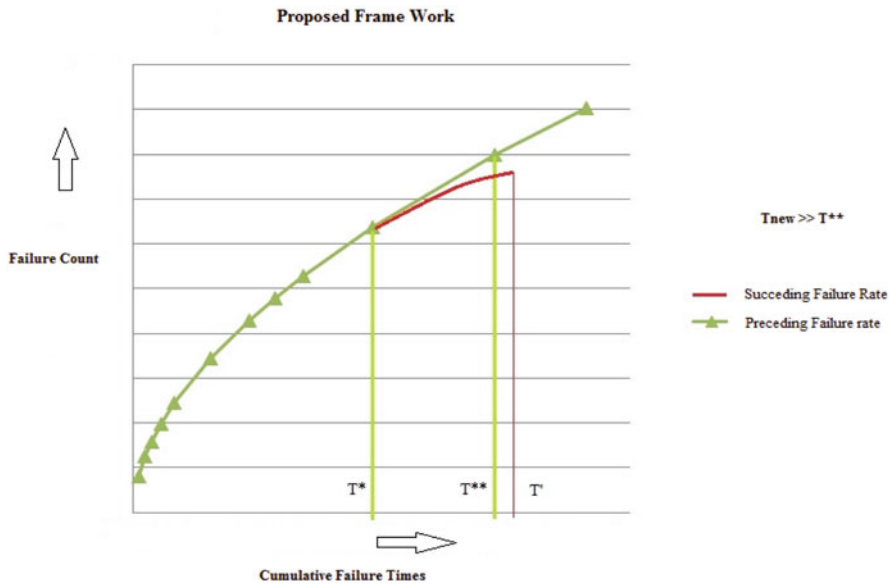
Fig. 48.3 Plot describing the framework where a succeding mode failure rate is lower than the preceeding overall failure rate. Hence Failure occurrence is seen much earlier than T**

close to a scenario explain a realistic process in the industry. The details of the empirical example can be made available from the authors on request.

48.4   Applications and Future Work

Our development of the case-wise estimation has been motivated by the aim to accurately predict from a training data, and we have discussed several aspects of the model supported by empirical and theoretical evidence. The numerical examples are not a part of this paper as a part of the documentation procedurals.

The framework can be effective in a scenario assuming the first few given number of failure times can be stepped over due to various process assumptions and the interest is guided towards predicting the failure event and failure mode accurately after this selected set. Hence from training process, we can predict the probable event that might occur after to this selected period. Realistically viewing this proposal can be an example where in the growth trend of interest is after the initial period of testing. From the historical data, parameters estimated for the system both overall and case wise would enable the prediction for a particular case event.

Various papers have discussed the application of RGM in inventory modeling or preventive maintenance, and this framework can aid in accurately optimizing the objective in such cases.

The framework can also be used in a scenario of learning where from the historical data, the mode wise data is trained over every point estimate and hence a case based growth trend can be accurately modeled. However, this ideation has to be tested for relevance to any standard growth planning.

48.5   Appendix

48.5.1   Optimum Algorithm for Framework

- Collect data set; identify issue-wise times to failure from this dataset.
- After cumulating, find crow's parameters by fitting crow's model to overall failure times and issue-wise failure times.
- Identify the point where the estimation of issue wise is needed to be modeled.
- Calculate failure rates till this point for overall as well as issue-wise data using (2).
- Calculate probabilities using (6) given that the previous issue occurred is known. Otherwise use the overall estimates as the preceeding parameters.
- If, all probabilities are nearly equal, model next issue using the overall estimates, else use the issue which is most dominant among these to model the growth.
- Continue for next points.

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Chapter 49
South-Asian Way of Taking Entrepreneurial Risk

Helan Gamage

Abstract This paper attempts to address the context sensitive paradox by examining entrepreneurial risk (ER) through the lens of social, cultural, political and economic and decision making. Entrepreneurial social reality of risk taking and management requires the fundamental philosophy of subjectivism and utilizes qualitative inductive case study method. The research data indicate that entrepreneurs do indeed use their social wisdom and cultural understanding more in their decision making. These findings provide a new perspective for understanding how entrepreneurs deal with the unjustifiable amount of risk associated with the complexity of indigenous society and culture in the South Asian context, which challenges the western ideologies and practices of ER.

49.1 Introduction

Entrepreneurial risk (ER) has been appeared with the French verb *entre-prende* in Europe in the 1100s. In 1848, Mill proposed that the bearing of risk was what differentiated entrepreneurs from managers and this is still the case [1, 2]. Risk taking behaviour of the entrepreneur has been observed by economists[3] and psychologists. These conventional ideologies of ER embrace that risk can be calculated and moderated through knowledge and the process of rational decision-making. The effects of risk, risk perceptions, and risk propensities of entrepreneurs have not been explicitly examined in empirical research and the available research on risk have been focused on a single determinant of risk behaviour, which can yield contradictory empirical findings and produce inaccurate conclusions about determinants of risk behaviour. A knowledge gap on ER perception in the context of social, cultural and political, which required entrepreneur's social wisdom to manage risk in a context sensitive approach. Therefore, socio-cultural values are of particular relevance to understanding ER in the South Asia as a social phenomenon.

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49.2   The Western Ideologies on ER and Critics

The pioneers of entrepreneurship, the classical economists defined entrepreneurship as a factor of production that carries risk and uncertainty. The market-exchange economy in which new economic combinations and mobilizing resources required psychological and material resources to organise large-scale, mass production effectively and rationally. In this institutional process of rational decision-making in calculating and moderating risk referred to functions and qualities which were an exciting and unknown experience taken at one's own risk and this process has been utilised in entrepreneurship development programs in the South Asia. However, the economic and industrial development through application of western ideologies has not remained unchallenged in the South Asia. This issue has been examined from different perspectives including cultural diversity. Observations of Khare in India show the heart and the mind of such a system often do not work together and this conflict is apparent. From these perspectives, without considering the complexity of indigenous society and culture, which hinders attempts to understand ER.

49.3   The Sri Lankan Socio-Cultural Milieu

One can be traced to the origins of its civilisation and the other to the western influence, originating from the Industrial Revolution, and imposed through colonisation which systematically destroyed the indigenous feudal system. As a result, Sri Lankan culture demonstrates complex and unique behavioural patterns. If culture supplies the initial social conditions under which entrepreneurial practices emerge, then the behaviors and practices that constitute current notions of entrepreneurship should be expected to fit the values of the cultures that generated and shaped the phenomenon.

49.4   The Research Approach: Holism and Qualitative Methodology

The dynamic interaction between the social context of entrepreneurial activities (including risk) and the complexity of the South Asian culture invites the exploratory culture-based research and which embraced the fundamental philosophy of subjectivism. A qualitative research methodology and inductive holistic case study approach including grounded theory analysis were selected to explore people's experiences and behaviour. This paper focussed on entrepreneurs who started up home-based businesses and which have grown to become significant in Sri Lankan society.

49.5   Theoretical Reflections on Empirical Findings

Theoretical Reflections on Empirical Findings are discussed under two board categories.

49.5.1   Dark Side of Risk Taking

The data suggest that social uncertainties are critical in influencing ER. This had been transformed into different forms of ER. For example, risks in decision-making on production, continuation of business activities and exporting products in time, and approval and smooth production processes resulted from social, political and economic instability, which has turned the entrepreneurial environment into a more uncertain realm. After more than 30 years of continuous ethnic civil war, political rivalry, international interference and youth unrest due to poverty, unemployment and imbalances in income distribution have led to the uncertain socio-political milieu. Periodic non-realistic promises given by politicians, for an example on power-cuts had disrupted entrepreneurial activity. These situations influenced to close down profitable international business lines and some cases indicated that their international customers have approached other country suppliers. Moreover, changing weather conditions in the last few years resulted in disruptions to the hydroelectric power system which was unable to cope with the increasing usage of electricity by household, commercial and industrial sectors. Government has not developed alternatives for it. Most entrepreneurs get used to such uncertainty because they see no other alternative as they are uncontrollable and unpredictable and could not be seen them through the rational process of forecasting and moderating risk. Hence, entrepreneurs are making business decisions in the dark environment due to political instability and lack of reliable information.

49.5.2   The Social Disorder

Most entrepreneurial challenges were derived from the disorder of the social system. The cases exemplified a lethargic social system where things just do not move efficiently, be it in banks or government departments, creating delays, time-consuming practices, and the need for political and personal favours or conversely, knocks to business activity. Time management is important in entrepreneurial success as they have to use their time efficiently.

Entrepreneurs expressed their disappointment on the unacceptable waiting period for getting things done and favouration and discrimination on issuing bank loan at the setting up stage of the business including personal subjectivity/biases involved in making decision on loan to grant or not. This has created emotions, stress, uncertainty and risk not in business aspect but also health aspect of the entrepreneur. Political

influence especially helped in getting permission to access resources and enters local and international markets. Dishonesty and bureaucracy of most government authorities was a formidable challenge to entrepreneurial activity. These discretionary and personalised favours generated entrepreneurial risks on the one hand or eliminated on the other.

Entrepreneurs have experienced on influence of multinational companies. They have distracted indigenous entrepreneurial activities. In some cases it is evident that, the lack of implementation of proper customer protection in the legal system and unethical behaviour of some business groups in the society. In the absence of an adequate legal framework, informal constraints play a large role in the society. Entrepreneurs are willing to take challenges and risk related to the business activities but they believe that socially driven unethical and illegal influences are very challenging and create big risk for entrepreneurial activities. Most cases provided evidence that in their entrepreneurial journey, the entrepreneur's personal and political relations, respectability and also willingness to give bribes were forceful. Socially driven risks were more harmful and more powerful than market driven risk in entrepreneurial activity.

This uncertainty and risk in the Asian context has been studied by Hofstede, he asserted that uncertainty is rooted in culture and reinforced through basic institutions such as family, school, and the state. The entrepreneur, who operates in such an environment of frequent social disturbances and constraints derived from inadequate social, political and legal structures, is unable to readily manage risk through rational planning. ER associated with time, favourations, biases, stress, disappointment, changing promises and letting entrepreneurs down could not be even calculated and moderated through the rational process of ER. Business uncertainty and risk initiation were therefore often critical, and socio-cultural, and could not be separated, as business is a part of the society.

49.6   Perceptions and Management of ER

The data suggest a range of perceptions on ER taking behaviour within the social cultural context.

49.6.1   Social Confrontation: Guilty or Shame

In Sri Lankan society, people are concerned and inquisitive about others' behaviour and performance and this builds negative or positive attitudes to which they react. This includes jealousy, frustration, resentment, anger and personal politics, all of which potentially operate against the entrepreneur's wellbeing and social power (*piliganeema*)(SP).

The data shows that most failures and social confrontations were kept at a personal level. Socially unethical challenges such as creating frauds against the

entrepreneur because of anger and jealousy were often taken personally and therefore entrepreneurs tried to manage them individually. It was assumed that personal challenges are aimed at the *piliganeema* of the entrepreneur; in turn entrepreneurial dignity would be damaged by the loss of confidence of workers, buyers, suppliers, supportive organisations and society. If subordinates' confidence, respect and loyalty were lost, work commitment seemed to disappear from workers.

The entrepreneurs interviewed seemed to perceive the necessity to take into account both personal and business risks, and also social and psychological risk which had been identified as typically involved in an entrepreneur's risk-taking. The data revealed that, the entrepreneur felt shame (embraced social concerns and feelings) in relation to a particular fault or error Bradshaw. Some risks were seen as personal and are kept covert; others were seen as social and collective, and made overt, were managed collectively. These confrontations were understood as either politically motivated (often resulting from opportunistic political forces) or due to human emotions. Entrepreneurs were ashamed to show their powerlessness (those who held some power and dignity) and they kept social confrontation covert to protect their SP with a motivation of securing workers' and other stakeholders' confidence, loyalty and commitment. This was different from guilt which is determined by objective criteria in an individualistic context. This provides evidence that entrepreneurial risk was perceived and interpreted subjectively within an individual context.

49.6.2   Collectivism: Business Challenges as Shared Risks

Ethically driven business challenges/healthy business competition were accepted collectively. In several challenging situations, most entrepreneurs addressed their subordinates very colloquially. Those words give sense of relationships, love and caring and a feeling of an advisory bond between an adult and a young person. In general, people show strong friendliness and closeness by using specific colloquial words in conversation with friendly facial expressions. The system had a built-in resistance to individualism. Familial emotions had been built up, developing a real sense of belonging to the entrepreneur or to the company in which caring, obligation and taking risks together operated between subordinates and superiors through paternalistic approaches. Both management and the workforce were encouraged by collective obligations to face business risks. The data suggest that entrepreneur's key skills in managing risk were based on a social capacity for value judgements. The entrepreneur often processed myriad bits of information available to him and conceptualised several alternatives, in depth, through his social wisdom before he acted. The entrepreneurs' previous experience of failures had expanded their wisdom; giving them confidence they had the skills to avoid failure in future. Social knowledge and the insights gained through painful social experience emerged from most case studies relating to risk management and future planning.

Entrepreneurs preferred workers who are loyal and reliable rather than technically qualified. This basically deviates from seeking work efficiency and higher productivity in the process of human resource management. Entrepreneurs were found to

have set a priority for work harmony on the basis of social wisdom. In general, workers in Sri Lanka display strong collective behaviour in demanding rights. An issue related to one worker affects all workers' productivity through strikes or 'work to rule' until the particular worker's problem is resolved. Sometimes this issue leads to union actions and continues for months, potentially causing the total business to collapse. This requires the entrepreneur to consider the workers' social behaviours and contrasts with a problem such as technical know-how, which could be handled through on- the-job training or external training. The ability to conceptualise possible social challenges allows him to deal with risk through social value judgments.

49.6.3   Religious Influence on Risk: Luck and Karma

Religious faith in Sri Lanka leads to 'Luck' and 'Karma'. The entrepreneur understood that Buddhism teaches the way to penetrate to the root of the problem (similar to the western analytical approach) and find out the main cause of it within the social moral context (different context from western countries). Individuals were guided by their religious norms to become more skilled in managing human life and to promote more satisfactory living. Lack of information and unforeseen conditions led to unavoidable uncertainty situations where the entrepreneur had no power over exterior influences he resorted to religious faith. The entrepreneur was persuaded with luck and *karma*. Religious faith and values rooted in religious morality were part of the social behaviours and provided satisfactory compromises between unexpected failure and success. In Buddhist values every material thing that exists is impermanent. People believe that the good and bad points collected in life (Karma) are carried forward to the next life. Therefore, every living being has the results of its own past *karma* to work out, and any interference with his situation will not be anything more than a temporary alleviation of the suffering it is bound to endure. The impact of uncertainties was neutralised in terms of *karma* and luck. Therefore, any impact of uncertainties had been taken as tolerable. The majority of Sri Lankan entrepreneurs (86.6 %) believe in *Karma*. Entrepreneurs did not see uncertainty as something to be avoided or moderated in any particular rational model but to be expected and tolerated through social and religious faith and morals. This is the key difference from western thinking on risk management.

Risk initiation, perceptions of risk, risk management and such tolerance indicated that business uncertainty was mainly derived from social, political and cultural settings. The business stakeholders and socially and politically influential actors, government authorities, their spouses, relations and friends were all involved (formally or informally) in the risk handling process in terms of creating personal favours. This is supported by studies of business risk in the Asian context by Hofstede who asserts that strategies for coping with uncertainty are rooted in culture and reinforced through basic institutions such as family, school, and the state. This does not mean that markets are not subject to risk, but that business risks in Sri Lanka were largely socially derived, were powerful, and demand widely developed conceptual skills for effective management.
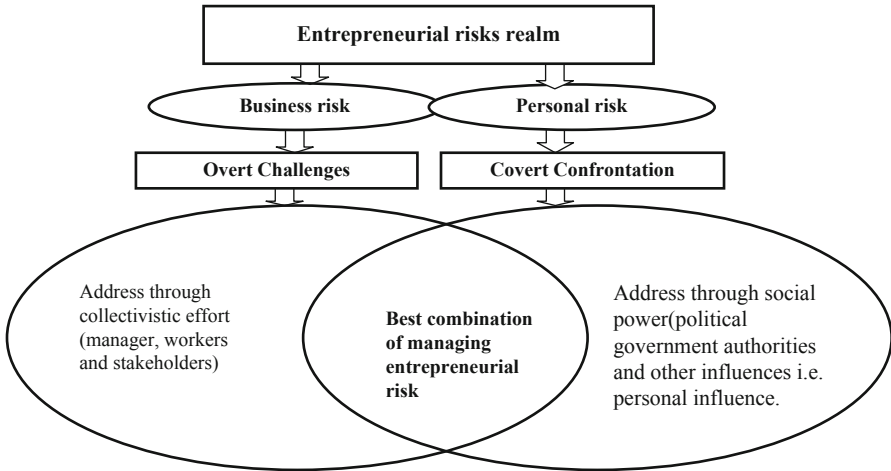
Fig. 49.1 A model for South-Asian way of taking and managing entrepreneurial risk

49.7   Irrationality in Rational Risk Taking

In the western models, ER can be managed through knowledge of and entrepreneurial alertness to markets and the process of rational decision-making. Classical economist Knight's classification of ER includes perfect knowledge, risk and uncertainty. Schumpeter asserts entrepreneurial risk-taking behaviour in innovative economic activities which implies risk taking in a rather uncertain condition of novelty. Research supports the idea that firms that innovate and are proactive also tend to take larger risks. McClelland's psychological theory also discusses business uncertainty and certainty based on availability of reliable information to the entrepreneur. He argues that risk involvement is essential in undertaking a venture and such risk can be moderated through logical analysis of information. However, business uncertainty and risk are often socially and culturally interpreted and cannot be separated, as business is a part of society. The country's social conditions and cultural values provide the ingredients for critical risks for the entrepreneur and lead to a definition of entrepreneurial uncertainty as 'socially-derived doubts'. As a result, different issues emerged in entrepreneurial activity and were identified as ER factors. In Sri Lanka, ER management was both defined by and managed in a social context rather than an objective cognitive context. Conceptualisation of business risk was subjective and antithetical to the psychological theory and to moderating risk and risk-avoidance through rational approaches. The market mechanism in risk management therefore worked loosely in Sri Lanka. Deep understanding from the findings led to a guiding model for business risk taking and management in Sri Lanka (Fig. 49.1), which discriminates between the social and business implications of business risk. This indicates that the entrepreneur needs to build a wider risk- management circle through

value base and the entrepreneurs' social wisdom to screen social risks rather than simple knowledge creation of market alertness.

49.8 Conclusion

Socio-cultural values and beliefs, which direct social being, influence entrepreneurial risk behaviour in Sri Lanka. Sri Lankan businesses try to preserve their paternalistic system, and emphasise socially bounded relations, and rightness, trust, loyalty and collectivism. Sri Lankan businesses cannot survive by merely following entrepreneurial orthodoxy within the western paradigm, which does not lead to appropriate practices because conflicts and challenges are palpable. In this research work found that in the South Asian cultural context social wisdom and value judgment is prominent and essential in understanding, tolerating and managing uncertainty and risk which are driven from socially and culturally.

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Chapter 50
Organizational Learning, Knowledge Management and Innovation Fusion

Preethi Kesavan

Abstract The synthesis of organisational learning and knowledge management theory traditionally has encouraged some important insights into learning and knowledge in organisations which are yet to be reflected in integrated practice. The integration of organizational learning and knowledge management (McElroy 2004; Kennedy, Developing a holistic perspective on learning and knowledge in a public sector organization—An exploration of workplace experience, 2010) in each of these areas has triggered interest in the exploration about contemporary innovation theories in their application to organisations (McElroy 2004; Quintane et al. 2011). The findings of the study described provide insight into the relationship between learning and knowledge in workplace through the lens of innovation theory. The findings provide some input into developing theories of innovation as they apply to organisations and practice. The study described in this paper offers empirical support for the fusion of themes evident in the "Managing the Asian Century".

In the recent PhD study described here, experiences of learning and knowledge in an organization were reflected on within a single frame. Weick, Sutcliffe, and Obstfeld [20, p. 410] say, "To focus on sense-making is to portray organizing as the experience of being thrown into an ongoing, unknowable, unpredictable streaming of experience in search of answers to the question, 'what's the story?'". Their investigation explored sensitiveness to innovation theory. In the study, the phrase 'intimately intertwined' was used to describe the integration of learners, knowledge and context evident in the experience of organizational members. The research explored the opportunities inbuilt in the fusion of the discussions, the prospects to look at learning and knowledge in organizations through the lens using innovation theory as an integrating device. The fusion of themes in the literature provides support for complete perspectives on learning and knowledge in organizations and reveals the significance of innovation as complex adaptive systems focus in the mix. The study emphasizes the ways in which this integration, while providing new scheme and highlighting features of the discussions.

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50.1   Significance in the Synthesis

Organizational learning and knowledge management are intertwined with each other (Weick 1991; [19]). He differentiates the organizational learning experience into two distinct conceptualizations. First, it focuses on behavior where organizational learning is related to change in behavioral responses. Second, it focuses on information processing system of an organization, where learning is seen as the process of disseminating information across different levels in an organization. Learning in the workplace can be understood as social networking between learners, which allows the creation and transfer of knowledge among individuals and groups [17, p. 169].

50.1.1   The Nature of Knowledge

Impetus for the KM focus grew from the work of business practitioners who developed and applied the first KM concepts in organizational settings [12]. Whilst there is widespread recognition of the importance of knowledge management and sharing amongst employees in organizations and its potential to enhance organizational performance and competitive advantage (e.g. [6]; Jackson et al. 2006), little previous research has been conducted on this topic within PEI. This is a rich area of research (Fullwood 2013) that leverages theories and frameworks from knowledge management, information science, human resource development, psychology and management toward the goal of learning and performance innovation for the individual, team, and organization (Turner 2012).

50.1.2   The Process of Learning and how it Contributes to Organisational Knowledge

The relationship between organizational learning (OL) and knowledge management (KM) has been best put forward by Garvin (2003) when he says that an organization that learns is an expert organization in creating, acquiring and transmitting knowledge, and modifying its behaviour to self-adapt. Findings indicate that there is lack of developing work and a lack of integration in the subject of organizational learning [9]. The practices in this organization links it to the knowledge the organisation holds. This investigation takes place within a reflection on the development of discussion eventually and its contemporary discussion.

   Although its relationship to organizational learning and knowledge management has been explored sporadically, the review showed no empirical studies conducted in the Private Education Institute's context. This creates a vacuum in the literature of organizational learning and Higher Education industry in Private Education Institutes. The present study extends the process school by examining different dimensions of organizational learning and knowledge management. This study is unique in that it

studies the relationship between the dimensions of learning, knowledge, leaders as innovation champions. This study extends previous studies on learning, knowledge, innovation theory, and culture and contextualizes to the Singapore Private Education organization.

50.1.3 Innovation Theory

Barbaroux, [4] integrates innovation, knowledge management and organizational learning and argues for a view of collaborative innovation as a complex and multidimensional organizational learning process "affected by the contextual factors such as the organization structure, information, communication and control process, which impact on the way individuals learn" [2, p. 456]. McElroy [11, p. 149] identifies, the "adaptive systems" school, which recognizes that innovation is a fundamental human behavior, a product of social systems that pre-date corporations by millions of years. In summary, innovation theories establish investigation activities concerning the creation of social ties that lead to innovation [1, 2]. McElroy [11] offers to the knowledge management, organizational learning and complex adaptive systems communities. This study's novelty is at the heart of the phenomena explored in a PEI and to contribute to the organizational learning, knowledge management and innovation literature.

50.1.4 Complex Adaptive Systems

The attributes of complex adaptive systems described by Holland (1995) align in many ways with Stacey's [14] and McElroy's [11] representation of complex responsive processes, a model developed to highlight innovation in knowledge processes within organizations and a model widely cited in knowledge management literatures. The novelty in this research is to adopt McElroy's [11] use of the "adaptive systems" school, which recognizes that innovation is a fundamental human behavior, a product of social systems (p. 149). In summary, innovation theory helps explain the establishment of order in a population where at first there appears to be none, and where novelty or exception successfully challenges settled rules. The complex adaptive systems model, works well when interrelationships among the members of a system are strong and dense, while allowing for action at the level of individual units (Stacey et al. 2000).

50.2 The Study

The fusion of themes in organizational learning, knowledge management and innovation provides a base for investigation of organizational learning and knowledge in a novel way. The application of complex adaptive systems for sustainable innovation

lends impetus to communicative behavior and action and advocacy efforts among a variety of social groups in the PEI context. In cultivating network ties among heterogeneous groups connected by common aims, it is here argued that, the innovator may prompt and, to an extent, guide the complex emergence of innovation in social systems. The pioneering research approach of complex adaptive systems in a PEI is presented for its ability to enrich contemporary social science and human behavior research epistemologies.

50.2.1 The Organization

The population for the research is drawn from a large Private Education Institute (PEI) with its head office in Singapore. It operates in multiple sites within Singapore and overseas. Access to diversity is essential to the emergence of novel phenomena in innovation and critical to the emergence of themes through the research methodology. Whilst there are no closely defined rules for sample size (Baum 2002; Patton 1990), sampling in qualitative research usually relies on small numbers with the aim of studying in depth and detail (Miles and Huberman 1994; Patton 1990). Seeking a richness of data about a particular phenomenon, the sample is derived purposefully rather than randomly [8]. The following section discusses the research methods and strategies that were employed in an effort to maintain rigor and create quality qualitative research. The study focused on exploring collective learning experience rather than individual differences. This study drew seven volunteer participants from three study sites. The final collective learning included the seven participants of the organization to address credibility of data and analysis to substantiate findings.

50.2.2 Method

The research study aims to elaborate the relationship between innovation theory and workplace learning experience in relation to organizational knowledge and learning. Thus the guiding question for this study *what is the relationship between innovation and workplace learning experience in relation to learning and knowledge* indicates the convergence of themes across research areas in organizational learning, knowledge management, and innovation and it connects workplace learning. The grounded theory approach has appealing characteristics to meet the requirements of an inductive theory building study. Glaser and Strauss (1967) observed, most studies generating substantive theory will ultimately generate and improve formal theory. The three sensitizing concepts organizational learning, organizational knowledge (parent theories), and innovation (focal theory) and the conceptual framework developed is treated as variables through the specifications of grounded theory procedures (Blaikie 2000). Adopting grounded theory methods for data collection and data analysis affords this study the potential to contribute to the body of knowledge

about innovation, organizational learning, and knowledge offering insight, enhance understanding, and provide a meaningful guide to action [15, p. 12].

This research used very small sample which produced this study with depth and significance based on the initial and emergent research questions and how the researcher conducted the study and constructed the analysis [5]. Sense-making [18] is trustworthy because the data emerges from participant experience defined by the participants. Grounded theory acts in this researching as a way of analyzing what phenomena is occurring that arises out of sense-making. Weick [19] regards sense-making as both individual and social and affects the way in which text is constructed and interpreted. 'When we describe something we are. . . reporting how something is seen and reacted to, and thereby meaningfully constructed, within a given community or set of communities' (Crotty 1998). The study drew on interactions of collectives in both the development and analysis of discussions.

50.3   Findings

The findings are built based on Holland's (1995) concepts of complex adaptive systems to describe the participants' language. Participants' use of language and vocabulary is presented here to build theory from the findings and expounds discussion in participants' experience and perception. Some discussion of the literature is developed in the early introduction of definitions through participants' shared language, activity and understanding in a particular PEI context. Constructivism, according to Crotty (1998, p. 58) is '. . . an individualist understanding of the constructionist position' maintaining focus on the sense-making activity of individual minds.

50.3.1   Learning Influence by Role Models

The participants described the influence of role models on learning. The leaders at all levels aim to ensure that organizational actions are consistent with organizational values and they also look for opportunities to learn in the process. Role modeling is perceived to support an orientation from which learning progresses. Learning from leaders, with members of the organization imparting their ideas to the team is exemplified in this respondent's words.

The participants spoke about mentoring and coaching. The process of organizational learning has been conventionally believed to be an intentional one with the goal of improving organizational effectiveness [9, pp. 88–89]. It is recommended that innovation results from the activities and inspiration of individuals, and the practices and policies of organizations, either in isolation or combined [13, 7]. Many participants describe their learning through inspiring other members and thus results in innovativeness in this organization. Organizational learning to innovate engages finding out a balance between exploratory and exploitative processes [10] so that

members have an environment favorable to learning and the results from learning are enjoyed by the organizing.

> F315: This is very important for me and this is what I also expect my staff and I also influence them to stand-up for a change and be stronger and more certain with this proactiveness. So, it is rather than just doing, it is just we'll lead, leading them to a comfort zone. And proactiveness, though I can't expect from all, but me being a role model, I try to be proactive. I am a bit courageous. So, it is my own efficacy, so I am able to influence these characteristics as I learn from my leaders, to my team

50.3.2 Learning by Group Interaction

Learning that results from interactions with a diverse group. Intra-organizational knowledge transfer has also been defined as "the process through which one unit (e.g., individual, group, department and division) is affected by the experience of another" [3, p. 3]. In this organization it is seen that the transfer of organizational capabilities from specially created business units and the transfer between subsidiaries within the organization located in distance is evident. Information is transferred through electronic media, but knowledge is shared through extensive interaction between members in a network. Such networks were obvious through formal organizational meeting setups and informal social relationships between individuals and teams within the organization.

50.3.3 Learning Activity Towards Preparation

All participants discussed learning in terms of their work place and all interactions within their organizational work place context. Workplace learning indeed includes both formal and informal learning, and important informal learning includes workers consulting with or seeking advice from other workers or even from wider contacts such as professional networks, suppliers, and customers. In this organization, participants' construction of learning exemplifies willingness, synergy, positive intention, growth and innovation, open-mindedness of feedback and appreciation which may lead to consequences of both positive and negative outcomes for the organization. This can be revealed as a process that transpires individuals and collective performance in the organization.

50.3.4 Knowledge

The motivation to share knowledge through an intra-organizational social media platform is the desire to help the organization reach its goals and helping colleagues was

evident. Vuori and Okkonen claim social media applications to be useful in work context which is assumed that people use the tools [16]. Thus, social media platform was mainly seen as a tool for knowledge sharing, thus value of such tool is dependent on perceived value of usage (p. 601). Innovations are primary in participants' discussions. This form of sharing and transferring knowledge is often spoken of in individual terms amongst the organizational members, and is treated as an organizational practice owned by the organization. Knowledge integration is enhanced via team autonomy, dedication and diversity. In this example of team dedication, autonomy and diversity as crucial knowledge, the participants' discussion reveals the interweaving of learning and knowledge and the influence of problem-solving in the everyday work of meeting customer needs.

50.4 Conclusions

It is evident that, growing attention is paid to the relationship between the individual and the organizational in development of knowledge and the role of individual and collective in cognition, sharing and institutionalization across the literature in organizational learning, knowledge management and workplace learning. Innovation theory is shown here to provide fresh perspectives on organizations and throw some light on the questions that are central to the converging themes across the literatures reviewed. The convergence of themes across organizational learning and knowledge management provides new view for more holistic organizational research into learning and knowledge. Essential implications for workplace learning approaches are suggested in the convergence. This paper illustrated the intertwined relationship of learning and knowledge in context and dynamic network connectivity through interaction and commitment with work and put next to the topics focused through fusion against the tranquility that become evident in following the "Managing the Asian Century".

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Chapter 51
Innovations in Entrepreneurship: The Experience of Indian Business

R. Satya Raju and Suneetha Rapaka

Abstract The entrepreneurship is a dream or desire for some people. Entrepreneurship helps a region or a nation for advancement. When innovations are introduced, the organizations always grow and contribute a lot. The enterprises selected for the study have given positive results with innovations. In order to face the challenges some measures are to be taken and the leaders are to be visionary and strategic.

51.1   Introduction

Entrepreneurship is a desire or dream for some people. Many people have ideas but few of them decide to do something not tomorrow but today. The real entrepreneur is the doer, but not a dreamer. The recent list of billionaires contains as many as 1,426 are global billionaires. The USA has the highest share of billionaires representing 442. There is a rise of millionaire entrepreneurs in Asia from 315 in 2012 to 442 in 2013. In China, the number is 122 and in India it has taken place the second at 55. The new comers in Asia have been significantly recorded as 78. It shows a tremendous growth of billionaires in Asia. The countries with most billionaires are: China (122), India (55), Hong Kong (39), Taiwan (26), Indonesia (25), South Korea (24), Japan (22), Australia (22), Philippines (11), Malaysia (10), Thailand (10) and Singapore (10). The top ten industries which are growing fast are: real estate, diversified, manufacturing, fashion and retail, technology, healthcare, food and beverage, metals and mining, finance and energy (Forbes April 5, 2013) [1]. This paper seeks to explain the issues relating to the concept of entrepreneurship, the micro, small and medium enterprises, the role, innovative enterprises success and some issues for consideration.

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51.2   The Concept

The concept of entrepreneurship has been explained by several experts and researchers. Some of them are Adam Smith, J. B. Say, Schumpeter, Knight, Cantilion, Marshall, Coley, Young, Frederic, Hoselitz, Mc. Cleland, Everatt, Kunkil, et. al. Different theories and experiences stated by them. Peter F Drucker says, the entrepreneur always looks for change, responds to it and exploits it as an opportunity. Entrepreneur is a person who takes decisions under he conditions of risk and uncertainty. The entrepreneurship may be in large scale sector or small business.

Government of India has been promoting small business under micro small medium enterprises (MSMEs). The importance of the micro small and medium enterprises (MSMEs) limit in plant and machinery excluding land and buildings for manufacturing enterprises and service enterprises is considered for the size of the business. In service enterprises, it is upto ₹ 10 lakh for micro enterprises, ₹ 10 lakh to ₹ 2.0 crore for small enterprise, ₹ 2.0 crore to ₹ 5.0 crore for medium enterprises. Whereas, in manufacturing enterprises, it is increased upto ₹ 25 lakh for micro enterprises, ₹ 25 lakh to ₹ 5.0 crore for small enterprises and ₹ 5.0 crore to ₹ 10.0 crore for medium enterprises. When the investment is above ₹ 10.0 crore, the firm is considered to be a large enterprise. Small enterprises represent 75 % of the total employment prevailing more than 18 million jobs. For every ₹ 1.0 lakh of fixed investment small sector provides employment to 26 persons as against 4 persons in the large scale sector. They also help a lot for removal of regional disparities.

The Government of India has established a separate Ministry known as Ministry of Micro, Small and Medium Enterprises for encouraging small scale sector. Some national institutes have also been established for promoting these enterprises.

51.3   Objectives

The objectives of the study are:

a. to present the role of small enterprises in Indian economy
b. to understand the innovative strategies of the entrepreneurs.
c. to offer suggestions for effective management of the enterprises.

51.4   Methodology

The micro—small and medium enterprises are chosen for the study because, the role of these enterprises in the economy is quite significant. The enterprises in the small sector represent trade, manufacturing and service segments. Based on random sampling method, 60 enterprises from trade, manufacturing and service sector have been selected. The entrepreneurs of these enterprises have been interviewed with a questionnaire eliciting information on the establishment, environment and challenges in

managing the business enterprises. Secondary data has been collected from journals and other information available. The innovations in MSMEs are studied in this paper. For the study 20 enterprises each in trade, manufacturing, service sectors have been selected based on random sampling. Thus, 60 enterprises have been studied. The experiences of entrepreneurs are briefly presented.

51.5 Some Observations

The small enterprises role in providing employment and generating income to the nation is significant. Average employment in the enterprises is about 7. The State is encouraging small enterprises by providing environment, infrastructure, loans and consultancy for 80 % of the units received some benefit. Some enterprises (10 %) have received innovation awards. Some of the micro enterprises representing 15 % have become major enterprise during the last two decades. The small enterprises used to offer services locally in the beginning and over a period of time have become global. Innovation process clearly explains the commercial application of the analytical planning. The end result is surplus for investors and satisfaction for founders. The innovation process is shown in the following diagram.

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┌─────────────────────────────────────────────────┐
│        TRANSITION OF CREATIVE IDEA INTO          │
│              A USEFUL APPLICATION                │
└─────────────────────────────────────────────────┘

┌────────────┐   ┌────────────┐   ┌────────────┐   ┌────────────┐
│ Analytical │ → │ Organizing │ → │Implementa- │ → │ Commercial │
│  Planning  │   │ Resources  │   │   tion     │   │Application │
└────────────┘   └────────────┘   └────────────┘   └────────────┘

To identify       To obtain         To accomplish      To provide
• Product         • Materials       • Organization     • Value to
  design          • Technology      • Product design     customers
• Market          • Human capital   • Manufacturing    • Awards to
  energy                              process            employees
• Financial                                            • Revenue for
  need                                                   investors
                                                       • Satisfaction for
                                                         founders
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Over 60 % of them have been following innovative practices. The entrepreneurs representing over 80 % have been growing and the founders have more satisfaction

towards the performance. As a result of their progress and prosperity, their contribution towards the society has been very significant. They are spending huge amount of the wealth for the society; giving donations, free food to the needy, educational scholarships. The enterprises, which are not following the innovative practices, observed to be slow growth oriented and their future is expected to be uncertain.

Some experiences are very interesting and educative. One of the small entrepreneurs has started world class printing press which has been considered to be the best in India. It is very creative in the processes and product design and development. It has received Asian awards also in addition to national awards. An other entrepreneur has been migrated from China and started a venture in India. It is one of the best in India in creativity and innovations. An other retail enterprise has been grown from small to medium because of the innovativeness. The entrepreneurs have started with meagre capital in the beginning which have become medium enterprises by adopting creative process. Another small enterprise in food processing business has been grown to the extent of medium enterprise. A small seeds enterprise has become a large group because of creativity and innovations. Another enterprise in construction activity has become a big enterprise contributing employment and income to the large extent. Thus, several enterprises in trade, manufacturing, service segments have become large enterprises because of creativity and innovations.

These enterprises have some constraints. The challenges of these enterprises are lack of visionary, leadership, competition from large enterprises, scarcity of resources, shortage of power, financial and marketing problems, succession problem, shortage of skilled people and technology. These constraints are directly or indirectly faced by the selected enterprises.

51.6 Suggestions

The entrepreneurship environment provides certain basic issues to understand competitiveness in the small enterprises. The entrepreneurs have both internal and external environmental threats. The suppliers of raw materials some times create problem of continuous supply of the inputs. As a result, there is scarcity of raw materials in many enterprises. There is a need for establishing long term contacts with the suppliers of the supply of raw materials. Sometimes, the appropriate governments have to take measures to supply the raw materials to the entrepreneurs. Power is another serious problem. The important reason for low capacity utilization is the irregular supply of power. Everyday 4–6 h power cuts have been observed. The government has to take appropriate measures for generation and supply of power to the enterprises. Therefore the government has to take steps to supply power continuously. Inadequate working capital is another problem in these enterprises. Long delays in sanction, improper estimates, mismanagement of the financial resources are the main reasons for this problem. The banks and financial institutions have to provide the required capital for effective management of these enterprises. As the technological changes are many in several activities, there is every need to introduce new methods of production, processes and procedures. Latest technology is to

be introduced. The appropriate governments have to provide proper markets. State Marketing Corporations should be established by the Governments to take up the responsibility of marketing. As some customers have brand consciousness the products need brand names. The customer gets maximum satisfaction in quality and price when it obtains brand name. There is need for market—research for improving quality of the product/ service. Employee—employer relations should always be cordial. Training and development activities are to be provided continuously to update the skills of the employees. The National Skill Development Scheme is to be considered for skill development. The entrepreneurs should attend EDPs at various places on their field. They must have knowledge over the techniques of production, distribution and selection of the personnel. The competition from large scale and medium enterprises is very high in some activities. There should be minimum market assurance for these enterprises from the large scale enterprises. As most of the enterprises are growing concerns, appropriate strategies are to be adopted for diversifying the business activities. Depending upon the environmental analysis, they have to adopt appropriate strategies. The entrepreneurs are to be visionary leaders in managing.

51.7   Conclusion

It is clear from the experience of India, entrepreneurship has been playing a crucial role for providing employment and generating income. Entrepreneurship is a change agent of a nation. The nation has been concentrating on this area for further advancement. Several institutions have been promoted to encourage entrepreneurship by the state. The innovative entrepreneurs are more successful than that of other entrepreneurs. As the small enterprise sector role is significant, this sector should be provided all the necessary support to sail smoothly in the competitive global economy.

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Chapter 52
Reflection of Ethicality in Business Practices: Perspectives of Sri Lankan Entrepreneurs

G D V Rupika Senadheera, Helan R Gamage and H D Karunaratne

Abstract It is evident that value is a central component that guides human activity systems and ethical decision making. Our study suggests that entrepreneurs are governed through the set of values that they internalize over the years. Hence over the years entrepreneurial values shape the nature of business practices. The purpose of this paper is to investigate the existence of ethical practices that shape entrepreneurialism in Sri Lanka. Ethical practices of business are analyzed based on three moral approaches: egoist ethicality; utilitarian ethicality; and deontological ethicality. Mixed methodology was employed to capture the holistic nature of interaction between values and entrepreneurial performance. Out of 500 entrepreneurs summoned for the survey, only 333 responded, of which 20 entrepreneurs were interviewed. Data confirmed that entrepreneurs who possess entrepreneurial values at a low level and the least mean scores were reported against the egoistic work climate. This shows that the pattern of the majority of entrepreneurs is based on a deontological type of ethicality rather than other types of ethicalities.

52.1 Introduction

Ethics reflect values of human beings and it has been cited as key fundamental concern for management as a focal topic of discussion within academia and policy makers. Hence, investigating the dimensions of ethics is vital since ethical business practices will help to maximize gains and unethical business practices will result in enormous social costs. Business ethics reflects the philosophy of business. Accordingly, to improve the ethicality of the business organization, management must effectively design a specific ethical basis for the organization and communicate it to all its stakeholders. Similar to other disciplines, ethics is important in entrepreneurial context too.

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Entrepreneurship is a social phenomenon and entrepreneur is a socially interactive person who works with human feelings. Druker explains that entrepreneurship is a fundamentally a moral enterprise [1]. It is clear that the entrepreneurs have the social obligations to promote wellbeing of the society. It has become a mega driving force to shape and reshape the societies which in turn influence human lives. Achievement orientation, autonomy, independence, locus of control, innovation, self confidence, risk bearing etc. are the main values that shape entrepreneurship [2, 3]. In developing countries implementation of ethics in business is less significant and lack of considerations. However, ethics is not a word unknown to Sri Lankan society and date back to several centuries.

52.2   Literature Survey

Ethical theories are broadly divided in to two; teleological and deontological theories of ethics. Teleological theory of ethics has two divisions, namely egoism and utilitarianism. Egoistic approach to ethics has been centered on individual basis and all actions are self-centered. Utilitarianism is on the consequences of the good and bad actions determined by the utility or happiness generated by the actions for the largest number of people [4]. Deontological approach to ethics focuses on the principles that govern the actions. Martin and Cullen, explains that an ethical climate as a type of work climate that is best understood as a group of perspective climates reflecting the organizational procedures, policies and practices with regard to moral consequences. Values are seen as a source for individual action, guiding principles in the life of a person and it may strongly influence entrepreneurs' behavior. In 2002, Morris et al. elucidate that values associated with entrepreneurs are need for achievement, Innovation, self- confidence, risk bearing, locus of control, independence etc. Gamage et al. states that 'any development strategy based on n-Ach concept will probably benefit from a significant revision which aligns it with values and belief that influences behavior in the Sri Lanka social and cultural context'. Entrepreneurial ethics is embedded within the main characteristics of the entrepreneurs and need for achievement leads them to focus on personal gains. Locus of control is a potentially important factor influencing ethical judgment and behavior. An innovation means that the entrepreneur must have the ability to produce solutions for new situations particularly addressing social issues. An individual's propensity to take risks can be defined as his/her orientation towards taking chances in uncertain decision making contexts which would be ethical or unethical.

Literature reveals that ethics is a relative concept that is specific to individual, culture, context, country and time. Many researchers explored the relationship between entrepreneurship and business ethics. The findings lead to realization that some are similar and some are contradictory. In Sri Lankan context, this relationship relatively unexplored in published literature. Underneath this situation, a recent edition of a daily paper in Sri Lanka has recorded that unethical practices are increasing. Therefore, this is an excellent research area where the researchers can explore the current ethical behavior pattern prevalent among Sri Lankan business entities.

52.3   Purpose of the Study

The main purpose of this paper is to investigate the existence of ethical practices that shape entrepreneurialism in Sri Lanka. In order to achieve this purpose the following research questions are examined.

1. Do business practices of entrepreneurs reflect the nature of ethicality of their businesses?
2. Do entrepreneurial values influence business practices to characterize the overall ethicality of the business?

In order to find answers to above questions, following hypothesis are proposed. Entrepreneurial value is employed as the independent research construct and types of ethicality is considered as dependent research constructs of the study.

H1: Entrepreneurial values influence in creating egoistic ethicality in business practices

H2: Entrepreneurial values influence in creating utilitarian ethicality in business practices

H3: Entrepreneurial values influence in creating deontological ethicality in business practices

52.4   Research Design and Methods of Analysis

An interpretive mixed-method approach was employed for the study. The major focus of the study was quantitative method, whereas the minor was qualitative. The findings were based on both methods. The study was based on the entrepreneurial community in Sri Lanka. Five hundred business organizations were selected from proportionate sampling. Survey method was used for collecting quantitative data for the study. Domain of the ethicality captured through egoism, utilitarianism and deontology dimensions. Egoism was tapped through 11 items, utilitarianism 16 items and deontology 7 items respectively. In-depth interviews were done with 20 entrepreneurs in Sri Lanka and observations were used as qualitative methods for the study. Data were analyzed using Statistical Package of Social Science (SPSS) version 16. Correlation analysis and multivariate analysis (MANOVA) were used to test hypothesizes of the study.

52.5   Results and Discussions

This section demonstrates results of survey data and qualitative data analysis and discussions of findings.

Table 52.1 Multivariate tests analysis. (Survey data 2012)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept Wilks' Lambda		0.010	1.097E4[a]	3.000	3.230E2	0.000	0.990
Entrepreneurial Values Wilks'	Lambda	0.938	7.154[a]	3.000	3.230E2	0.000	0.062

52.5.1 Demographic Profile

Out of 500 entrepreneurs summoned for the survey, only 333 responded. Ninety-four % respondents were males and 6 % females. In terms of age group, 29 % is less than 40, 37 % falls to 41–50 and 34 % over 50 years. Where education is concerned, only 33 % school educationists, 35 % professional educationists and 32 % higher educationist. Out of this, 80 % Buddhists, 8 % Christians, 7 % Hindus and 4 % Muslims were the reflected national demographics. Most of the responding entrepreneurs were rural origins (59 %) and others (41 %) from urban areas.

52.5.2 Quantitative Data Analysis

Mean score of entrepreneurial value varies across each type of work ethicality. The highest mean score was recorded on deontological work ethicality (4.14). The second highest mean score for utilitarian work ethicality(3.84) and third preference reported for egoistic work ethicality (3.27). The correlation coefficient between entrepreneurial value components and type of ethicality demonstrate that all relationships are positively correlated. With respect to the correlation matrix, two conditions are confirmed. One of the variables should have to be inter correlated and the other one should not be highly correlated. As a result, the data are appropriated to use in MANOVA (Table 52.1).

Wilks' Lambda value for entrepreneurial value was 0.938 with a sig. value of 0.000 ($p < .05$). The results conclude that the main effect of entrepreneurial value construct (independent variable) has a significant influence on the combined dependent variables: egoistic ethicality, utilitarian ethicality and deontological ethicality. The value for the partial eta squared was 0.062 for entrepreneurial values. Therefore, the study discloses that entrepreneurial values have moderate level effect, on the dependent variables, egoistic, utilitarian, and deontological types of ethicality in business context in Sri Lanka (Table 52.2).

Mean difference was recorded -0.163 in between two groups; low and high against to egoistic work ethicality. P value was 0.019 indicated that entrepreneurial value has not statistically significant influence on egoistic work ethicality ($\alpha = 0.017$, $p = 0.019$, $p > 0.05$). Different results were found on entrepreneurial values and utilitarian work ethicality (mean difference, -0.223, $\alpha = 0.017$, $p = 0.001$, $p < .05$)

Table 52.2 Pairwise comparisons. (Survey data 2012)

Dependent variable	Mean value	Entrepreneurial values	Entrepreneurial values	Mean difference	Sig.[a]	Partial EtaSquard
Egoist work climate	3.27	Low ($M = 3.337$)	High ($M = 3.500$)	0.163*	0.019	0.017
Utilitarian work climate	3.84	Low ($M = 3.620$)	High ($M = 3.843$)	0.223*	0.001	0.031
Deontological work climate	4.14	Low ($M = 4.026$)	High ($M = 4.223$)	0.198*	0.000	0.038

*$p < 0.05$

and deontological work ethicality (mean difference, -0.198, $\alpha = 0.017$, $p = 0.000$, $p < 0.05$). Once improving entrepreneurial values from low level to higher level, entrepreneurs' more prefer to practice these three types of ethicalities at higher level as their business practices. Moreover, comparing the entrepreneurs' preference to practice each type of ethical work climate patterns are: low group entrepreneurs' where first preference goes to deontological work climate, second preference to utilitarian work climate and last preference goes to egoistic work climate. Entrepreneurs who are embedded with high level of entrepreneurial values also demonstrated same results.

52.5.3 Qualitative Data Analysis

Results of in-depth Interviews uncover interesting aspects of values and ethics of entrepreneurial lives of Sri Lanka.

Egoistic work ethicality "... it should be satisfactory return for my investment" (R1). "I think business is a profit generating entity" (R 3). We use subcontractors to certain tasks" (R 10). According to their views, business organization is a profit generating entity of the society. *"I like to hear the (operating voices) of my machineries in the factory" (R 4). I do not influence the workers to use safety equipment" (R 18).* The main objectives of these entrepreneurs are to achieve their targets and un-concerning to employees' health and safety. Similar ideas in relation to above aspects were said by respondents 14, 15, 19 as well. *"... a camera system (CCTV Camera) have been fixed in the relevant locations" (R5). "... CCTV minimizes the unethical incidents in my organization" (R 2).* These statements reveal that present day organizations strongly controls the human behavior in the organization to achieve their targets. *"Whatever the right for me that is my ethics" (R6). "I am the person who loves my business most" (R8). "All decisions are taken by me" (R 11). "I think my first choice is my business"(R 19).* It is evident that entrepreneurs are governed through the set of values that they internalize over the years which is self-centered and autocratic in decision making.

Utilitarian work ethicality *". . . Share and care, win hearts and accept challenges"*
(R 2). We are also responsible for the wellbeing of our employees" (H6). "Our aim
is not (only) to make quality decisions, and (but)make a quality citizen" (R1). "Our
main focus of the business is to serve the society" (R3).

From the perspective of utilitarian ethical theory actions in which accumulated
values of majority is concerned as ethics. *". . . When a funeral happens, the com-*
pany pays" (R7). "I have a responsibility to create a good work environment with
harmony" (R4). ". . . employees stayed with us for nearly 20 years and never steal"
(R12). These views reflects that entrepreneurs like to keep up good work environ-
ment and work with harmony. *". . . providing meals for our employees"(R 13). I am*
planning to provide accommodation facilities"(R 10). ". . . there is a roster for each
employee to participate for a meditation programe (R 15). These statements reveal
that the entrepreneurs are often concerned of employees, their families, employees'
mental and physical health. *"We Organize annual get together in which any one of*
the employee's family could participate" (R 14). "My office is open to everyone (R3).
These are the incentives provided to the employees to win their confidence and keep
them happy.

Deontological work ethicality *"I believe that all the business organizations should*
have a well clear rules and procedures" (R 14) ". . . Well established set of rules and
regulations are always being practiced" (R 15)." Rules and regulations will help me
a lot" (R 10), ". . . rules help the business to minimize the day to day operational
issues" (R 11), (R 16). However, since the rules seem to serve only the employer to
manage resources in an efficient way, rules and regulations are a must, in the business
context to maintain ethical practices. *"I ordered advance technological systems such*
as finger print machines, security alarm, security personnel as well" (R 17), Always
we will obey the law" (R19). We have a good set of rules and regulations governance,
discipline and conduct. When someone is found guilty, in the first instance, they are
advised and in the second instance, they are fired" (R20). These facts are evident
that those respondents prefer more to follow and apply rules, regulations, code of
ethics and professional standards to manage the business activities.

52.5.4 Discussions of Findings

Empirical findings of the study revealed that entrepreneurial values are not statisti-
cally significant in influencing for creating egoistic ethicality in business practices
within the business context in Sri Lanka. Therefore, H1was not accepted. But
in-depth interview data reflected that most entrepreneurs have paid their focus to
maximize their self-wellbeing. The common object of their ideas reveals that they
are highly concerned on efficiency, self decisions for the survival of the organization
and self with a good profit. Bottom line of this situation is that H1 has been accepted.
It is evident that what is good and bad is a culture bounded person specific and rela-
tive concepts in Sri Lankan society. Quantitative findings have also been supported

for H2 and H3. Entrepreneurial values influence in creating deontological work ethicality in business practices. Qualitative data also support to confirm the same results for H2 and H3 at surface level. Hence, it can be concluded that entrepreneurial value influence business practices to characterize the overall ethicality of a business in Sri Lanka. The results revealed that the entrepreneurs reflect the existence of ethics in their current practices and they prefer more to follow deontological ethicality as their practices. The least preference was reported for egoistic work ethicality. Utilitarian work ethicality also has been practiced by the respondents. Therefore, findings of the study have been proved, existence and reflection of ethics in their practices and entrepreneurial values, that influence business practices in the Sri Lankan context

52.6   Conclusion

It was indicated that rules and regulations and professional codes of ethics are the most important considerations in practice. All three types of ethicalities are blended with their business practices. This has been further evident by qualitative data. It shows that rather than a dominant single ethicality, a combination of ethicalities was preferred by most entrepreneurs. Within this mix of ethicalities, deontological ethicality seems to be the dominant one. However, the exact type of ethicality that they practices in their business depends in achieving their ultimate intentions.

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Chapter 53
Innovation in Small and Medium-Sized Wood-Furniture Firms in Central Java, Indonesia

Amie Kusumawardhani and Grace McCarthy

Abstract The aim of this paper is to explore the perception of innovation within Indonesian SMEs in the wood-furniture industry in Central Java, Indonesia. Qualitative research was employed by interviewing SMEs managers/owners. The study showed that SMEs' perception of innovation was not necessarily related to 'newness' or 'novelty' as suggested by some scholars. The innovation carried out by the majority of SMEs in this study is likely to be considered as incremental innovation. The characteristics of the wood-furniture industry and SMEs are believed to contribute to the different perspectives concerning innovation than those reported in the literature. Even so, they are unlikely to prevent Indonesian SMEs to become entrepreneurial and competitive firms.

53.1 Introduction

The wood-furniture industry plays a very important role in the Indonesian economy, as this industry has great potential not only for domestic but also international trade. In the global market, Indonesia is one of the biggest furniture exporters in the world, along with China, Italy, Vietnam and Malaysia. Undoubtedly, this industry is recognised as having another important role in Indonesia as a source of foreign exchange. The wood-furniture industry in Indonesia is characterised as a resource-intensive[1] as well as labour-intensive industry. This industry employs approximately 2 million people directly, and an additional 8 million workers indirectly.

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[1] A resource-intensive industry is an industry that utilise natural resources as materials, such as timber.

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Small and Medium Enterprises (SMEs)[2] are the major players in the wood furniture industry in Indonesia. With this large proportion, it is no surprise about the ability of SMEs to generate more employment than larger firms.

At present, Indonesian SMEs in the wood-furniture industry have to face the intense competition as more and more players, especially from Asian countries such as China, Malaysia and Vietnam, enter the global market. Previous studies suggested that innovation has become fundamental for achieving competitive advantage. By conducting innovation, firms are able to renew their market offerings, particularly as product and business- model life cycles are shortening. Innovation is crucial for firms that are operating under conditions of global competition, rapid technology advances and resource scarcity in order to survive and thrive [5].

As the important role of SMEs in nation's economy, there is no doubt that innovation activity in SMEs has attracted researchers' attention. Schumpeter suggested that SMEs were likely to be the source of most innovation. However, it has been argued that innovation in SMEs is limited due to the lack of resources and capabilities. For this reason, previous studies of innovation have mainly focused on large firms.

Despite agreement about the relevance of innovation in competitiveness, previous studies have revealed inconsistencies in conceptualising and measuring innovation that lead to inconclusive findings in the innovation literature. Some researchers [3] implied that innovation means different things to different people. The lack of consensus about innovation definition has also been suggested as a major reason why findings in the innovation literature are inconsistent [2, 4].

This article attempts to explore the innovation perceptions within Indonesian SMEs in the wood-furniture industry in Central Java, Indonesia. Specifically this article addresses research questions: (1) How Indonesian SMEs in the wood-furniture industry in Central Java define innovation? and (2) How Indonesian SMEs in the wood-furniture industry in Central Java perform innovation in their firms?

To answer these research questions, a qualitative research was employed by conducting in-depth interviews with managers/owners of SMEs in the wood-furniture industry in Central Java in order to identify their perspectives on innovation.

This study contributes to entrepreneurship research in three respects. First, this study attempts to provide more in-depth understanding on how Indonesian SMEs in the wood-furniture industry in Central Java perceive and perform innovation in their firms. Second, this study focuses on SMEs. Despite the widely acknowledge important of innovation in SMEs, the empirical studies lack evidence regarding the way SMEs define and practice innovation for responding to expectation of better performance in order to survive and remain competitive. Third, this study employs a qualitative research that is considered by entrepreneurship scholars as a more appropriate approach in researching entrepreneurship and SMEs, particularly in the developing countries.

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[2] SMEs are defined by Statistics Indonesia (Badan Pusat Statistik) (2008) as firms that employ five to ninety-nine workers.

The article is structured as follows. Section 2 briefly reviews literature about innovation, particularly in entrepreneurship and SMEs. Section 3 describes methodology. Section 4 discusses empirical results. Section 5 presents discussion in order to answer the proposed research questions. Finally, some conclusions are provided.

53.2   Literature Review

Innovation is a condition inherent in a domain of entrepreneurship. Schumpeter [1] emphasised that innovation is the core of entrepreneurship. He was also one of the first scholars to argue that innovation is the fundamental endeavour of entrepreneurial organisations for developing new products or inventing new processes [1], and that innovation can contribute to a firm's competitive advantage [5]. Likewise, Covin and Miles [4] believed that innovation is an essential part of a business strategy and that entrepreneurship cannot exist without it. Johne and Davies suggested three main types of innovation:

1. Product innovation, which refers to new product options and their development. It is commonly conducted in technology-driven firms to facilitate their competitive positioning.
2. Process innovation, which refers to the improvement of internal capabilities, including firms' operations and capacities.
3. Market innovation, which refers to the selection of new market segments that are best served by particular firms.

Innovative firms can perform one or more types of innovation, as they are not mutually exclusive. The level of innovations may vary depending on the characteristics of the firms and the performance achieved by the company.

Innovation is always associated with an attribute of 'newness' [5]. However, the scope of 'newness' has been conceptualised inconsistently in the literature. This is understandable, since to date there has been no consensus in defining innovation, despite agreement about the relevance of innovation in competitiveness. This lack of agreement about its innovation definition has been suggested as a major reason why findings in the innovation literature are inconsistent [3].

Since 'newness' is considered as a relative term, some researchers [5] suggested that innovation can be categorised based on *whose* perspective this degree of newness is viewed and *what* is new. Applying this criterion, innovation is distinguished into radical and incremental innovation. Radical innovation refers to the introduction of products, services or technologies that are perceived to be new to the firm as well as to the market or industry. This type of innovation also implies substantial changes in the activities of an organisation that will lead to an increase in the existing knowledge of the firm. On the other hand, incremental innovation refers to innovation that is perceived to be new to the firm only. It only requires a minor improvement to current practice. Dewar and Dutton, however, posited that the distinction between incremental and radical innovation "is easier to intuit than to define or measure", such that different perceptions may exist in classifying innovation.

53.3   Methodology

Even though both quantitative and qualitative methodologies have been applied in entrepreneurship research, quantitative research based on empirical data has dominated previous entrepreneurship and SME studies. The use of quantitative research in entrepreneurship studies, however, has drawn criticism. This approach is considered is not able to describe the entrepreneurial process of the firm. Hill and Wright argued that quantitative research is unable to provide insights into people's behaviour. They emphasised that researchers should recognise the concept of multiple realities, which means that "each individual entrepreneur/owner-manager constructs his or her own reality according to how he or she interprets and perceives the world". Hill and Wright also suggested that a qualitative approach is more appropriate in researching SMEs.

According to Marschan-Piekkari and Welch, lack of secondary data to support random samples, unfamiliarity of informants with questionnaires, and cultures that highlight social relationships (including face-to-face communication) and trust, are among the factors that contribute to the preference for qualitative rather than quantitative approaches in studying emerging economies.

For that reason, this study employed qualitative research as this allows the researcher to have a deeper understanding about the participants' personal experiences.

53.3.1   Data Collection

The wood-furniture in Central Java was selected as a single industry for this study due to its significant contribution to the regional and national economies. The informants in this study are owners/managers of SMEs. Based on purposive sampling, thirteen SMEs in the wood furniture industry in Central Java were selected to be interviewed. Semi-structured interviews with owners/managers of SMEs were conducted in this study; that is, a list of open-ended questions on specific topics in this study was used as a guideline for the researcher to carry out the interview and to allow informants flexibility in answering. This method enabled the researcher to ask other relevant questions not on the list.

53.3.2   Data Analysis

Trustworthiness was addressed in this study. This means that this study complied with established criteria by following a logical research design throughout. The research design, including data-collection methods and data analysis, was cautiously planned and implemented. Trustworthiness contains four criteria: credibility, transferability, dependability and confirmability [18].

All interviews with informants were recorded and later transcribed in Indonesian. All transcriptions were then translated into English. Field notes, collected documents

and photos relevant to this study were sorted and examined to complement the data acquired from interviews.

Content analysis was applied in analysing qualitative data in this study. It provides a replicable methodology to access deep individual or collective structures such as values, intentions and attitudes. It also allows flexibility for researchers in analysing data.

53.4   Empirical Findings

53.4.1   Profiles of SMEs Informants

All informants in this study were indigenous Indonesian (*pribumi*) from a Javanese ethnic background. *Pribumi* SMEs are the major players in the wood-furniture industry. Of the thirteen SME owners/managers interviewed for this study, eleven were business founders, and only two were the second generation to own the family business. The SME owners/managers interviewed in this study employed between seven and sixty-five full-time workers. When their full-time workforce was not able to finish the work in time, the owners/managers would hire part-time workers.

Most SMEs in this study are located in clusters that were established naturally. SMEs in this cluster are mostly household-based firms, meaning that their workshops are located in or next to their houses. Only three SME informants were located in a cluster that was developed by the Government as a pilot project for SMEs in the furniture industry in Central Java.

The wood furniture produced by SMEs can be differentiated into indoor and outdoor (garden) furniture. The wood-furniture industry in Indonesia is characterised as market-driven, or more specifically buyer-driven: the market or buyer determines the products that the producers will make.

All SMEs in this study depended heavily on foreign markets, since their main products were intended to serve these markets. Nonetheless, only three informants exported their product directly to their buyers overseas. The majority of informants were suppliers or subcontractors for larger workshops or buyers/agents, who then exported the furniture overseas. Few informants sold their product directly to final customers, either domestic or foreign.

Subcontracting is the key characteristic in the relationship between players in the wood-furniture industry. In this relationship, SMEs that receive orders from local as well foreign buyers may subcontract their part of the production process to more specialised small firms and craftsmen.

The majority of informants were not members of *ASMINDO* (Indonesian Furniture Producers Association), since they thought *ASMINDO* was only for large firms in the furniture industry. Furthermore, they were reluctant to pay a membership fee that was relatively expensive for them. As a consequence, they never had any assistance from this organisation in doing their business.

Three types of innovation were identified in this study: product, market and process innovations.

53.4.1.1 Product Innovation

Product innovation demonstrated by informants SMEs can be categorised into three types: augmented product design, new product design and global product design.

Augmented Product-Design

This refers to the ability of SMEs to improve the existing design provided by buyers or customers to enhance product value. Most informants commonly applied this practice by conducting minor improvements to the existing design for new orders from buyers. Sometimes they propose ideas to improve the product design, even though this is only a minor change in a product construction:

> For design, they bring us a picture or a photo, sometimes a sample. Sometimes I propose a different design, a small change from the sample they brought here. For example, for a lounger, I proposed an additional buffer to its leg to make the lounger steadier. (R11)

Unlike new orders, the process for repeat order is simpler, as the owners/managers have already understood the buyer's design and specifications.

New Product Design

This refers to the ability of SMEs to seek, create and introduce new product designs to the market. Some informants who served final customers needed to provide new designs for them. The SMEs may offer custom-made product or new-design product to market. Designs should be continually updated so that SMEs can survive in this industry.

Global Product Design

This refers to a firm's ability to produce products that meet global standards. All informants interviewed in this study produce products for export. When they began to receive international orders, directly or indirectly, SMEs were introduced to global product standards. In turn, this influences the SMEs' generations-old furniture making practices.

53.4.1.2 Sources of Innovation

The sources of ideas for product design can be anywhere. Some informants picked up ideas for their new products from other furniture makers in their surrounding

area. Trade fairs are also a common place for SMEs to get ideas from other furniture makers. Due to the lack of awareness of intellectual property rights and protection, counterfeiting is a common practice in the furniture industry.

So far, the majority of informants have relied on buyer or customer suggestions as the primary sources of ideas for innovation. One informant mentioned that an order for a customised product persuaded him to be innovative.

> From a customised order, I can produce new product designs because customers' demands represent the real customers' voices. So our products have to be new at all times, because without innovation we cannot compete with others. (R13)

Interviews with the informants in this study disclosed that efforts to produce innovation in their firms originated with the firms themselves, rather than with Government initiatives. The Government, according to the informants, has not provided any assistance in encouraging innovation. Likewise, since almost all informants were not members of *ASMINDO*, they have never obtained any support from it.

53.4.1.3   Market Innovation

The interviews revealed that the majority of informants were involved in informal and unplanned marketing efforts. The main reason given by informants for not conducting formal marketing activities is because owners/managers are the only person responsible for all functions in the firm, so their time has been fully occupied with managing technical and managerial activities in the firm, leaving no time for marketing. Other reasons, such as capital constraint, lack of skilled workers and satisfied with the current buyer or current market were other reasons mentioned by informants that inhibit them from conducting marketing activities to expand their markets.

The SME informants commonly practiced four marketing strategies: word-of-mouth marketing, participation in trade fairs, showrooms and websites. The majority of informants relied heavily on word-of-mouth marketing. They used their networks, such as friends and relatives, to promote their products. SMEs' awareness of the importance of marketing for their business survival and sustainability is shown by some informants. Four out of thirteen informants participated in trade fairs, either regularly or irregularly, with the hope of meeting potential buyers. Only two informants interviewed stated that they displayed their products in showrooms (in these cases, located in a busy street) to attract potential customers or buyers. The majority of informants, who did not have showrooms, were located in clusters that were mostly in villages. Few informants used a website to promote their products as this method is largely determined by the particular SMEs' ability to master information technology.

53.4.1.4   Process Innovation

The majority of informants applied modest equipment and technology in their production process. Only two informants have set up relatively modern automated machines in their workshops. These two informants were relatively young (in their

early thirties) and had graduated from universities. They had not had any experience in the furniture business before managing the current family business. Their companies were considered to be growing, with more full-time employees than those of other informants. This suggests that age and educational background are likely some of the factors influencing the willingness to change from existing SMEs practices in the furniture industry. Besides, since being innovative in technology requires financial support, which is unlikely to be available for the majority of SMEs, only companies that have relatively easy access to finance are keen to engage in new technology.

53.5 Discussion

53.5.1 SMEs' Perception on Innovation

The SMEs in this study perceived innovation as an effort to offer any improvements in their product, market and/or process to be competitive on the market and in response to customer needs; in turn, this may generate a profit for their firms. The majority of the informants considered that their firms were innovative by producing some changes, which were perceived to be new for the firms, even though they might not be new for the industry. In other words, their perception of innovation was not necessarily related to 'newness' or 'novelty' as suggested by some scholars [e.g., 4]. The informants' perception of innovation is more related to their creativity in response to customer needs, even if it only involves minor modifications to their products, markets and/or processes to enhance product value. This finding supports studies by Coulthard [3], Massa and Testa, and Wang and Zhang, who found that innovation is interpreted by their samples not only as new ideas, but in terms of modifications of existing products, processes and markets.

53.5.2 Innovation in Indonesian SMEs in the Wood-Furniture Industry in Central Java

Two types of innovation—incremental and radical—are employed in this discussion to represent innovation activities implemented by informants. However, these two terms have not been used within the interviews in this study. The innovation carried out by the majority of SMEs informants in this study is likely to be considered as incremental innovation, as it constitutes minor changes or improvements from existing products, markets and processes.

The tendency of SMEs in this study to perform incremental innovation rather than radical innovation may be related to the subcontracting characteristic in the relationship between actors in the wood-furniture industry. In this buyer-driven innovation, SMEs have limited authority to decide or to suggest new product design.

This practice is common in SMEs, as McCarthy, Perreault and Quester suggested: "Sometimes the buyer will design a product—and simply ask the supplier to build and deliver it at a fair price."

Furthermore, the furniture market is not as dynamic as other markets such as apparel, electronics and information technology, in which product life cycles are shortening as a result of constantly changing market preferences and technology turbulence. Therefore, the furniture sector is considered as a low-technology industry, and this may cause SMEs in this industry to be unwilling to invest in technology. The traditional process of making hand-carved wood furniture drives its market value to be significantly higher than machine-carved. In other words, hand-carved wood furniture does not need high-technology machines. This implies that for particular items of furniture, the market will not appreciate or value radical innovation in the firm's production processes. This is in line with Zahra's argument that sometimes "investing in new and emerging technologies may not pay off because they may not reach commercialisation or the market may fail to accept them". As a consequence, markets are not willing to pay an extra cost for the product. For this reason, Schiller and Schiller suggested that a huge leap in mastery technology and management is not necessary in the furniture industry, particularly in Indonesia.

The tendency of SMEs in this study to perform incremental innovation rather than radical innovation is consistent with other studies. Limitations on financing, time, marketing knowledge and access to information that drive the innovation process may all contribute to these conditions.

Some SME owners/managers in this study were reluctant to adopt market innovation to expand their markets. They felt comfortable enough with the existing markets they had served so far because serving these markets allowed them to meet their family needs as well as to cover firms' expenses, including paying their workers. This interpretation supports a study conducted by Hankinson, Bartlett and Ducheneaut, who found that SMEs in the United Kingdom felt their firms were large enough, even though these owners/managers believed that they were not profitable enough. Besides, considerable research has shown that SME owners/managers do not view organisational growth as one of their principal objectives. This may explain why the majority of the informants in this study did not have any interest in expanding their markets or production facilities

The majority of SMEs in this study were engaged in product innovation, and only a few were involved in market and process innovation. This is consistent with Oke, Burke and Myers, who investigated innovation in United Kingdom SMEs. The rationale is that product-innovation outcomes can be perceived by the market directly and in a shorter time than market or process innovation. Besides, considerable research has shown that SME owners/managers do not view organisational growth as one of their principal objectives. This may explain why the majority of the informants in this study did not have any interest in expanding their markets or production facilities.

53.6 Conclusion

The characteristics of the wood-furniture industry (e.g., less dynamic, low technology involvement, buyer-driven innovation and lacking collective support from public and private institutions) and the characteristics of SMEs (e.g., lack of capital, time and access to information) might inhibit radical innovation conducted by SMEs in this study. Nevertheless, these characteristics are unlikely to prevent Indonesian SMEs in the wood-furniture industry in Central Java to become entrepreneurial and competitive firms.

The innovation literature that suggests firms that incline in radical innovation may perform better than those employ incremental innovation are not necessarily true. The innovation implementation has to consider its context: type of industry (e.g., wood-furniture) and characteristics of the firms (e.g., SMEs). This study contributes to entrepreneurship research by providing in-depth understanding of the innovation behaviour of Indonesian SMEs in the wood-furniture industry in Central Java, the focus on SMEs and the implementation of a qualitative research in the field that has been dominated by a quantitative research.

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Part VII
Systems Thinking and Systems Practices

Chapter 54
Foreign Direct Investment and Income Inequality in Developing Countries: A System Dynamics Approach

Pard Teekasap

Abstract This paper studies the relationship between foreign direct investment (FDI) and income inequality in developing countries. System dynamics method is used to analyze the dynamic of income inequality which is not covered in the previous literature. The results indicate that the Kuznets inverse-U curve is not symmetrical. In addition, unemployment rate plays a major role in determining income inequality.

54.1   Introduction

Foreign direct investment (FDI) is a physical investment made by the multinational companies (MNCs). Many literatures have shown that FDI can stimulate economic growth and also improve the income of the people in the host countries, especially when the FDI goes to the developing countries [1–3]. However, the effect of FDI on the host country does not distribute throughout the country equally. Even within the same region, there is also an income inequality. The foreign firms offer higher wages than the local firms and can employ educated and high skilled workers. Because of that, the income gap between the educated and uneducated workers become wider and income inequality problem is more severed. From the aforementioned, FDI create income inequality in the host countries. Even though FDI creates income inequality, it is unavoidable. Therefore, the strategy to encourage FDI but also control the income inequality is crucial. However, most previous research was the empirical research and cannot provide the solution for this problem. Thus, this paper aims to shed lights on how to control income inequality while stimulating the FDI.

In order to provide the solution for the mentioned problem, the dynamics of income inequality should be well understood. The tool to analyze the dynamics of income inequality in this paper is System dynamics. System dynamics approach focuses on the cause-and-effect relationship between each factors in the system and analyze how the interaction among all factors create a problem. The system dynamics

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approach has been used to analyze the holistic complex problem with many factors such as the city and nation growth.

54.2   Foreign Direct Investment, Economic Growth, and Income Inequality

The effect of foreign investment on the economic growth has been studied tremendously and the result shows that the FDI contributes to the economic growth of the host country. The economic growth from FDI is due to an increase in employment, wages, and productivity of the local firms. Previous studies on the impact of FDI on the employment show that the foreign investment can create more jobs in both foreign and local companies [2, 3]. The foreign investment also increases the per capita income through higher wages [1]. In addition, local firms become more competitive due to the technology transfer and spillover from foreign firms, which results in more employment.

Many scholars show that the income inequality is correlated with the economic development. The well-known theory on the economic growth and income inequality is the Kuznets curve. The Kuznets curve shows that when the economic development is still low, economic growth will worsen income inequality problem because the improvement is focused on the upper-level income people. However, after a certain point, economic growth will reduce income inequality because the people from agricultural industry will move to the industry. This theory has been used as a foundation structure in many researches on income inequality.

The effect of FDI on income inequality receives an attention much later. On the one hand, FDI can stimulate economic growth which affects the income inequality according to Kuznets curve. On the other hand, FDI can utilize abundant human resources in the host country. The empirical work on FDI and income inequality shows that FDI will increase the income inequality if the FDI goes to only a specific sector, people have limited capability to move across the sector, and the technological absorptive capability is limited. Most developing countries meet all explained criteria. When investing in developing countries, foreign firms can employ highly qualified workers due to the wage premium. The investment is made only in a particular region which have well-developed infrastructure such as the capital city or the coastal region. In addition, the technological absorptive capability of the local firms in the developing countries is limited. Therefore, FDI will increase income inequality in developing countries.

54.3   Foreign Direct Investment and Income Inequality Model

We develop the FDI and income inequality model to analyze the relationship between FDI, economic growth, and income inequality. System dynamics is used as a simulation tool to analyze the complex relationship of all factors. The model is developed based on the approach used by Robinson which divided the population into
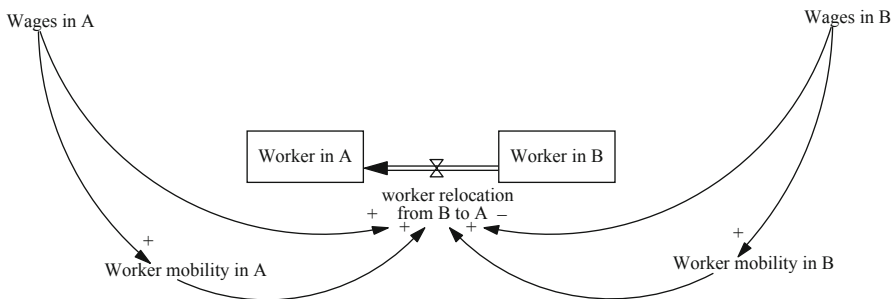
Fig. 54.1 Worker mobility

two groups—A and B—with unique condition but the people can move across the group. This approach can be used to analyze both intra-regional and inter-regional income inequality.

The model starts with the worker relocation. Workers will move to the region that has higher wages. Even though people prefer to move to the region with higher wages, moving across the region is costly. The degree of factor mobility is depended on the level of economic development which is the level of income of people in the region. Therefore, the wages in both regions can accelerate the degree of worker relocation as shown in Fig. 54.1.

Increase in income from both regions will improve the total average income of the country, which represents the country's economic growth. Higher average per capita income will attract more FDI into both regions. FDI will improve the wages due to the wage premium.

When selecting the region for investment, foreign firms will consider based on the total operating cost. The total operating cost includes wages and other factors such as the geographical location and the governmental support which is grouped as "Infrastructure". The foreign firms themselves are also a part of the infrastructure in this context. When more foreign firms operate in the region, the operating cost will be lower because the communication between firms will be more effective and the logistics cost will be lower.

When FDI prefers one region than another, it creates the income inequality. High income inequality can cause the separatist tendencies and internal conflict which reduces the FDI. The explain relationship is illustrated in Fig. 54.2. This is also the complete model of the relationship between FDI, economic growth, and income inequality.

54.4 Relationship Between Foreign Direct Investment and Income Inequality

The relationship between FDI and income inequality is analyzed based on the scenario that one region has better infrastructure than another, which happens in most Asian developing countries. When the infrastructure in region A is better than
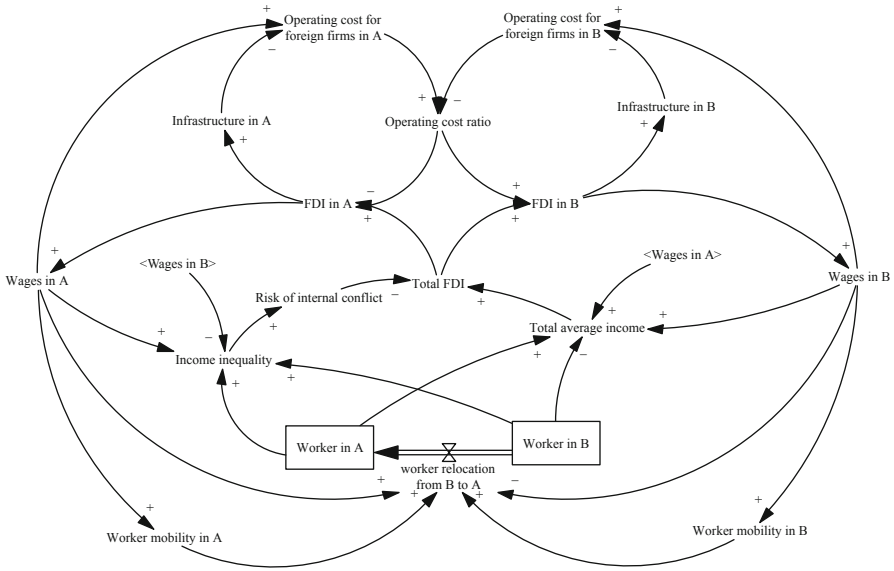
Fig. 54.2 Risk of internal conflict and complete model

another region, FDI will flow into region A which will create more jobs in that region comparing to region B. As a result, FDI also reduces the unemployment in both regions. However, the reduction pattern is different because of the difference pace in wages increase in both regions as shown in Fig. 54.3.

The wages in region A increases continuously due to more FDI in the region. On the other hand, the wages in region B slightly increases and then jump up later. This unexpected jump in wages is due to the limited workers in the region. When the unemployment is low, finding the qualified workers becomes harder. Then the firms need to increase their wages in order to attract qualified candidates. In region A, an increase in wages can reduce this problem because it can draw the workers from region B. However, when the workers in region B is drawn to the point that the unemployment rate in region B is low, local and foreign firms in region B also faces a difficult time finding the workers. Therefore, the firms in region B need to suddenly increase their wages. However, an increase in wages can only slow down the problem but the problem is not solved because as long as the wages in region B is lower than that in region A as shown in Fig. 54.4.

Because of the wage hikes in region B, the income gap between two regions drops significantly as shown by a huge drop in income inequality. The income inequality will drop to zero when the wages in both regions are the same. Therefore, FDI can improve the per capita income in all regions but the growth rate is different. Because of that, the income inequality increases. However, because of the limitation in number of workers, firms in the region with less infrastructure needs to increase their wages in order to compete with the firms in other region to attract workers. Then the income inequality will reduce.
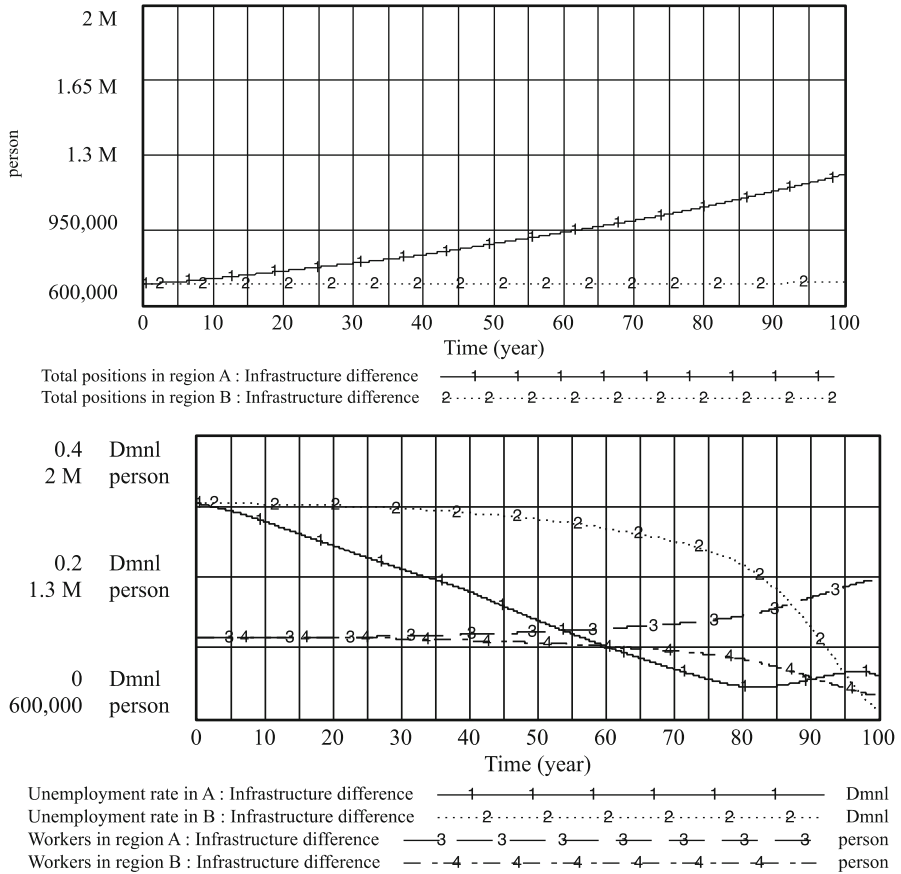
Fig. 54.3 Number of jobs, unemployment, and number of workers in *region A* and *region B*

54.5   Policy Analysis

The policy that is commonly recommended aims to encourage FDI to flows into all regions equally or to make the effect of FDI distributes throughout the country such as the tax incentive. However, it is hard to make all regions in the country equally attractive for FDI and this policy can be expensive to be implemented countrywide. The results from the previous section illustrate that the income inequality is reduced when the workers move across the region and create a pressure for the firms in the region with less infrastructure to increase their wages to attract qualified workers. Therefore, the policy to support worker relocation between regions is analyzed. In this section, the "Infrastructure difference" which is the scenario without the policy is used as a base case and the scenario "Move faster" is the situation that the policy supporting worker relocation is in place.
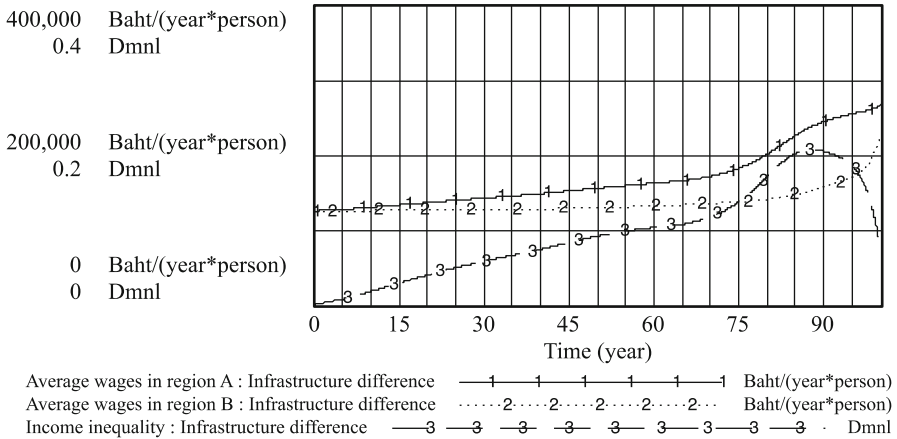
Fig. 54.4 Wages and income inequality in *region A* and *region B*

The results show that when workers can move across the region faster, an income inequality drops significantly as shown in Fig. 54.5. However, the reduction in income inequality comes with the lower total average income. It is because when the workers can move across the regions easier, the firms in region A do not have to increase much wages to attract qualified candidates.

Even though the wage is lower, there is still a rising wage in a later period. It is because of the unemployment rate. Because the workers can move easier, the unemployment rate in region A drops at a slower rate but the unemployment rate in region B drops quicker as shown in Fig. 54.6. However, due to the lower wages, number of workers who move across the region in the later period is smaller which makes the unemployment rate in region B higher than the previous scenario.

In summary, the policy aiming to enhance the mobility of the workers can significantly reduce the income inequality of the country. However, it also reduces the per capita income which represents the economic growth of the country. To be specific, the average per capita income does not reduced significantly whereas the income inequality considerably drops if the unemployment rate is still high. But when the unemployment falls to a particular level, a reduction in average wages will be noticeable.

54.6   Conclusion

This paper implements the system dynamics model to study the relationship between foreign direct investment and the income inequality. This paper aims to study the dynamics of income inequality in order to come up with the policy to encourage FDI while controlling the income inequality, which is not covered in the previous literature. The results show that income inequality follows the Kuznets inverse-U
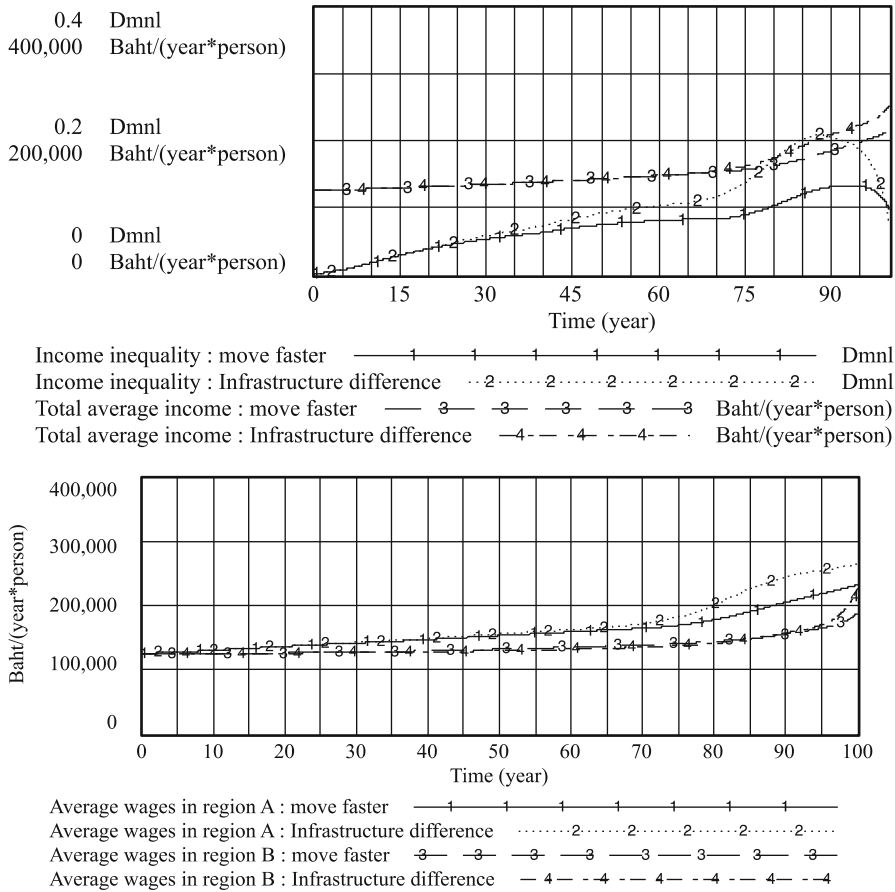
Fig. 54.5 Income inequality and average income when policy is implemented

curve but the curve is not symmetrical. An income inequality is growing slowly but the reduction is steep, likes the rollercoaster. The turning point of the inverse-U curve is determined by the unemployment rate.

To lower the income inequality, the policy aiming to facilitate worker relocation is studied. The results show that income inequality considerably drops and the effect on average income is minimum. Due to the ease in worker relocation, the unemployment rate in the attractive region reduces slower than without the policy. Therefore, the income inequality increases at a much slower rate. However, when the unemployment rate falls to a particular level, the wages offered by the firms in both regions significantly rise, which lowering the income gap between region and resulting in a drop in income inequality. Therefore, the worker mobility policy is effective when the unemployment rate is high. If the unemployment rate is low, the worker mobility
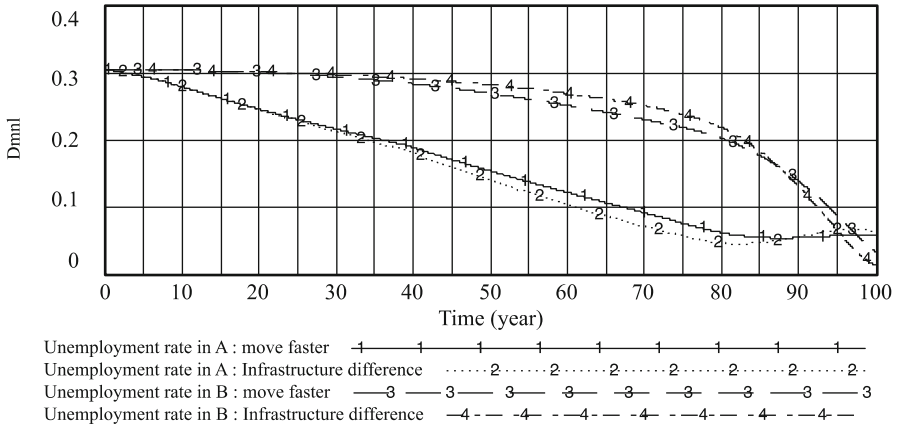
Fig. 54.6 Unemployment rate in region *A* and region *B* when policy is implemented

policy still can reduce the income inequality, but it also slows down the economic growth and FDI into the country.

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Chapter 55
Exploring the World Through Systems Thinking

Piero Mella

Abstract I believe the most useful and effective models for strengthening our intelligence are system ones—developed following the logic of Systems Thinking—since such models can explore complexity, dynamics and change. I consider Systems Thinking not only as a technique but primarily as a logical approach for observing a world of incessant dynamics and change, as well as a discipline for efficient and effective thinking. My objective is to present a set of five fundamental rules on which the logical structure is based and according to which the Systems Thinking technique is developed. Two general laws derive from these rules, laws which many ignore, leading them to produce behaviour which is inefficient as well as often inappropriate.

55.1 Introduction Systemic Models and CLDs

The title of this short conceptual paper is intended to make immediately clear that, in my opinion, Systems Thinking is one of the most powerful tools of knowledge and understanding because it teaches us to devise coherent and sense-making models of the world, which are among the most effective for improving our intelligence, modifying our world and constructing our existence [1, 2].

Intelligent persons are those who learn quickly and effectively; they have the ability (innate or acquired) to construct, utilize and modify models; they can understand their interconnections and changes and always "know" what is happening and could happen in order to control events and successfully face the various situations in life, deciding in the most rational way how to solve problems.

My opinion is based on three premises:

- intelligence is the ability to develop a system of coherent and meaningful models that allow us not only to survive in a dynamic world that is continually evolving but also to improve our intelligence and make progress;
- the most powerful and effective models are the systems ones that view reality as a set of connected and dynamic variables forming a whole;

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- the most interesting and useful connections among the variables that make up reality are not the linear ones—characterized by chains of causes and effects—but the circular ones, the feedbacks and loops, which make the elements not only connected but also interconnected, not only dynamic but also interactive. The relations of cause and effect between variables can be simply represented using arrows that unequivocally correlate their variations. The cause (input) variables are written in the tail of the arrow; the effect (output) variables at the head of the arrow. Two variables have the same direction of variation ("**s**") if increases or decreases in the former result in corresponding increases or decreases in the latter (*first arrow*). They have the opposite direction ("**o**") if increases or decreases in the former result in corresponding decreases or increases in the latter (*second arrow*).

$$X \xrightarrow{\ \ \mathbf{s}\ \ } Y \qquad X \xrightarrow{\ \ \mathbf{o}\ \ } Y$$
$$\ \ +/- \qquad\quad +/- \qquad +/- \qquad\qquad -/+$$
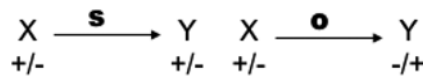
A *closed causal chain*, that is a *loop*, is formed by a circular link between two or more variables which can be linked in two opposite directions with respect to the causal link. Loops can be *basic*, when there are only two variables, or compound, when more than two variables are joined in a circular link. There are only two basic types of loop:

1. *Reinforcing* loops [**R**], which produce a *reciprocal increase* or *reduction*—in successive repetitions of the system's cycle—in the values of the two variables having identical *direction of variation*: "**s** and **s**" or "**o** and **o**".
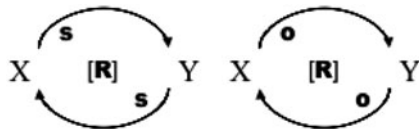
2. *Balancing* loops [**B**], which *maintain relatively stable* the values of the connected variables, which are connected by a different *direction of variation*: "**s** and **o**" or "**o** and **s**".
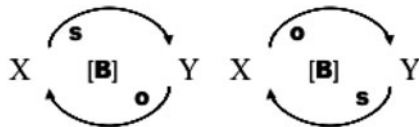
There is no limit to the number of interconnected variables. A system of loops in which all variables are linked by arrows, without there being an initial and final variable, is defined as a *Causal Loop Diagram* [3].
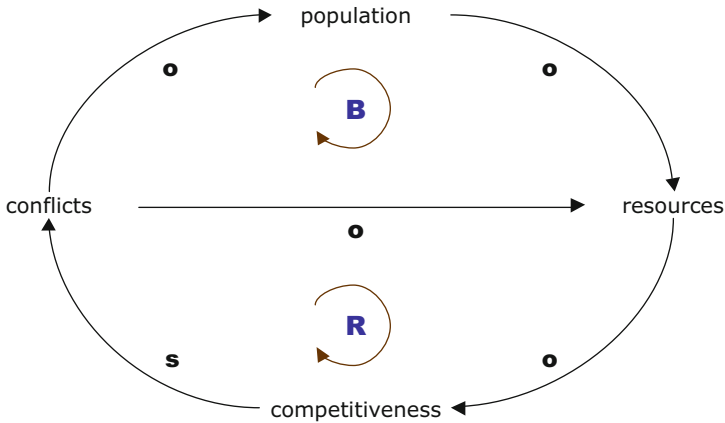
Fig. 55.1 Struggle for life
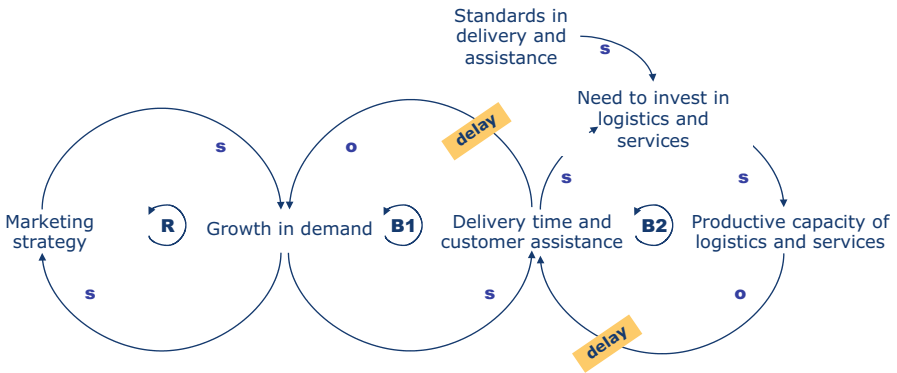
Fig. 55.2 Marketing strategy

Figure 55.1 represents a very simplified model of a struggle-for-life system. Figure 55.2 connects the main variables that drive the marketing strategy.

55.2 The Five Rules of Systems Thinking

Systems Thinking was presented, in a way that could be understood by a broad readership, by Peter Senge in his important work, *The Fifth Discipline: The Art and Practice of the Learning Organization* [1].

But what does Systems Thinking consist of? What are its logical and theoretical bases?

Systems Thinking, a Systems Approach, Systems Dynamics, Systems Theory and just plain "Systems" are but a few of the many names commonly attached to a field of endeavor that most people have heard something about, many seem to feel a need for, and few really

understand. [...] As I prefer the term "Systems Thinking," I'll use it throughout as the single descriptor for this field of endeavor.

In his masterly book, Peter Senge presents Systems Thinking in an intuitive way, but he does not provide the logical principles behind it. In my recent book, "*Systems Thinking. Intelligence in action*", I have tried to recognize the fundamental rules and principles as well as the cultural background of this discipline. I believe that the logical structure of systems thinking can be summarized in five fundamental rules which the systems thinker must follow at all times.

First rule: *if we want to describe and understand the world we must be able to* "see the trees and the forest"; *we must develop the capacity to "zoom" from the whole to the parts, from systems to components, and vice-versa.*

This rule, which is at the basis of systems thinking, can be translated as follows: "reality" is permeated with systems, increasingly vaster in scope, which form a global structure that creates a global process that cannot be understood only from the outside or inside. If we want to broaden our intelligence we must develop the capacity to "zoom" from parts to the whole, and from entities to components. In this sense we can say that this first rule of Systems Thinking "operationalizes" the holonic view, in that it not only specifies how far the observation of the whole/part relationship should extend but above all tries to identify the links and constraints that make the whole and its parts interdependent. This rule leads to an important corollary: to describe and understand the world we must always be aware of, or specify, our point of view; that is, the level of observation in which we choose to place ourselves.

Second rule: *we must not limit our observation to that which appears constant but* "search for what varies over time"; it is *the* variables over time that *interest the systems thinker*.

This rule is perhaps more important than the preceding one, and requires even more intense discipline, since Systems Thinking tells us to shift from a "world of objects"—whether trees or forests—to a "world of variables" that connote those objects. This seems easier than it really is. One needs sensitivity and experience to select the truly significant variables. However, we must not limit ourselves to explicitly stating the variables we consider useful but must be able to measure the "variations" they undergo over time. The objects must be "seen" as vectors of variables. This seems easier than it really is. One needs sensitivity and experience to select the truly significant variables. Systems Thinking also requires us to *select the relevant variables* and *restrict their number* so as to consider only those most relevant for the construction of models.

Third rule: *if we truly wish to understand reality and change we must make an effort* "to understand the cause of the variations in the variables we observe" *by forming chains of causal relationships among the connected variables* while identifying and specifying:

1) the *processes* that "produce" the dynamics in the variables, and the *machines* (or systemic structures) that "produce" those *processes*;
2) the *variables* that "carry out" those processes (causes or inputs), and those that "derive" from the processes (effects or outputs)

For simplicity's sake we could even call the input and output variables "causes" (causal variables) and "effects" (caused variables), respectively.

However, we must always remember that the processes—to the extent they are considered black boxes—always play the role of producer of the effects, given the causes and more or less broad set of "initial" and "boundary or surrounding" conditions. Systems Thinking admits that the processes that produce variations can be conceived of as a *black box* whose internal structure and functioning may not even be known. What is truly indispensable is to understand the rules (laws, functions, operations) by which the variations in the input variables cause variations in the output variables.

FOURTH RULE: *it is not enough to search for the causes of the variations we observe; we must also link together the variables in order to* "specify the loops among all the variations".

Systems Thinking states: if we really want to "understand" the world and its changes, it is not enough to reason in terms of *chains* of causes and effects between variables. We must recognize that the effects can, in turn, become the causes of their causes, thereby creating a loop, a circular connection; we must make an effort to link together the variables until we obtain a loop among their variations. In other words, we must move from the causal chains to the systemic interconnections and from the linear variations to the systemic interactions among the variables of interest. In brief, we must see the world in terms of circular processes, or feedback loops, abandoning the "linear thinking" ("laundry list thinking") that only considers chains of causes and effects and becoming accustomed to "circular thinking" (loops and Causal Loop Diagrams), identifying the loops that interconnect the variables.

> [...] If you took the time to record your thoughts, I'll bet they took the form of a [...] "laundry list". I like to refer to the mental modeling process that produces such lists as laundry list thinking. I believe it to be the dominant thinking paradigm in most of the Western world today. [...] Notice that the implicit assumptions in the laundry list thinking process are that (1) each factor contributes as a cause to the effect, i.e., causality runs one way; (2) each factor acts independently; (3) the weighting factor of each is fixed; and (4) the way in which each factor works to cause the effect is left implicit (represented only by the sign of the coefficients, i.e., this factor has a positive or a negative influence). The systems thinking paradigm offers alternatives to each of these assumptions. First, according to this paradigm, each of the causes is linked in a circular process to both the effect and to each of the other causes. Systems thinkers refer to such circular processes as feedback loops.

FIFTH RULE: *when we observe the world we must always* "specify the boundaries of the system" *we wish to investigate*.

In fact, the first rule of Systems Thinking obliges us to zoom inside a system—thereby identifying increasingly smaller subsystems—as well as outside a system, to identify ever larger super systems. Are we thus destined (or "condemned") to having a holistic view without limits? Certainly not! Systems Thinking is the art of "seeing" the world, and in order for what we see to have a true meaning it must depend on our cognitive interests. We cannot have a forest without limits. To understand this let us briefly review the rules that make up the logical structure behind Systems Thinking, using the figure as an aid.

By connecting a number of variables and determining the direction of variation we can build models of every dynamic system, keeping in mind that we must zoom in order to analyze the processes in more detail, in order to identify and connect other important variables.

Systems Thinking, precisely because it is a tool for developing our intelligence, must be learned gradually through practice and continual improvement. It is a discipline that requires the systems thinker to have a deep knowledge and to constantly apply its rules, as well as to have the willingness to continually improve: A discipline is a developmental path for acquiring certain skills or competencies. [. . .] To practice a discipline is to be a lifelong learner. You "never arrive"; you spend your life mastering disciplines [2, p. 10].

55.3   System Dynamics

It is important to clarify which systems Systems Thinking examines and what types of models can thereby be obtained. Due to its intrinsic logic, which observes a world of variables and of variations, Systems Thinking defines "system" as a unitary set of interconnected variables possessing its own autonomy—*capable of producing emerging macro-dynamics that do not coincide with any of the micro-dynamics of the individual variables or their partial subsystems*—whose logical structure is examined and represented by Systems Thinking. This discipline considers dynamic systems of any kind in any field, building models of a world of incessant movement in continual transformation and evolution.

The construction of the Causal Loop Diagram is a crucial step for "seeing" and understanding the systems that operate around us and interact with our behaviour. Since Systems Thinking by nature considers systems to be *dynamic*, it is natural to develop simulation techniques to try to numerically and graphically represent the succession of values generated by the system under examination, as in the attempts made in sect. 55.5. Systems Thinking, when *quantitatively expressed* in simulations, is commonly known as the study of the dynamics of dynamic systems, or (Dynamic) *System Dynamics*, a discipline that all agree goes back to Jay Forrester and his fundamental book *Industrial Dynamics*. In a recent article the founder of this discipline defines it in this way:

> By "systems thinking" I mean the very popular process of talking about systems, agreeing that systems are important, and believing that intuition will lead to effective decisions. . . . "System dynamics" is a professional field that deals with the complexity of systems. System dynamics is the necessary foundation underlying effective thinking about systems. System dynamics deals with how things change through time, which covers most of what most people find important. System dynamics involves interpreting real life systems into computer simulation models that allow one to see how the structure and decision-making policies in a system create its behaviour.

Since System Dynamics and Systems Thinking are disciplines that cover the same field of knowledge, there is a question as to which can be considered the original

one and which the derived one. Is Systems Thinking a generalization of System Dynamics or is System Dynamics a specialized operational application of Systems Thinking?

The discipline considers not only dynamic but also repetitive systems, which are able to repeat their processes over time, as well as recursive systems, capable of interacting with themselves in the sense that their output, entirely or in part, becomes their own inputs. Even if we are not used to observing them, repetitive and recursive systems are all around us; they are the typical essence of nature; life itself is recursive in its typical process of birth, reproduction and death, which is destined to repeat itself again and again.

Systems Thinking is particularly sensitive to *systems with memory*; it forces us to consider the connections between variables, always zooming between high-level variables, which accumulate variation over time, and more detailed (state) variables, which cause variations over time; it forces us to observe the dynamics of recursive processes and not only individual pairs of values, to consider the loops and not only the pure causal connections.

55.4   Two Fundamental Systems Thinking Laws

The Systems Thinking models are certainly not the only ones capable of increasing our knowledge of the world, but in my view their cognitive effectiveness owes to their ease of construction and communication. The only skills they require are perspicacity and insight; they use elementary techniques; they are understandable even to non-experts; and they can be easily communicated, examined and improved. They allow us to learn together to collectively improve our understanding of the world and can be easily translated into quantitative simulation models.

These definitions allow us to present a first fundamental law of Systems Thinking:

- on the one hand, the behavior of a variable depends on the system in which it is included;
- on the other hand, the behavior of the entire system depends on its structure; that is, on the interconnections among its component variables.

This law has two corollaries:

- it is useless to try to modify the values of a variable if first we do not understand the systemic structure of which it is a part, since the balancing loops will restore its value and the reinforcing loops will increase it;
- in observing a dynamic world, the "ceteris paribus" assumption is never valid.

Connected to the preceding law is a second fundamental law of Systems Thinking, which I shall name as:

LAW OF DYNAMIC INSTABILITY: *expansion and equilibrium are processes that do not last forever; they are not propagated ad infinitum. Sooner or later stability is disturbed. Sooner or later the dynamics are stabilized.*
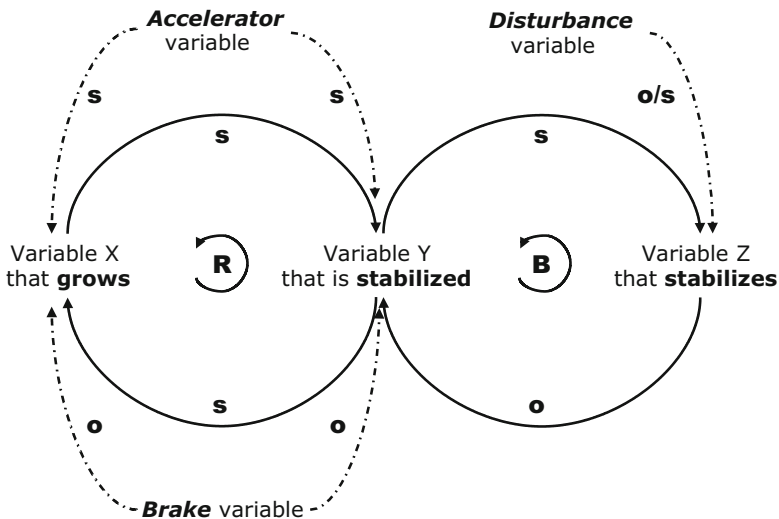
Fig. 55.3 The general law of dynamic instability

55.5 The General Law of Dynamic Instability

Operationally speaking, the LAW OF DYNAMIC INSTABILITY affirms in a simple way that, though we are unaware or unable to observe this, every expansion loop is always associated with a balancing loop that dampens the expansion dynamics; and vice-versa, every balancing loop is associated with some type of expansion loop that counters the balancing effect.

Moreover, external disturbances can come from the environment in the form of braking variables that counter the expansion, or acceleration variables that eliminate the balancing effect, as shown in the model in Fig. 55.3.

> Paraphrasing Newton's first law of mechanics: "Every object remains in its state of rest or uniform motion in a straight line unless a force intervenes to modify this state", Systems Thinking could instead state: "Every repetitive system does not endlessly produce its own reinforcing or balancing processes because other processes intervene to reverse the dynamics". It seems impossible to respect the wise motto of Plato: "Mota quietare, quieta non movere!".

A simple and interesting numerical simulation—in one of its many possible variants—is shown in Fig. 55.4. Several simulation tests are presented in Fig. 55.5. The diagram in Fig. 55.5, Test 1, shows that the curve in bold, which depicts the dynamics of the stabilized variable Y_t, has a cyclical dynamics precisely due to the reinforcement from the curve for variable X_t and the balancing effects from the curve for variable Z_t. By modifying the values in the control panel (directly shown in the CLD at the top of the table) we obtain the explosive dynamics of growth in Y_t if variable X_t prevails (see Test 4 in Fig. 55.5), or the explosive decreasing dynamics if Z_t prevails. By introducing outside disturbances the dynamics can become quite

Diagram (Fig. 55.4):

- rate of action Y/X: 10.00%
- rate of action Z/Y: 20.00%
- Reaction time Y: 1
- Reaction time Z: 1
- Variab. X — X_0 100.00
- Variab. Y — Y_0 1,000.00
- Variab. Z — Z_0 400.00
- Reaction time X: 1
- Reaction time Y: 1
- rate of action X/Y: 12.00%
- rate of action Y/Z: 15.00%
- Loops: R, B

	Variab. X			Variab. Y					Variab. Z		
time	X	rate Y/X	Δ Y	Y	rate Z/Y	Δ Z	rate X/Y	Δ X	Z	rate Y/Z	Δ Y
0	100.0	10.00%	10.0	1,010.0	20.00%	202.0	12.00%	121.2	602.0	15.00%	-
1	221.2	10.00%	22.1	941.8	20.00%	188.4	12.00%	113.0	790.4	15.00%	- 90.3
2	334.2	10.00%	33.4	856.7	20.00%	171.3	12.00%	102.8	961.7	15.00%	- 118.6
3	437.0	10.00%	43.7	756.1	20.00%	151.2	12.00%	90.7	1,112.9	15.00%	- 144.3
4	527.8	10.00%	52.8	642.0	20.00%	128.4	12.00%	77.0	1,241.3	15.00%	- 166.9
5	604.8	10.00%	60.5	516.3	20.00%	103.3	12.00%	62.0	1,344.6	15.00%	- 186.2
6	666.7	10.00%	66.7	381.2	20.00%	76.2	12.00%	45.7	1,420.8	15.00%	- 201.7
7	712.5	10.00%	71.2	239.4	20.00%	47.9	12.00%	28.7	1,468.7	15.00%	- 213.1
8	741.2	10.00%	74.1	93.2	20.00%	18.6	12.00%	11.2	1,487.3	15.00%	- 220.3
9	752.4	10.00%	75.2	- 54.7	20.00%	- 10.9	12.00%	-6.6	1,476.4	15.00%	- 223.1
10	745.8	10.00%	74.6	- 201.6	20.00%	- 40.3	12.00%	-24.2	1,436.1	15.00%	- 221.5
[omissis]											
91	- 236.6	10.00%	- 23.7	1,100.0	20.00%	220.0	12.00%	132.0	58.9	15.00%	24.2
92	- 104.6	10.00%	- 10.5	1,080.7	20.00%	216.1	12.00%	129.7	275.1	15.00%	- 8.8
93	25.0	10.00%	2.5	1,042.0	20.00%	208.4	12.00%	125.0	483.5	15.00%	- 41.3
94	150.1	10.00%	15.0	984.4	20.00%	196.9	12.00%	118.1	680.3	15.00%	- 72.5
95	268.2	10.00%	26.8	909.2	20.00%	181.8	12.00%	109.1	862.2	15.00%	- 102.1
96	377.3	10.00%	37.7	817.6	20.00%	163.5	12.00%	98.1	1,025.7	15.00%	- 129.3
97	475.4	10.00%	47.5	711.3	20.00%	142.3	12.00%	85.4	1,168.0	15.00%	- 153.9
98	560.8	10.00%	56.1	592.2	20.00%	118.4	12.00%	71.1	1,286.4	15.00%	- 175.2
99	631.8	10.00%	63.2	462.4	20.00%	92.5	12.00%	55.5	1,378.9	15.00%	- 193.0
100	687.3	10.00%	68.7	324.3	20.00%	64.9	12.00%	38.9	1,443.7	15.00%	- 206.8

Fig. 55.4 The law of dynamic instability. A numerical simulation

irregular. By adopting the simulation model behind Fig. 55.5 we can simulate other dynamics, introducing new parameters or even disturbance elements for one or even all three of the variables. I will not add any comments since the loops produced by the Systems Thinking technique are clearly representative and understandable.

The first three tests shown in Fig. 55.5 reveal the relative stability in the dynamics of variable Y (the thicker curve), which is stabilized even in the presence of disturbances; in fact, the latter are "neutralized" by the joint action of the variables X and Z. Test 4 shows that by deactivating loop [**B**] we get only the reinforcing effect of loop [**R**].

55.6   Final Remark

Organizations and men are linked to the world through their behaviour, and are thus part of the world they interact with and intend to change. They are subject to and produce the fundamental variables of their existence and that of other entities, and for this reason managers and organizations as cognitive systems must develop a systemic and pro-active learning for observing (understanding), judging (deciding) and identifying

Test 1	
X0 =	100
Y0 =	1.000
Z0 =	400
g(Y/X) =	10%
g(Z/Y) =	20%
g(Y/Z) =	15%
g(X/Y) =	12%
r(X) =	1
r(Y) =	1
r(Z) =	1
NO disturbances	

Test 2	
X_0 =	100
Y_0 =	1.000
Z_0 =	400
g(Y/X) =	10%
g(Z/Y) =	20%
g(Y/Z) =	15%
g(X/Y) =	12%
r(X) =	1
r(Y) =	1
r(Z) =	1
YES disturbances	

Test 3	
X_0 =	1.000
Y_0 =	1.000
Z_0 =	1.000
g(Y/X) =	30%
g(Z/Y) =	30%
g(Y/Z) =	15%
g(X/Y) =	20%
r(X) =	1
r(Y) =	1
r(Z) =	1
YES disturbances	

Test 4	
X_0 =	1.000
Y_0 =	1.000
Z_0 =	1.000
g(Y/X) =	10%
g(Z/Y) =	0%
g(Y/Z) =	0%
g(X/Y) =	3%
r(X) =	1
r(Y) =	1
r(Z) =	1
NO disturbances	
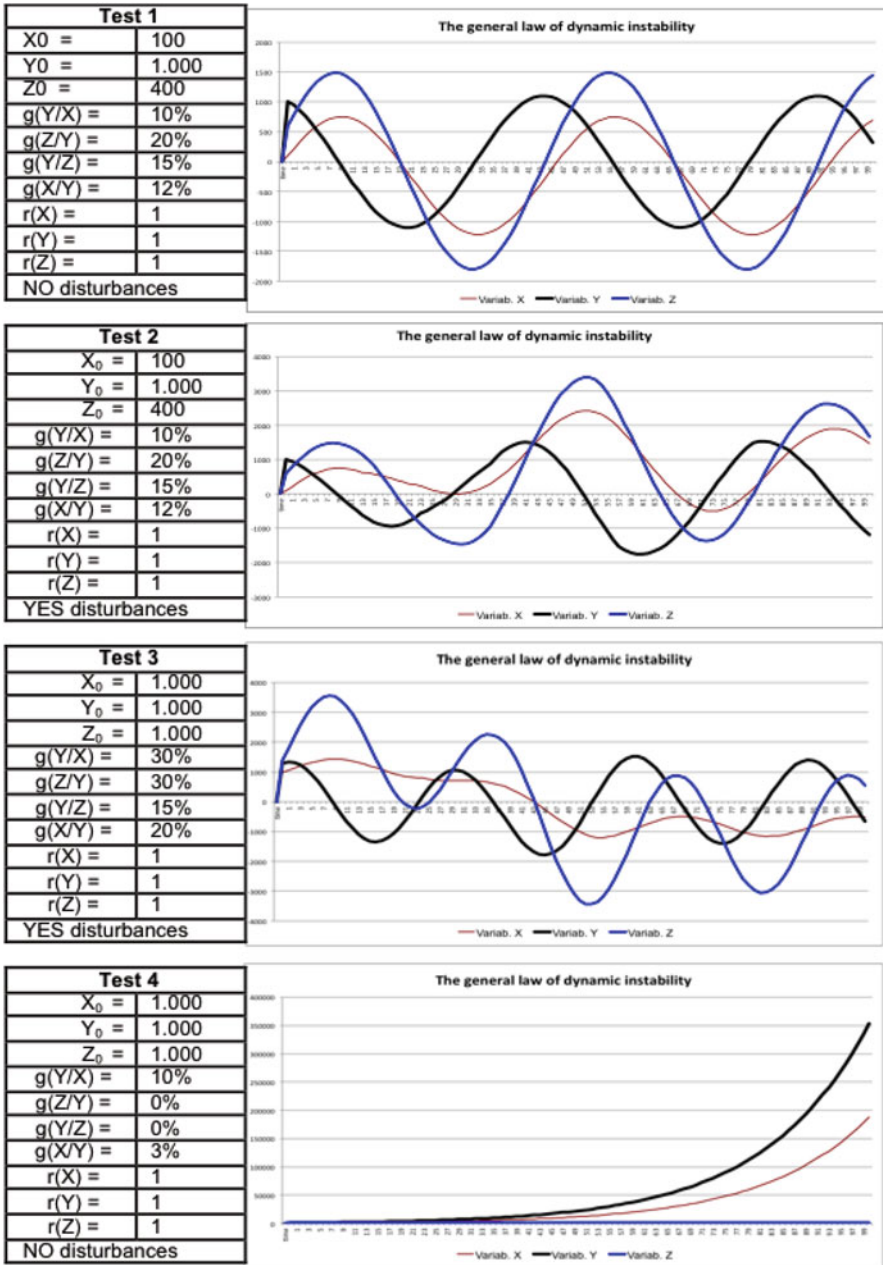
Fig. 55.5 The law of dynamic instability. Simulation tests (the *bold line* represents the stabilized Variable Y)

opportunities and solving problems. Systems Thinking is not the panacea for solving all problems related to man's and organizations' behaviour involving knowledge, judgment and decisions, but it nevertheless is an instrument that broadens our way of thinking, one which allows us to avoid the error of ignoring the structures and isolating the variables. Peter Senge indicates to managers the "superiority" of systems thinking not in order to propose a new form of thinking but to emphasize the need for organizations to think systematically. Precisely for this reason, he considers systems thinking as a discipline—the Fifth Discipline—everyone should follow in order to get accustomed to "seeing the trees and the forest", the only kind of thinking that can grasp the properties of the whole without, however, forgetting those of the parts. I hope this study adds some ideas for observing the world through Systems Thinking.

In this regard, we can paraphrase Lucius Annaeus Seneca ("Ignoranti quem portum petat, nullus suus ventus est", VIII, Ep. 71) and conclude that: "No wind is favorable for those who know not what port they are making for, but for the man who knows where he is headed, in the sea of knowledge, even the breeze of Systems Thinking is sufficient to navigate".

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Chapter 56
Innovative Strategies Layout in Recruiting

Jui-Chin Jiang and Yuan-Ju Chou

Abstract This study tend to verify in the TRIZ theory on recruit of human resource whether it is possible to use the help of many methods and tools. Suggest to use the TRIZ contradiction analysis and the function characteristic analysis to help to seek and hire the talent personnel that having both depth and width, and for talent to obtain strategy of model summarized in order to the application of the principle, to build immediately integrated the talents layout strategies. The study analysis human resources from the view of competence deployment, connecting all the concept of these activities to link with the TRIZ tools, it can provide a new thinking model of human resources.

56.1 Introduction

Compare the Human Recourses of Taiwan with Asia, in the innovation and R & D, as well as flexible thinking still has some competitive ability although in recent years for the evaluation of the quality of talents vary, but still has a certain value. In the industry's development process, from manufacturing to service industries and even cultural creative industries, the nature of the enterprise is changing, how can require enterprise personnel to cope with the industrial environment changes with the old thinking? Therefore, in order to let the enterprise have more sense of direction and higher competitive ability on enterprises in talent utilization, first should conduct corporate function analysis to confirm the enterprise core competencies, and then based on the unique functions of the enterprise, establish recruitment model by using tools, can be adapted to find a goal-oriented business personnel, that is the key personnel strategy that enterprises should pay attention to. TRIZ has been very helpful in many areas such as politics, service development and delivery, organizational structure, social welfare systems, inter-personal relations, and disputes resolutions

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[1]. In this study, try to using TRIZ theory combine competency analysis for devise new HR strategy.

In this study, through the functions analysis, classify the enterprise the capability and transformed into useful information, enterprise can use it to understand the current direction and development trend, by using TRIZ methods, and expect to achieve the strategy result of using personnel depth and range, domestic in this field of research mostly focuses on the promotion of human resources management and method, seldom have study to research from the point of view of talent personnel strategy of the application of TRIZ, we focused on the functions based on personnel strategy is this study, expect we can provide a systematic too and method of talent personnel exhumation, so can promote the quality of personnel talent personnel recruit, then can set up the talent personnel strategies.

56.2 Literature Review

56.2.1 Innovation Inventive Problem Solving Theory

TRIZ is a method proposed by Russian scientist G. Altshuller in 1946, after the former Soviet Union collapsed, it was known by the world. Altshuller's analysis and research obtained more than several 100,000 patents, innovation and problem solving method through systematic classification and summarized as the innovative design method 1. Through the logical resolved innovative and deductive method as a problem-solving program guide, and make use of TRIZ in different areas easier access to practical application and practice. TRIZ theory's method tools include: Problems Planning, Contradiction Matrix, the 40 Inventive Principles, Material-Field Management Theory, Effective Functional Analysis, Separation Principles, Final Ideal Method, Scientific Effects and TRIZ Algorithm of Inventive Problem Solving, ARIZ (Algorithm of Inventive Problem Solving) etc. To make it easier to understand the problem-solving mode of TRIZ theory, we can briefly divided it into four categories: (1.) The technical contradictions VS 40 inventive principles, (2.) Physical contradiction VS 11 physical contradictions solving principles, (3.) Qualitative field analysis VS 76 standard solution, (4.) Least resources contradictions VS ARIZ. Diagram of overview by TRIZ Problem Solving as follow Fig. 56.1.

56.2.2 Competency Theory

Among many theories, Spencer and Spencer [2] proposed the most attention model of functions of the iceberg model as Fig. 56.2. The theory contains five elements which included motives, traits, self-concept, knowledge and skills, motive means a continuing desire to turn the idea into action; it emphasize that a person's functions in addition to the icebergs floating on the water-knowledge technology (it is easy to see
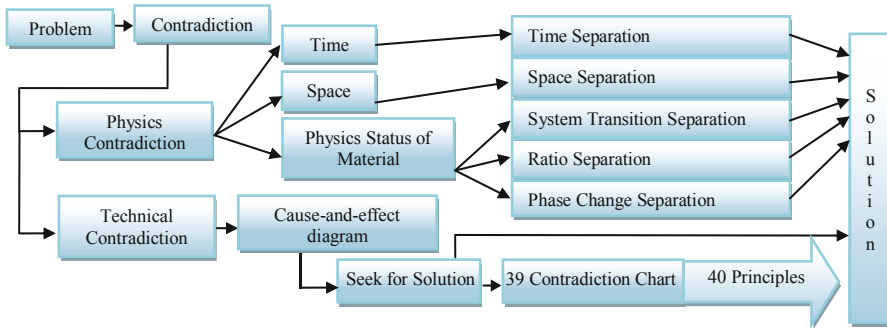
Fig. 56.1 Diagram of Overview by TRIZ Problem Solving
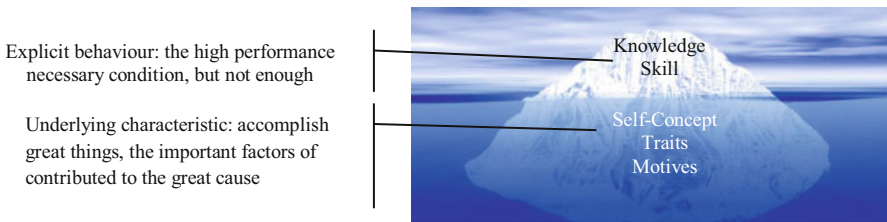
Fig. 56.2 Iceberg Model of Competency [2]

and easy to learn), there are still underwater iceberg-motives, traits and self-concept (not easy to detect and easy to change) are the factors that affecting the performance.

The higher part is explicit behaviour, it belong to easier identified behaviour, and is easier to be trained and evaluated, but the lower part it goes, it belong to the potential characteristics and it is less likely to be trained and evaluated. In such a concept, when the organizations using the selection, use, educate, reserve to the talent personnel, can put the below potential characteristics as a selection benchmark on the threshold, as for the easy trained and evaluated easy identify behaviour can be designed as training course.

56.2.3   Competency Analysis Model

Competency analysis mode, first summarize and analysis various types of work's area of competence, such as sales, planning, service etc. duties, then according to the various functional areas, develop the behaviour that can identify good or bad performance, that is so-called competency, but the focus of its assessment at the individual, rather than a duty. Competency model contains two functions under: core competencies and job family competencies, the former are mostly the product of the core values, regardless of job or position, it is the behaviour that organization requires

every personnel who must show, it is also known as the cultural competencies, in order to increase the personnel's professional quality effectively the industrial, the advanced countries have raised the wave to construct the standards of reforming the functions [3].

And the competency model means every competency group that should possess to achieve an excellent performance. Knowledge, skills, behaviours and personal characteristics etc., which were contained in different competencies; model must prove that a particular behaviour can reflect hidden motives, traits or characteristics. A complete competency model, usually including one or more competency groups and each competency group also contain some other competency item and several aspect and index of behaviour, and also contains that competency's some specific behaviour shown on the work [2].

56.2.4 Competency Arrangement

The so-called competency arrangement means the enterprise take total competency thinking via competency responsibility's deployment and allocation of all positions in the enterprise, and you can figure it's type by the following few ways:

- Competency classification deployment and the competency structure are related, which means which competency should be place at which position should be discussed.
- The competency capability deployment is based on "innovation capability" as the core deployment of the power of competency. Commonly used competency deployment can be divided into the following mode [4].
    1. Competency of strategic: an enterprise based on current conditions development's deployment while changing, such as a particular enterprise in their environment area must have some capability skill or and professional core competence etc.
    2. Total Competency Deployment: If there is no best strategy competency, also can form categories like "competency jungle" or "mined zone" as blanketing competency deployment.
    3. Combinational competency deployment: Can combine various structure and type to form a network frame type combination's competency deployment, by strengthen the capability of technique strength.

56.2.5 Research in Domestic and Abroad

Regarding the research and development of TRIZ's can be divided into the following several aspects:

- System amendments of TRIZ theory [5].
- The TRIZ practical applications, solving problems, innovation new products [6, 7]
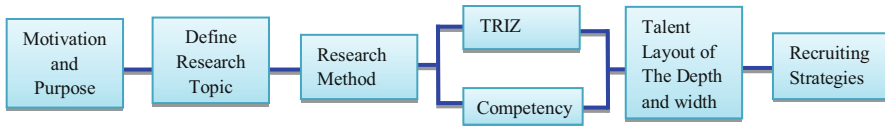
Fig. 56.3 Flow-process Diagram of this Research's Process and Structure

- Software development of TRIZ theory application; such Creax, Goldfire, and so on.
- TRIZ and other design theory's combine applications [8, 9]
- The TRIZ theory extend application; such as services, management [1].

56.3   Research Method

This study took competency deployment as the scope of application of TRIZ methods in recruitment strategies. Explore the organizations core value of the enterprise, analyse the competency, how to turn the result of the competency analysis as the reference data of recruitment strategy, therefore, this study discuss the process of competency analysis and many tools functionality, which means it is thinking from the angle of TRIZ, whether it can provide any assistance or application in the recruitment activities provide what assist and applications under competency analysis's point of view, by and into the behaviour depth with the wide degree of the functions of the layout, so can proceed to conduct a competency deployment with depth and wide range, in order to upgrade the corporate human resources to be more effective on selecting screening and usage. The flow-process diagram of this research's process and structure as follows (Fig. 56.3):

56.4   Competency Analysis Strategy

56.4.1   Competency Develop Trend Analysis

For specific position, first set up the environment and their job performance requirement to do the competency analysis, then put those collected data to do the functional analysis, Using the 9 windows method of TRIZ theory that is used to define the problem, can take the position development life cycle as the basic thinking logic, should have different strategies to deal with the different positions environment of different time.

The TRIZ theory 9 Windows Method, is using time (past, present, future) corresponding to the system (super-system, system, subsystem) to describe, the purpose of 9 Windows Method is to help us to break psychological inertia to think all the various

Table 56.1 9 Windows Method Table

System time	Past	Present	Future
Super-system			
System		Thinking point	
Subsystem			

possible answers, we can put the content of competency analysis in to the 9 windows method, then can understand the past and current competency status and relations, at the same time, we also can think about the development of competency in the future, in order to understand the trend of competency and predict the development. Table 56.1:

56.4.2 Competency Functional Analysis Map

After competency development analysis, we can use the data of competency function and degree to conduct capability application map analysis, the main purpose is to understand the diffusion of competency capability, in order to set up the future direction of competency develop, Table 56.2:

In Table 56.2, capability 1 can achieve 2 required items of position 1, and capability 2 can achieve 6 required items of position 2, through the data we see the capability status and develop direction. These information can combine with the evolution trend of TRIZ theory and knowledge/effect, for the future development of competency and personnel capability, enterprise can have a confirm path for reference.

Using evolutionary trends concept, Dr. Mann divided it into 37 evolution lines, We can use specific competency list's content to analyse by the 37 evolution line, to find out relative evolution trend and define the individual level of evolution, and thus can use the way of drawing graphics to understand the subject competency located in what stage of development, and identify improvement measures for the items that need to be improved, through the analysis of these evolutionary line, you can understand the future evolution trend of the application of these competency, so we can predict the future direction of the competency deployment.

Table 56.2 Capability Application Diffusion Map

	Competency			
Capability application	Competency List 1	Competency List 2	Competency List 3	Competency List 4
Capability 1	2	6		
Capability 2	5			
Capability 3			8	
Capability 4		3		4

56.4.3 Competency Deployment Strategy

Competency deployment means to do a broad and deep deployment base on certain list of competency, the so-called "competency depth" is to combine the same type of capability from the basic status to the improved status or strengthen status to form a series of "competency chain". Speaking of the "competency width", it is focus on the area that the basic capability possible applications field, and to be applied in the field of the derivative competency will benefit in the capability to lead the field of application development. In this structure of concept, there are following several analysis mode.

56.4.3.1 Using the Functional Attribute Analysis

TRIZ Function and Attribute Analysis, stressed not only expressed the useful functional relations between components, but also should render the deleterious, insufficient and excessive relations, as well as the related components attribute, of the, and even can consider the function attribute relations change form times dimension (before, after). Express the competency content shown like this way, will help to identify derivative capability, and continuously improve the harm that come from the improvement, it will help to think the direction of competency depth deployment; adding the competency requirement of improvement, it can treat as competency width promotion, and should apply it to other competency list.

56.4.3.2 TRIZ Tools in the Competency Deployment of the Applicability of Analysis:

TRIZ theory provide diversify innovation tool, regarding its characteristics, from a competency depth and width as well as the competency deployment mode to explore the timing of using various types of tools, such as when you want to explore it from the direction of the depth, to conduct competency capability deployment on specific position, what kind of TRIZ tools should be applied will be more suitable? This study has summarized several applications principles of TRIZ methods and competency deployment mode:

- "Strategy type" needs to carry out the competency development of "depth".
- "Contradiction matrix", "effect","deletion and merger" are more suitable to the "width" of competency development.
- "Evolution trend" is more suitable to the "depth" of competency development.
- "Quality-Field Analysis", "resources", "exclude psychological inertia", "separation principle" are suitable depend on the conditions.
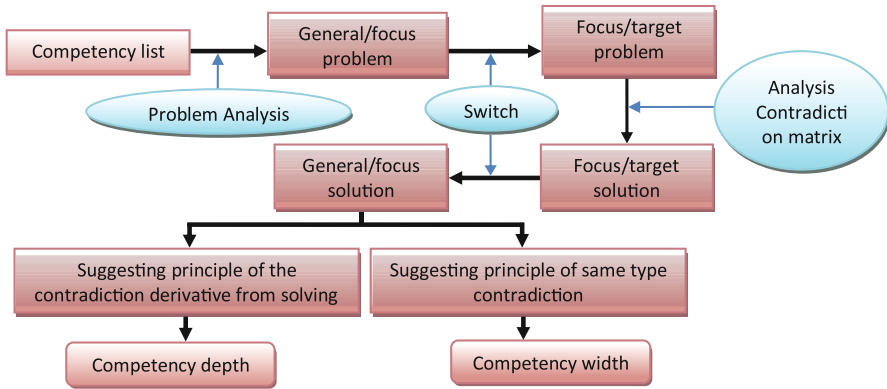
Fig. 56.4 Competency Contradiction Analysis Map

56.4.3.3 Contradiction Analysis Model of Competency

Contradiction Analysis Model of Competency the whole procedure is shown in Fig. 56.4.

Put the connotation develop from the competency transfer into contradiction problem to analyse, depending on what kind of problem that they have solved and what kind of problem nature it belongs to, from the contradiction matrix corresponding out the TRIZ invention principle, and to improve the engineering parameters and deterioration engineering participation number corresponding relationship, conducting the possible competency deployment. Follow the contradiction analysis mode, and seek following possible derivative contradictions, to strengthen this type of problems solving with better technology, which can drill down into the problem of technical fields, the contradiction matrix corresponding to the other principles of the invention, may be can conduct broadly deployment.

56.5 Conclusions and Future Research

TRIZ theory sorts out the successful creative method, which includes more possibilities of resolving the problem, masters creative rules, uses analogy thinking and resource analysis to find a better way much earlier than using the test error method, and it can lead to success [10].

This study on the work of competency analysis as well as the competency of depth and width technical deployment, discuss the TRIZ theory method's applicability, try to create a guidance procedure and application of strategy by using TRIZ tools on the competency deployment, this study is still continuing, currently the preliminary results, follow-up study by the study of the competency of the cases, will use the reasoning to the case method, to verify and editing its applicability gradually, and

hope can provide competency deployment and TRIZ integrate systematized analysis method, to expand the scope of application of TRIZ tools and energy.

More and more scholars to explore the areas of application of TRIZ methods, but most of them are still apply with the different product innovation and R & D. Lee Wei Hwa in the stage of concept design, mentioned to provide systems approach to extend the limited knowledge field, so can define the problem correctly, and provide innovative answer. 10 TRIZ application research papers is not much in the field of human resources, in these few papers, most of them are exploring the impact on the organization when enterprise using TRIZ theory, or training in the use of TRIZ personnel; regarding using the TRIZ theory as a tool in practice work, not yet been explored widely, however, there still have some scholars bring out their point of view in different fields that it can be used in human resources, such as: TRIZ use brainstorming technique to find the solution for the problems, it is quite useful when the problem in not so complicate, such as finding a new usage for a product, improve the promotion program etc., provide the solution for the organization's problem, it all can get good results [11]; The study analysis human resources from the view of competence deployment, connecting all the concept of these activities to link with the TRIZ tools, it can provide a new thinking model of human resources.

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Chapter 57
Modelling and Managing Patient Flows in a Hospital Outpatient Environment

Papiya Bhattacharjee and Pradip Kumar Ray

Abstract A hospital Outpatient System is usually a complex system comprising multiple facilities and services, such as consultation, medical examination and medication for different classes of patients requiring services of different specialities. In such a system, patients may enter the system at different facilities, may leave the system from different facilities and may follow different possible pathways during the process of care. The resulting patient flow rates and routings may directly affect the performance of the system with respect to resources and other constraints. In such an environment, it is a challenging task to manage and control the patient flows in such a way that resources are optimally utilized and the delays experienced by patients at various stages of care are minimized. In this context, modelling patient flows may provide important insights for improving the performance of the system. This paper presents some pertinent issues and their implications related to variations in patient flows for different facilities and patient classes.

57.1 Introduction

The outpatient system in a multi-speciality hospital comprises facilities, such as consultation for various specialities like Orthopaedics, Neurology, Gynaecology, Cardiology and Gastroenterology; various kinds of medical investigations, such as blood tests, urine test and tests of tissues that are conducted in pathology lab; the tests requiring imaging facilities, such as X-ray, Computed Tomography (CT) scan, Magnetic Resonance Imaging (MRI) and ultrasonography (USG) that are conducted in radiology; and various other investigations and procedures, such as Electrocardiogram (ECG), Treadmill Test (TMT), Endoscopy, Dialysis and Physiotherapy. The outpatient system of a hospital is the primary phase of interaction between patients and the hospital system (resources and facilities). Patients may enter the system at

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various facilities, subsequently follow any possible care pathway within the system and finally leave the system from any of the facilities or may get admitted to the inpatient department. For instance, a patient may enter the system, have consultation with the physician, and undergo the medical examinations prescribed by the physician and leave; another patient may visit the outpatient system for a follow-up consultation with the physician or for showing the reports of the medical examinations conducted after the first consultation. Even some patients may visit the outpatient system only for a medical examination prescribed after consultation with a physician outside the concerned hospital outpatient system e.g., a primary care clinic.

The movement of patients from the point of entry to the stage where the patient leaves the system is referred to as patient flow [1]. The flow rates (the rate at which patients enter or pass through a particular phase of care) and routings (the path followed among a number of facilities) throughout the process of care affect the performance of the system. The arrival rates depend upon the location of the hospital and seasonal factors and popularity of the hospital and the consultants while the pathways followed by the patients depend partially on the inherent uncertainties and partly on the decisions taken by the physicians. Under these conditions and various constraints (mainly determined by the availability of resources), it is very difficult to manage and control the patient flows in such a way that various resources are optimally utilized and the delays experienced by the patients at various stages of care are minimized. Patient flow management plays a key role in performance improvement of a healthcare process [2]. Such modelling involves determining the characteristics of the arrival patterns [3], service times [4], the probabilities of transition and branching among the various stages of care through statistical analysis and capturing the overall flow in a process (sub-process) of care with techniques, such as Queueing Theoretic models [5], Markov chains [6] and discrete event simulation [7] techniques.

In this paper, some pertinent issues and their implications related to variations in patient flows for different facilities and patient classes are discussed in the context of the outpatient system of any multi-speciality hospital. Some of these issues may also be relevant for other sub-systems of a hospital.

57.2 Patient Flows at Different Facilities of an Outpatient System

The facilities in an outpatient system of a hospital, such as consultation and medical investigation facilities experience demand for various services throughout the day. Figure 57.1 depicts the inflows and outflows of patients (represented by the direction of arrows) for the consultation and investigation facilities of an outpatient system. As the sources of arrival of patients to the consultation, investigation and other outpatient facilities are varied and different for different facilities, the demand rate and pattern varies over these different facilities. For instance, the demand rate for consultation is usually low at the beginning of the day when the consultation sessions start at clinics
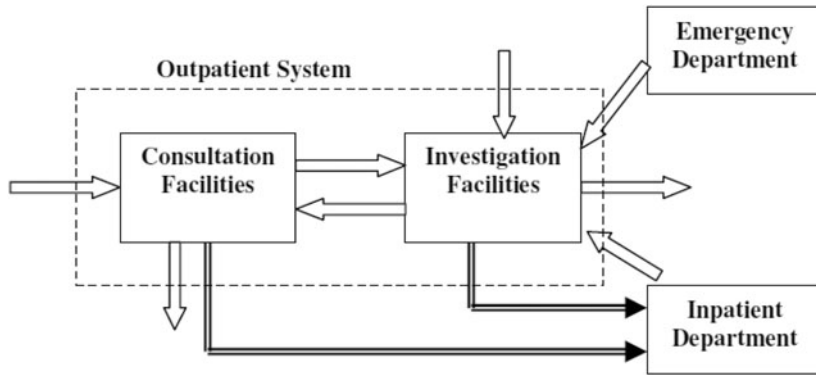
Fig. 57.1 Inflows and outflows of patients in an outpatient environment

for different specialities; then as time passes, the inflow rate of patients increases, and reaches its peak during the middle of the day. Finally in the evening when all the consultation sessions are about to close, the demand rate decreases. This pattern mainly depends upon the distance of the patient's residence from the hospital and the availability (scheduled session times) of the physicians. Arrival rates of patients for different specialities are also different.

Even among the investigation facilities, like Pathology and Radiology services, there are variations in patient flows. Arrival rates and service times for different investigation facilities are different. Some of the investigations require prior preparation, such as fasting, and such conditions may not be satisfied on the day of generation of the demand for the investigation service. Such demands propagate to some other day in future. Some investigations have long service times, and need to be scheduled. On the other hand, some investigations do not require any prior preparation and even the service times are also very small. These investigations may usually be conducted the same day of generation of the demand. Medical investigation facilities experience demand from both inpatients and outpatients. A fraction of the inflow of patients coming to investigation facilities are the patients coming from the outpatient clinics of the hospital after having consultation the same day or those consulted earlier but could not get the investigations done either due to the preparations required for the test or because the slots are already booked; another fraction comes from the emergency department of the hospital; one fraction comes from those having consultation elsewhere and visit the system only for having investigation facilities and another fraction comprises the inpatients of the hospital requiring these facilities. The working (functioning) hours for consultation and investigation facilities are also different. While the outpatient consultation services are open from morning till evening, the investigation facilities are available till late night or even for 24 hours. It is imperative that the patient flow rates and routings vary among these facilities. The demand for investigation facilities is almost same throughout the day, and in the night the demand decreases and is restricted only to inpatients and emergency cases.

Daily records of demand for consultation for different specialities and all the investigation facilities along with corresponding service times (time studies to be conducted if data not available through records) need to be analysed separately and then an integrated approach considering the interaction between the facilities is to be applied for modelling the patient flows in order to plan the resources optimally and to control and coordinate the patient flows with the availability of resources by proper resource allocation and scheduling of appointments [8, 9] and resources.

57.3   Patient Flows for Different Patient Classes

Patients visiting an outpatient system (or any other sub-system) of a hospital may be classified in various ways depending upon some common characteristics. Such classification helps in identifying the groups of patients experiencing dissatisfaction and the types of problems faced by a particular category of patients. Such classification may also help in planning resources and applying specific improvement strategies for different categories of patients. Depending upon the problems faced by the system and the types of analyses intended to be performed, the characteristics of classification may be varied. The classification may be in terms of the number of visits the patient is making, i.e, new patients or repeat patients; in terms of the age or sex of the patient or in terms of the problem or disease, for instance, the patients visiting the department of Orthopaedics may be classified as fracture patients, patients having pain/sprain/strain and patients having some form of deformities. In an investigation facility, the patients may be classified on the basis of the type of investigation. For instance, the patients requiring CT scan services may be classified on the basis of whether the patient requires a CT scan or an angiogram. Alternatively, the patient may be classified on the basis of the body part to be scanned/examined. Another way of classifying the patients which is usually adopted when an integrated approach for improving a process or planning the resources for a process is to be applied is on the basis of the pathways followed by the patients during the process of care. Analysing the pathways helps in exploring alternative patient routings or processes that may improve performance metrics like patient cycle time in the system [10]. Furthermore, the frequencies with which these pathways are followed depict the number/amount of resources consumed and hence provide insights for planning and allocation of resources.

Because of the difference in characteristics, such as generation of demand, service times and requirement of number and types of services, different patient classes have different flow rates and routings through the process of care. A new patient usually has to undergo more number of stages of care during a visit to the outpatient system while a repeat patient usually follows very simple pathways having only one or two stages of care. The service times at a particular stage for different patient classes may also vary, e.g., the new patients require more consultation time as compared to review patients and a patient requiring CT scan and X-ray services experiences less service time as compared to those requiring MRI services. In fact, the patients entering a
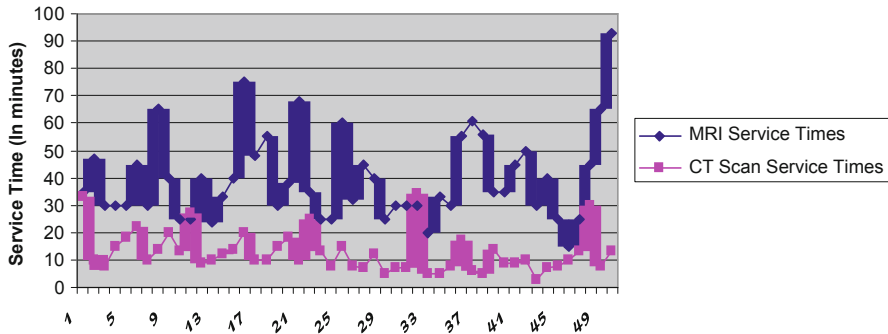
Fig. 57.2 Comparison of MRI and CT scan service times

particular stage of care may also be classified in terms of the service times (this is usually done in case of inpatients, where the length of stay is used for classification). Figure 57.2 depicts the service times for CT scan and MRI investigations in a hospital.

The characteristics, such as arrival rates and patterns, service time distributions, care pathways and various performance metrics need to be analysed (relevant data to be collected mainly through observations, time studies, and medical records) for different patient classes in order to identify problems specific to different classes and then the interrelationships among the performance of various classes should also be analysed.

57.4   Methodology

The methodology for patient flow modelling is given in Fig. 57.3.

57.5   Managerial Implications

Some of the managerial implications pertaining to variations in patient flows for different facilities and patient classes are as follows:

1. A hospital outpatient system usually allows both scheduled and walk-in arrivals for consultation. Analysis of demand rates and patterns of various classes of patients, e.g., scheduled, walk-ins, new patients and review patients may provide insights for appointment sequencing and scheduling policies e.g., developing hybrid appointment systems (considering both scheduled and walk-in patients) and also helps in allocation of resources, such as receptionists, junior doctors and nurses.
2. Before applying any strategies for improvement, the performance metrics of interest, such as waiting times of patients and utilization of resources should be analysed for various facilities and various classes of patients separately in order
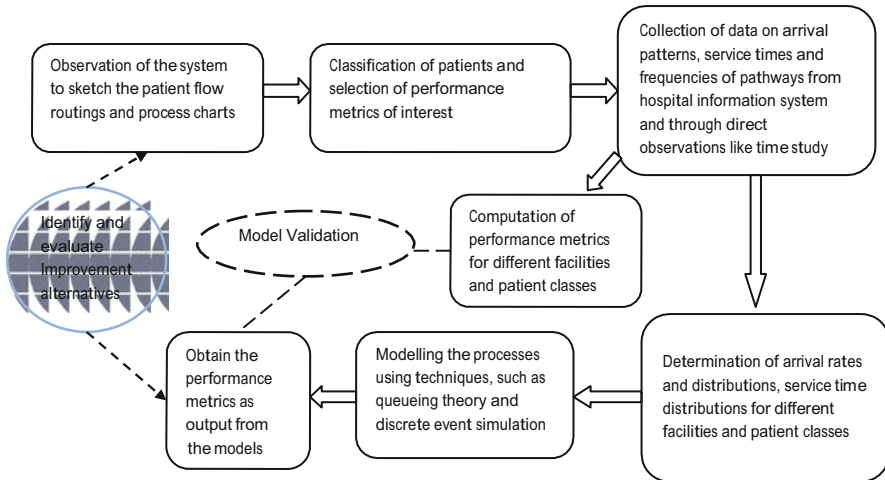
Fig. 57.3 The methodology for patient flow modelling for hospital processes

to identify the facilities facing problems and the classes of patients experiencing more dissatisfaction. This helps in attacking the problems in the system in a systematic manner.

3. The techniques for capturing the patient flows, such as queueing theoretic models, Markov chains and discrete event simulation are to be used taking into account the different conditions related to the variability in patient flows of different facilities and patient classes and the constraints. For instance, multi-class queueing models [e.g., [11]] may be used in order to characterize different patient classes.

57.6   Conclusion

The issues and implications related to variations in patient flows for different facilities and patient classes in an outpatient system signify the importance of considering the variations in arrival rates and patterns, service times and flow routings for different facilities and patient classes while modelling and managing the patient flows in an outpatient system in particular, or any hospital system in general.

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Part VIII
Tourism Initiatives, Relationships and Issues in Asia-Pacific

Chapter 58
Explore the Use of Visitors E-GATE System Intention

Tsung-Ying Yu and Po-Tsang Huang

Abstract Global International Airport growing fast continuously, most countries add the new high-tech hardware to improve border security, services, efficiency, Taoyuan Airport is also to enhance airport-related hardware by build E-GATE system, The results showed: (1) passengers attitude by ease of using E-GATE, (2) Using attitude corresponding to the acceptance of actual use, (3) Using attitude corresponding to satisfaction of the actual use. The contribution of this research provides organizations with a systematic innovation management, provide the reference of airport renovation projects.

58.1   Introduction

Under the trend of globalization and internationalization, international population begin to move frequently, the number of people engaged in the business travel and tourism increase rapidly and dramatically, and under the economic development today, Global International Airport growing fast continuously, airports of all countries have expanded or add new high technology or humane hardware facilities, and trying to build the airport not only as a transfer point of transportation. but wish to the develop the nearby area of the airport's operations by operating the airport, attracting the people to use the airport, so can promote economic prosperity, and bring huge business opportunity and profit to the relative industry base on the idea of aerotropolis.

Under the circumstances of airport hardware facilities expansion and number of passengers entering and leaving the airport increase significantly, all countries are try to raise the border security management level, cause the existing airport manpower already unable to meet the requirements, and have impacted on frontier duty operation and management stability. How Government should co-ordinate and use the existing information technology and management techniques to compensate

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for border management manpower gap, and reached the border management business innovation is the motive of this study.

While international airport clearance work load increasingly onerous and need to take into account of streamlining manpower policy, relevant countries in order to reduce the Customs and immigration off the clearance pressure, they start to design and implement fast customs clearance method, and hope can use "technology to replace manpower", therefore we summarized in the following for the object of this study: (1.) Understand travelers acceptance of using E-GATE system. (2.) Understand the satisfaction of travelers using the E-GATE. (3.) By collating data and empirical analysis, can give government departments some suggestion when planning to set up a large number of E-GATE system in the future purpose, and highlight the active serving people's performance, the performance, enhance the overall image of the country.

58.2 Literature Review

58.2.1 The Definition of Information Technology

Laudon and Laudon [6] define the information technology as: computer hardware, software, data and storage technology and the Internet. Information technology is a technology that can handle large amounts of information quickly, including a fast computer, research that can support the decision, such as math, statistics, Boar [2] definition, collection, transmission, retrieval, storage, display and convert a variety of information technology, the transfer of information between two people, between people and information processor or multiple information between processors. Enterprises after year 2000 the key is speed. From this, the investment in information technology is bound to become the inevitable trend of enterprises or organizations.

58.2.2 Technology Acceptance Model

Technology Acceptance Model (Technology Acceptance Model, TAM), Davis et al. [5] proposed that the external factors affecting users to accept new technology, based on the theory of reasoned action, through the perceived usefulness (Perceived Usefulness) and perceived ease of use (Perceived Ease of Use) two key mediating factors, impact the use of behavioral intention of the user.

58.2.3 Customer Satisfaction

Yang and Peterson [11] that customer satisfaction can be divided into two categories, the first category-based transaction (transaction-specific) satisfaction; Tier Accumulator (cumulative) or overall satisfaction (overall). Transaction-based definition of

satisfaction to the consumers in the emotional response of the consumer experience with a service or product provider [7], Cronin and Taylor [3] and by Parasuraman et al. [8] cumulative plus impression that overall satisfaction is one of the main functions of the service quality, and compared with the transaction-based view that overall satisfaction reflects the customer's enterprise service performance Therefore, the overall satisfaction can effectively predict customer loyalty. The study used the concept of conducting a customer satisfaction measure overall satisfaction.

58.3   Research Methods

The main purpose of this study is to investigate the Immigration Department to promote users to use E-GATE of the system, to investigate the overall perception of the system for the use of E-GATE acceptance and satisfaction, in order to understand the travelers use behavior and its impact factors and various structure of all aspects differences.

58.3.1   *Hypotheses and architecture*

Integrated the aforementioned literature finishing with inferences, this study is mainly based on Davis [4] proposed TAM by TAM user's point of view, to explore the perceived ease of use of the E-GATE system, causing the user to use the system impact on the overall perception of acceptance and satisfaction, as a reference for units in the future. The research deduction TAM model proposed three hypotheses:

H1: The perceived ease of use corresponding using attitudes have a positive and significant impact.

H2: The system using attitude corresponding to the acceptance have a positive and significant impact.

H3: The system using degree have a positive and significant impact on satisfaction.

The main factors affect the user to use the E-GATE system, including using the system's perceived ease of use, attitude of using and the actual acceptance and satisfaction. In order to achieve the research purpose, it is necessary to conduct hypothesis analysis in order to confirm the research structure of this study.

58.3.2   *Study Object*

Therefore, will take Taoyuan airport as the location subject of this study, and take travelers using the E-GATE system models the study object.

58.3.3 Questionnaire Design and Contents of the Questionnaire

In this study use questionnaire to collect the data to examine the issues of the theoretical basis of in the questionnaire design, according to the semantics of the relevant literature modify a preliminary questionnaire. Total of 45 questionnaires were distributed at pretest phase, deduct 4 invalid questionnaires, valid questionnaires were 41 at pre-test phase, analysis the 41 valid questionnaires, and using a 5-point Likert (Likert) scale.

58.3.4 Research Variables

This study mode each construct variables and the corresponding Question items are described below:

58.3.4.1 Ease of Use

According to Venkatesh et al. [10] to integrate the similar concept corresponding to the expected to devote the proposed definition, this study is expected to devote means the "travelers consider that the degree of E-GATE system is ease to operate". In this study, according to Davis et al.'s [5] study, summarized the four measurable variables that expected to devote.

58.3.4.2 The Using Attitudes Toward

Integration similar to the concept of the et al Venkatrsh [10] definition of convenience, the convenience class constructs in this study refers to the "the travelers think" E-GATE clearance very convenient. This study, according to Ajzen [1], Thompson et al. [9] of the study, summarized convenience eight measurable variables.

58.3.4.3 Acceptance

According to Davis et al. [5] that the actual use of the system or not, is an important indicator of user technology acceptance, satisfaction with the actual use of the system is also often used to assess user acceptance indicators. Therefore in this study is according to and this study, summarized six user technology acceptance measure variables.

Table 58.1 Perceived ease of Table KMO and Bartlett test table

Kaiser-Meyer-Olkin Sampling the appropriateness of the amount of the number		0.770
Bartlett test of spherical	Of the chi-square value	254.956
	Significant	0.000

Table 58.2 Attitude pour ScaleKMO and Bartlett test table

Kaiser-Meyer-Olkin Sampling the appropriateness of the amount of the number		0.871
Bartlett test of spherical	Of the chi-square value	1048.846
	Significant	0.000

Table 58.3 Acceptance scale KMO and Bartlett test

Kaiser-Meyer-Olkin Sampling the appropriateness of the amount of the number		0.820
Bartlett test of spherical	Of the chi-square value	320.415
	Significant	0.000

58.3.4.4 Satisfaction

Rust and Oliver [7] explain the customer satisfaction as "the consumer has or the extent to which the use of the service brought positive feelings" Rust and Oliver [7] developed a measure method, after summarized users satisfaction of Science and Technology with six measurable variables.

58.4 Data Analysis and Results

58.4.1 Questionnaires Collection

The study questionnaires at Taoyuan Airport for travelers to use E-GATE system susceptibility provided 160 questionnaires, and 152 questionnaires were retrieved, there are four invalid questionnaires and retrieved 148 valid questionnaires.

58.4.2 Factor Analysis

In this study a total of four questions about perceived ease-of-use table, data shown in Table 58.1:

A total of eight questions on the use of the Attitudes Scale, as shown in Table 58.2:

A total of six questions on the acceptance scale, analysis of the data shown in Table 58.3:

A total of six questions on the acceptance scale, analysis of the data shown in Table 58.4

Table 58.4 Acceptance scale KMO and Bartlett test

Kaiser-Meyer-Olkin Sampling the appropriateness of the amount of the number		0.825
Bartlett test of spherical	Of the chi-square value	987.250
	Significant	0.000

Table 58.5 Perceived ease of usePearson correlation analysis

		Perceived ease	Use attitudes
Perceived ease	Pearson related	1	0.559*
	Significant (two-tailed)		0
	Number	148	148
Use attitudes	Pearson related	0.559*	1
	Significant(two tailed)		
	Number	148	148

*0.01 (two-tailed significance level), significant

Table 58.6 Attitude toward usingPearson correlation analysis

		Use attitudes	Acceptance
Use attitudes	Pearson related	1	0.489**
	Significant (two-tailed)		0
	Number	148	148
Acceptance	Pearson related	0.489*	1
	Significant (two tailed)	0	
	Number	148	148

*0.01 (two-tailed significance level), significant

58.5   Reliability Analysis

This study uses the four dimensions of the scale reliability analysis, including perceived ease of use, attitude, acceptance, satisfaction and behavioral intentions. Overall Cronbach's α value of 0.953, number of items is 24; at the same time remove any one of the items in the various dimensions, are unable to significantly improve the Cronbach's α value, prove the questionnaire has good scale internal consistent reliability.

58.6   Pearson Correlation Analysis

From Tables 58.5, 58.6 and 58.7 as shown below: perceived ease of use positive correlation with the use of the attitude presented significant results; attitude and acceptance positive correlation, significant results; attitudes and satisfaction are positively related, significant results, in line with the three proposed in this study assumptions.

H1: Perceived ease of use attitudes toward a positive and significant impact.

H2: The system uses a positive and significant impact on the attitude of acceptance.

H3: The system uses a positive and significant impact on the degree of satisfaction.

Table 58.7 AcceptancePearson correlation analysis

		Use attitudes	Satisfaction
Use attitudes	Pearson related	1	0.663**
	Significant (two-tailed)		0
	Number	148	148
Satisfaction	Pearson related	0.663*	1
	Significant (two tailed)	0	
	Number	148	148

*0.01 (two-tailed significance level), significant

58.7 Conclusions and Recommendations

58.7.1 Conclusions

In this study we use Technology Acceptance Model theory to investigate travelers use E-GATE system research, the following conclusions and recommendations are summarized as follows:

1. Learn travelers use E-GATE acceptance (i.e., acceptance, satisfaction): analysis from various dimensions, acceptance and satisfaction with the use of the average of Li Ke scale (Liker's scale) are as high as 4.5–4.89 represents a fairly high degree of satisfaction and acceptance of the system for the E-GATE recognition and identity, customs clearance services provided by the most people for the E-GATE system is quite acceptable and very satisfied.
2. By collating data and empirical analysis suggests that government departments should use to the advantage of the technology to replace the human, not only can save on labor cost, but the country can also produce tighter border security mechanisms, it is recommended that government departments to set up E-GATE system can provide more diversified technology products in the future as the reference of the Taoyuan Airport conversion works.
3. People interact with technology in recent years have become increasingly frequent, it is recommended that future researchers toward the design of the E-GATE system equipment, the mode of operation of the E-GATE system, E-GATE system device processes more optimal way of E-GATE system.

58.7.2 Limitations of the Study and Recommendations

This study is limited to time and cost considerations, and E-GATE systems operation services in the high-tech products, and also is limited to the questionnaires main issued considering after use E-GATE. Unable attend overall to the people cannot using technology. Questionnaire number and the object are our research limited. In sample representation and outcome deduce, maybe not adequately express the opinion for different group. Can only make general studies. Only make achievement for general group.

People and technology interact in recent years become increasingly frequent, and different groups of travelers for technology acceptance also increasingly higher, and recommendations for further studies into the more large-scale and the scale of sampling survey, towards the E-GATE system equipment's design, E-GATE systems' operation mode, E-GATE system set up process, to optimized E-GATE system in better way, to carry out more comprehensive and rigorous study.

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Chapter 59
Major Sporting Events and National Pride: A Comparison Between the London 2012 Olympics and Singapore 2010 Youth Olympic Games

H. K. Leng and H. Hopfl

Abstract Hosting a major sporting event has both economic and social benefits for the host country. A recent study on the Singapore 2010 Youth Olympic Games showed that there is an increase in national pride following the hosting of the event. The aim of this study is to examine whether this finding is replicated following the hosting of the 2012 London Olympics. The study is a two-stage survey involving students from a university in the United Kingdom. The first survey was administered six months prior to the Olympics to establish the level of national pride of students in the university. The same survey instrument was administered again six months after the Olympics. Statistical tests showed that there is no significant difference in national pride from the two surveys. This suggests that the relationship between hosting a major sporting event and national pride is more complex than what has been suggested in earlier studies.

59.1 Introduction

Sport is an important and conspicuous vehicle of national expression. Many nations use sports to create narratives of shared meaning and values for the citizens of a nation. In addition, international sports competitions encourage nationalistic displays and provide the platform for a nation to demonstrate its sovereignty and strength. As such, sports can enhance the national identity and pride of a nation [1–3].

Some nations have gone further in using sports to build its national identity and pride by hosting major sporting events. This has been documented extensively in the literature but most recently in the South African FIFA World Cup 2010 [4, 5]. To justify the high financial cost in hosting major sports events, politicians and sports

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organisations have relied on research documenting the economic benefits in hosting major sports events [6]. More importantly, the public need to be convinced of the financial viability and the benefits accrued in hosting the event [7, 8].

Consequently, there are many studies on the economic benefits of hosting major sports events such as the Olympic Games and the FIFA World Cup. These studies have focused on various economic impacts for the host country, including increased tax revenues, employment of residents, publicity for the host country, and investment in new infrastructure and facilities. In comparison, there are fewer studies on the non-economic benefits of hosting major sports events as they are external to the economic evaluation in the decision to host the event [7, 9–11]. Social impacts of major sports events are less tangible, making them more difficult to measure and quantify, and are often associated with negative factors like security concerns, alcoholism, prostitution and congestion [10]. The few studies conducted, however, have generally concluded that non-economic benefits do exist. They include increased community pride, sports participation rate in the community, and level of awareness of traditions, culture and environmental concerns [6, 7, 10, 11].

A recent study found that following the hosting of the 2010 Youth Olympic Games in Singapore, Singaporean students in a tertiary institution experienced an increase in national pride [12]. However, the Youth Olympic Games is a relatively new international sports event. Consequently, it does not have the same appeal as other major sports events as it has attracted less attention from both the media and participants [13, 14]. The aim of this study is to examine if the findings from the earlier study can be generalized to other major sporting events by replicating the study with the London 2012 Olympics as the sporting event. Findings from this study will add to the understanding of the relationship between national pride and the hosting of a major sports event.

59.2 Literature Review

Sport can enhance a nation's national identity and pride [1, 2]. In particular, international sports events are opportunities for spectators to be exposed to nationalistic sentiment and increased antagonism towards rival sporting nations [1, 15]. For example, the Asian Games and its predecessor, the Far Eastern Championship Games, was a sporting battle between China and Japan extended from the political arena. The Chinese saw the games as an excellent platform to display their wounded nationalistic sentiments, and to unite and triumph over their greatest political foe [16].

A small number of studies have generally concluded that following the hosting of a major sports event, there is an increase in national pride in the host country. A longitudinal study of the Sydney 2000 Olympic Games revealed a significant increase in Sydney residents' pride in Sydney and Australia from 1998 to 2000 [7]. More recently, it was also found that host countries of the FIFA World Cup, South Korea in 2002 and Germany in 2006, enjoyed a temporary surge in national pride [10, 17]. Although the increase in national pride is usually short-lived, the sport

event becomes a part of the national narrative and history. As such, hosting large-scale sports events can present unique occasions to strengthen bonds among citizens through a common narrative and history [7, 10, 17].

The increase in national pride from hosting major sports events has also been attributed to the grand opening ceremonies. These ceremonies generally seek to demonstrate the host country's capabilities and its unique culture to the world. Hence, they tend to enhance feelings of national identity and pride amongst the population of the host country [8, 18, 19]. For example, while the opening ceremonies of the Olympic Games present universal ideals of humanism and peaceful internationalism, they also seek to reaffirm and celebrate the host country's identity. The opening ceremonies are thus regarded as a site for the construction of national identity and narratives of a nation [8, 19].

In addition, the hosting of major sports events is usually accompanied by the building of new facilities and grand stadiums. Stadiums, as the site of the main ceremonies and major sporting events, can demonstrate the technological and economic capabilities of the nation [18]. With their mammoth size and grandeur, they also play an important role in propagating national pride [19].

Measuring an intangible impact like national pride in a systematic and quantifiable way requires the impact to be recognised as an attitudinal construct [6]. To measure national pride, the National Opinion Research Centre in the University of Chicago developed the General National Pride scale. This scale measures the extent to which a citizen is proud of his nation, its achievements and what it stands for. The General National Pride scale consists of five agree-disagree items, with the second item being reverse-coded, on a 5-point Likert scale. Hence, the General National Pride scale runs from 5 (lowest general national pride) to 25 (highest general national pride). These items are as follows:

a. I would rather be a citizen of (Country) than of any other country in the world.
b. There are some things about (Country) today that make me ashamed of Country.
c. The world would be a better place if people from other countries were more like the (Country's Nationality).
d. Generally speaking, (Country) is a better country than most other countries.
e. People should support their country even if the country is in the wrong.

The scale had been used extensively in many previous studies conducted in different countries. For example, the International Social Survey Program used the scale in at least two separate studies. The first study was conducted in 24 countries in 1995. In this study, it was found that the countries had scores ranging from 13.5 to 17.6. Great Britain had a score of 15.4 and ranked 14 among the 24 countries. The second study was conducted in 33 countries in 2003. The scores in this study ranged from 13.4 to 18.4. In this study, Great Britain obtained a comparable score to the earlier study of 15.1 and ranked 19 among the 33 countries [20, 21]. The score obtained must be taken in the context that the United Kingdom is in reality a multination state with distinct Welsh, Scottish, English and Northern Irish nations. As such, most British have dual identities which may explain the lower scores [22].

A review of the studies using the General National Pride scale suggested that there are differences in the level of national pride between different demographic groups. The younger segment of the population generally has a lower level of national pride as compared to the older segment of the population. This was suggested to be due to the younger generation being exposed to the effects of globalisation. Conversely, the older generation being exposed to extreme nationalistic sentiments during the World Wars and other politically-divisive events were more nationalistic when compared to the younger demographic groups [17, 21, 23].

Singapore was not among the countries studied in the above two studies. However, two other studies using the General National Pride scale were conducted in 1999 and 2009. Both studies recorded a score of 17.2 which is considered a high score when compared to the scores obtained by other countries [24, 25]. More recently, a study using the General National Pride scale found that following the hosting of the 2010 Youth Olympic Games in Singapore, Singaporean students in a tertiary institution experienced an increase in national pride. Although the effect size of the increase in national pride was small, the increase in national pride was more pronounced among males and those who were more involved in sports [12].

In the review of the literature, the hosting of major sports events has been found to generate an increase in the level of national pride. The research question for this study is to examine if there is an increase in the level of national pride in the United Kingdom following its hosting of the 2012 London Olympics. In particular, the study aims to compare the findings with the earlier study conducted on the 2010 Youth Olympic Games in Singapore.

59.3   Methodology

In March 2012, about six months prior to the London Olympics, a powerpoint slide explaining the aims of the research was shown during a lecture to 600 first year students enrolled in a management course in a university in the United Kingdom. The same slide provided an internet link for students to complete a survey online. The survey consists of the 5-item General National Pride scale and other demographic information. Response to the survey was poor despite several reminders. As there were less than 40 responses after a month, the survey was sent to all 3,000 students in the faculty in April 2012. The survey closed in May 2012 with a total of 74 students responding to the survey.

In November 2012, three months after the Olympics, another powerpoint slide with the same information was shown during a lecture to a group of 500 students. There were only 2 respondents from this survey. Due to the Christmas vacation, it was not possible to remind the students to complete the survey. The result from this survey was discarded due to poor responses. In January 2013, two other classes with a total of 200 students were invited to respond to the survey. In this phase, a total of 30 students responded.

In this research, it was initially conceived as a longitudinal research. The majority of research on resident perceptions of major sports events employed cross-sectional research methods. Cross-sectional research establishes the level of national pride at a

Table 59.1 Comparison of general national pride score across events

	Pre-event		Post-event		t-value
	M	SD	M	SD	
2012 London	12.67[a]	3.36	13.17[b]	2.37	− 0.52
2010 Singapore	16.95[c]	3.10	17.13[c]	2.81	− 1.68*

*$p < 0.05$
[a] $n = 24$
[b] $n = 12$
[c] $n = 679$

single point in time. In comparison, longitudinal research allows the examination of change in national pride over time. However, longitudinal research requires higher levels of co-ordination and resources, including both time and cost. As such, there are fewer of such longitudinal studies [5, 9, 11]. Due to the poor response and the difficulties indicated in the literature, a cross-sectional research design was finally adopted for this study.

59.4   Findings and Discussion

In the first survey of 74 respondents, 24 (32.4 %) respondents were from the United Kingdom, 21 (28.4 %) respondents were from the countries in the European Union and the remaining 29 (39.2 %) respondents were from other countries. In the second survey of 30 respondents, 12 (40 %) respondents were from the United Kingdom and 9 (30 %) respondents each were from countries in the European Union and other countries.

An independent t-test was conducted to evaluate if there was an increase in national pride following the hosting of the London Olympics among respondents from the United Kingdom. There was no statistically significant increase in national pride from the survey prior to the Olympics ($M = 12.67$, $SD = 3.36$) to the survey conducted after the Olympics ($M = 13.17$, $SD = 2.37$; $t = -0.52$). This is detailed in Table 59.1 below.

This result is different from the earlier study in Singapore which showed that hosting a major sports event has a significantly positive effect in increasing the level of national pride among the residents of the host country. In the Singapore study, the level of national pride increased from 16.95 ($SD = 3.10$) to 17.13($SD = 2.81$; $t = -1.68$, $p < .05$). However, the effect size was small ($d = .06$), which suggests that the magnitude of the change was not large.

The study in Singapore had a much larger sample size of 679 respondents. As such, the large sample size used in the earlier study will make a small difference between groups become statistically different even though the effect size was small [26, 27]. In addition, the earlier study showed that the effect in hosting a major sports event on national pride is highest among males and those who are more involved in sports [12]. In this study, due to the small sample size and the cross-sectional research design, it was not possible to examine if these factors had any effect on the findings.

Table 59.2 Comparison of general national pride score across national groups

	Pre-event		Post-event	
	M	SD	M	SD
UK citizens	12.67[a]	3.36	13.17[b]	2.37
EU citizens	14.90[c]	4.27	15.56[d]	3.32
Other citizens	14.45[e]	4.01	13.78[f]	3.60

[a] $n = 24$
[b] $n = 12$
[c] $n = 21$
[d] $n = 9$
[e] $n = 29$
[f] $n = 9$

As such, the findings from this study serves to highlight that even though the earlier study in Singapore found an increase in national pride following the hosting of a major sports event, the effect is small and particular to specific demographic and psychographic segments. The hosting of major sports events has only a limited effect in increasing national pride.

A closer examination of all respondents showed that while both UK and EU citizens reported an increase in national pride following the 2012 London Olympics, citizens of countries outside the EU reported a decrease in national pride. While inconclusive, this finding suggests that future research should examine if there is a regional effect in hosting major sports event on national pride (Table 59.2).

59.5 Conclusion

In sum, while the literature has suggested that hosting a major sports event can lead to an increase in national pride, there has not been a statistically significant increase in national pride following the hosting of the 2012 London Olympics. In particular, it concurs with existing literature that the change in national pride following the hosting of a major sports event has only a small effect. This remains an area that needs to be researched further.

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Chapter 60
Drivers of Green Market Orientation of the Hotel Sector in Sri Lanka

G. D. Samarasinghe and F. J. Ahsan

Abstract Literature has identified drivers that induce firms to adopt green marketing initiatives. However, it is significant to specifically identify the drivers of green marketing initiatives in the hospitality industry in an emerging economy. This study addresses this important knowledge gap by undertaking a theoretical sample of senior managers in the hotel industry in Sri Lanka representing all-star category hotels. It adopted qualitative design using in-depth interviews and the data was analyzed in terms of the common conceptual themes emerging. The study derived four conceptually distinct green drivers namely, desire for competitive advantage in terms of cost and differentiation and ethical/ moral obligation of top managers and leadership as internal divers to the firm whilst need for regulatory compliance and pressure from stakeholders as external drivers to the firm. The findings have implications for manager and policymakers in the tourism and hospitality sector in Sri Lanka to improve the competitiveness of the industry through promoting the fair-trade practices in Sri Lanka and provide opportunities for future research.

60.1   Introduction

Whole World is identifying the need of the Green Marketing, Environmental Marketing and Ecological marketing which give the same meaning. Although environmental issues influence all most all activities in our day today lives, only a few academic disciplines have discussed green issues in Sri Lankan market context. Especially in Sri Lankan business domain, in the manufacturing, apparel, FMCG and hospitality sectors are considerably large sectors in the economy which have opened their eyes on eco friendliness. As society becomes more complex with the environmental

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pollution and unethical business practices, now both consumers and business organizations are concerned with the natural environment. Hence, businesses have begun to modify their behavior in an attempt to address this society's emerging concerns.

Tourism has become one of the largest industries in the world economy. In Sri Lanka, the biggest contribution and growth recorded was from the Services sector especially taking the Hotels and Restaurants sector which recorded 39.8 % higher growth in 2010 compared to 13.3 % growth rate which it experienced in 2009 [1]. Tourist earnings increased by 62 % and room occupancy rate increased to 70 % in 2010 compared to 48.4 % in 2009 [1]. In 2012, the number of tourist arrived in Sri Lanka exceeded one million. Sri Lanka has planned to have 2.5 million tourists to arrive in Sri Lanka by 2016 and accordingly initiated necessary infrastructural development with the development of hotel establishments and increased room capacity [1]. From an ecologically sustainable perspective, today the firms of tourism and hospitality sectors in Sri Lanka have started using environment friendly marketing practices as a way of accomplishing their social responsibility and creating value for tourist customers. However, it is observable that majority of hospitality firms in Sri Lanka have not satisfactorily adopted green marketing as a business philosophy according to the opinion of industry experts.

60.2 Purpose of the Study

The purpose of this study was to explore the drivers and motives that make hospitality firms green and conceptually explain their potential for compelling the firms to adopt greener marketing. For the purpose, the study defines corporate greener marketing initiatives as a set of corporate initiatives aimed at mitigating a firm's impact on the natural environment.

60.3 Review of Key Literature

60.3.1 About Green Marketing

Sustainability is the keystone of the green marketing philosophy. A sustainable approach to consumption and production involves enjoying a material standard of living today, which is not at the expense of the standard of living of future generations. In accordance with this, nowadays, the concept of "green marketing" is becoming more and more popular. Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment [2]. In general green marketing is a much broader concept, one that can be applied to consumer goods, industrial goods and even services. For example, around the world there are resorts that are beginning

to promote themselves as "ecotourism" facilities, i.e., facilities that "specialize" in experiencing nature or operating in a fashion that minimizes their environmental impact.

60.3.2 Key Influences of Corporate Green Initiatives

Increased use of Green Marketing is depending on five possible reasons [2]: Organizations perceive environmental marketing to be an opportunity that can be used to achieve its objectives; organizations believe they have a moral obligation to be more socially responsible; governmental bodies are forcing firms to become more responsible; competitors' environmental activities pressure firms to change their environmental marketing activities and cost factors associated with waste disposal, or reductions in material usage forces firms to modify their behaviour. Public policymakers will continue to develop more efficient ways to regulate waste and pollution, and scientists will continue to gather information about the environmental risks from various substances or practices. As they do, pricing structures will evolve that communicate even more accurate information to manufacturers and entrepreneurs about the true cost of commercial activities and the potential rewards from innovative solutions to environmental problems. Visible environment consequences of the manufacturing industries made them adopt the environment best practices earlier than the service industry [3]. But growth of Green Marketing expanded to services industry also in early twentieth century. Growth of eco-tourism, green investments and consideration of environment friendly service expanded to various sections of service industry in an increasing speed [4].

Prior research on organizations and the natural environment has identified four drivers of corporate green initiatives. Business opportunities drive corporate green marketing. By intensifying production processes, firms reduce their environmental impacts while simultaneously lowering the costs of inputs and waste disposal [5]. Revenues can be improved through green marketing, the sale of waste products, and outsourcing a firm's environmental expertise. Enhancing firm-based resources, such as corporate reputation, learning capabilities, and product quality, can be developed through corporate green initiatives. The importance of regulation in inducing corporate green initiatives has been widely recognized. Escalating penalties, fines, and legal costs have punctuated the importance of complying with legislation. Furthermore, firms can avoid expensive capital refits by keeping ahead of legislation. Stakeholders have also been powerful influencer corporate green initiatives. Customers, local communities, environmental interest groups, and even the natural environment itself encourage firms to consider ecological impacts in their decision making. Managers are able to avert negative public attention and build stakeholder support by being responsive. Ethical and moral conduct of top management and leadership drives firms be environmentally friendly because it is a norm and the "right thing to do". Top management team members and company values are instrumental in encouraging these firms to be mindful of their social responsible behavior.

60.4   Methodology

The study design was qualitative and based on inductive approach. It theoretically selected senior managers of hospitality firms which were known to have green business practices. It covered a purposive sample that was comprised of four managers from Five Star & Four Star hotels, nine managers from Three Star, Two Star & One Star hotels and seven managers from unclassified hotels in the Sri Lankan hotel industry. In-depth interviews were carried out using pre-planned discussion guide and responses were subsequently transcribed for use in the data analysis on the basis of common themes and categories emerging.

60.5   Theoretical Reflections on Key Influences of Green Market Orientation

The data analysis revealed four conceptually distinct themes, which were consistent with previous literature.

60.5.1   Desire for Competitive Advantage

Green initiatives that help gain competitive advantage in the industry were the low cost of energy consumption and waste management through low cost advantage. Many firms were motivated to replace their lighting from CFL to LED and use day-lighting facilities. Additionally, the availability of low cost loan facilities for enhancing green facets of hotels from some banks in collaboration with global green initiative projects motivated some hotels to be green oriented. Eco-promotion and the development of eco-products in corporation with supply-chain partners was significant way of differentiation. Some believed that such visible green initiatives would improve corporate reputation and hence attract competent employees to their firms as well as tourist customers. Among these visible initiatives were attractiveness towards the accreditation of ISO 50000 (Total Environmental Management) and qualification for entering optional classification based on green criteria, different from traditional star based hotel classification.

60.5.2   Moral Obligation of Top Managers

All firms had extended their helping hands to local community groups in various ways, the use of recycled papers, toilet papers, biodegradable packages, and the recycling of office wastes. A very few firms had started using Global Reporting Initiative (GRI) format to communicate their genuine commitment for sustainability

and corporate social responsibility in the industry. Further, they recognized it would enhance both employee moral customer satisfaction and loyalty of other stakeholders. Many firms accepted it is a virtue of business to be environmental friendly and the right thing to do as environmental friendly criteria are one aspect of measuring business performs in terms of triple bottom line of business (people, profit and planet).

60.5.3 Need for Regulatory Compliance

This implies the desire of a firm to improve the appropriateness of its actions within an established set of regulations, norms, values, or beliefs. For instance, appointment of an energy manager who is responsible for keeping the annual energy consumption level at a stipulated level with year-by year improvement would be mandatory to report this energy management annually to Sustainable Energy Authority annually. This proposed yardstick would demands the firms to have an energy auditor to conduct environmental audits. These findings are consistent with the literature that supports link between organizational legitimacy and organizational survival. This implies that the need to comply with such regulations was making the firms to adopt and develop institutional norms and standards as a way of reacting macro environment.

60.5.4 Pressure from Stakeholders

Shareholders had no direct influence on the demand of green initiatives but considerable number of customers from Europe and some global travel and tourism operators had shown the attractiveness towards eco-friendly initiatives. However, local community as well as industry chambers were very concerned on green initiatives and promoted it. This is in consistent with stakeholder theory an institutional theory. A many firms were mindful of this and recognized green initiatives as an emerging mega trend. This situation would be due to in part of institutional norms and pressures to comply with stakeholder interests.

The Fig. 60.1 depicts four conceptual themes that serve as drivers of corporate green marketing practices in the hospitality firms in Sri Lanka as depicted in the Fig. 60.1:

60.6 Implications and Conclusion

The study has identified four major drivers that make hotel firms adopt green initiatives. It implies that green is a source for competitive advantage as it can either provide low cost advantage or differentiation in the industry. Therefore, managers in

Internal Drivers to the Firm

Desire for Competitive Advantage

Moral Obligation of Top Management

External Drivers to the Firm

Need for Regulatory Compliance

Pressure from Stakeholders

Hotel Firm's Green Market Orientation
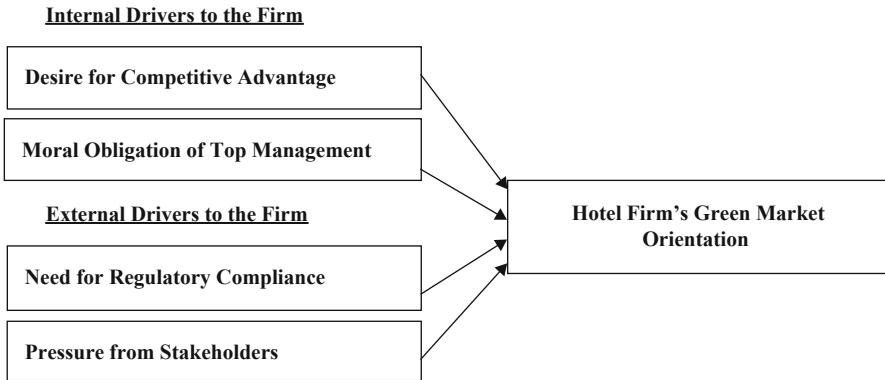
Fig. 60.1 Driving forces of corporate green marketing initiatives in the Sri Lankan hospitality industry

the industry should evaluate green investments in these criteria when making resource allocation decisions for green initiatives. This finding is also in line with the natural resource based view of. Next, the need for regulatory compliance was recognized as driver for green initiatives of the firms in the industry. However, policy makers in the industry can carefully use this as a powerful inducer for promoting the green market orientation in the industry by highlighting its benefits to the industry. I.e. too much regulation for green initiatives without sound evidence can create industry resistance. The management of hotel firms should carefully address the green based interests of their tourist customers and other foreign travel/ tour operators in making green based decisions and investments as well as the local community and chambers in order to have the acceptance for their brand in the industry. Finally, the ethical and moral mind set of top management will help uphold the natural environment at large and reduce the contribution to carbon foot print in the industry as well as Sri Lanka. In conclusion, it is evident that Sri Lankan hotel industry has started its way forward to green and environmental friendly marketing and business practices as a way of responding to global movement towards sustainability. However, relevant policy makers in the industry need play a critical role in cultivating trust on green oriented initiatives in the industry in the future years to come. The findings from the study can only be theoretically generalized to the theoretical constructs of study within the sample. The future studies can empirically validate the conceptual model of the study with appropriate measuring instruments.

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Chapter 61
Singapore's Ability to Maintain Destination Competitiveness Through Integrated Resorts (IRs)

Derrick Lee, Abhishek Bhati and Laurie Murphy

Abstract The purpose of this paper is to discuss the Integrated Resorts (IRs) launched in 2010 which has created a cutting-edge for Singapore tourism industry. This tourism initiative was a great success considering that it tackled the problem of declining in international tourists visiting Singapore since 2009. The two IRs—Marina Bay Sands (MBS) and Resorts World Sentosa (RWS) appears to have enhanced Singapore's appeal as an attractive tourism destination with successive record high tourist arrivals and boosted higher tourism receipt and also created more employment opportunities in the service sector. This paper attempts to stimulate researchers to address Singapore's ability to achieve destination competitiveness by exploring three key areas—tourism development planning, comparing Singapore relative to other destinations, and also the local residents' perceptions and attitudes of the IRs.

61.1 Introduction

Global tourism is an important driver of growth and prosperity as it creates employment opportunities worldwide and raising nations' incomes, balance of payments and economic growth rates. Tourism contributed US$6.3 trillion in 2011 or 9.3 % of total global GDP and employs 98 million people or 9 % of global employment. For every 36 new tourists in a given destination, one new job is created (World Economic Forum

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2013). Singapore identified tourism as one of the key industries with the potential in developing and boosting economic diversity. This paper provides an overview of the Singapore's newest tourism initiative Integrated Resorts (IRs) launched in 2010 and that sparked a phenomenal growth in international tourist arrivals to 11.6 million by 2010 and 13.2 million in 2011. This growth continues as Singapore welcomed 14.4 million international tourists and registered tourism receipts of S$23 billion in 2012 compared to S$22.3 billion in 2011, an increase by 3 %. Singapore is expected to attract 15.3 million visitors in 2013, this is in contrast to the decline in tourist arrivals of 6 % from 10.28 million in 2007 to 9.68 million in 2009 [32]. [27] view that Singapore launched the IRs—a one-stop entertainment for tourists and residents in an attempt to reinvent its new destination marketing strategy to achieve Tourism 2015 goal—17 million tourist arrivals and S$30 billion in tourism receipts.

The concepts of integrated resorts, destination competitiveness, destination branding, destination choice, social exchange theory (SET), social representation theory (SRT) will be discussed. Destination competitiveness involves enhancing the appeal of the tourism industry and more importantly, the economic prosperity of the local residents. Singapore legalized casino gambling in 2005 to enhance its appeal to attract international tourists. The two IRs have boosted the tourism industry in Singapore with high visitation numbers and this positive spillover effects resulted in tourism revenue shared with other stakeholders—tour operators, hotels, restaurants and theme attractions. However, it remains to be seen whether casino tourism has also created new social problems such as addictive gambling, broken families, bankruptcies, crimes and social disruption in Singapore as gambling can be regarded as an addictive behavior. Researchers argue that the concepts of destination branding and destination image are closely associated as both concepts are concerned with the perception of tourists. A destination's image, if perceived positively by tourists also enhances a destination's branding. This is of significant importance to the IRs as tourists' favorable perception of Singapore as an attractive destination can boost international visitor arrivals and tourism receipts. However, if foreign visitors dislike casino gambling and view the concept of casino tourism negatively, this will create unfavorable perceptions of the two IRs and perceive Singapore as another casino gambling destination like Las Vegas or Macao. To understand local residents' perception of the IRs, it is necessary to apply the SET and SRT.

61.2   Destination Singapore

The Singapore government aims to reinvent its new destination marketing strategy using the two new casino-based IRs as an attraction to boost international tourist arrivals to 17 million by 2015. The main unique selling point of the two IRs is in providing all-in-one entertainment for tourists and local residents. The US$4.32b (S$6.59b) Resorts World Sentosa (RWS), which officially opened on 20 January 2010, houses six hotels offering a total of 1,840 guest rooms, a casino capped at 15,000 square meters, Universal Studio theme park Singapore which features 24 attractions with 18 rides and a Marina Life Park, the world's largest oceanarium

[31]. The US$5.5b Marina Bay Sands (MBS) officially opened on 27 April 2010 features three cascading 55-storey hotel towers topped by an extraordinary 1.2 hectare SkyPark, Art Science museum; renowned brands retail stores, theatres, nightclubs and a Las Vegas-style casino [18]. The two IRs are expected to create about 35,000 jobs, including 10,000 positions within the IRs themselves. This innovative tourism strategy is paying dividends both in terms of tourist arrivals and employment opportunities. According to the Singapore Tourism Board (STB), Singapore welcomed 30.3 % more visitors in May 2010 compared to the same period in 2009. For the year 2010, the total employment increased by 112,500, a significant increase compared to 37,600 in 2009. The bulk of employment gains came from the service industries which added 109,500, up from the increase of 55,600 in 2009. The services industries contributed 97.3 %, whereas the construction employment gained a modest 2,300 and the manufacturing employment declined by 2,700 compared to 2009 [19]. The top five inbound markets are from Indonesia (2.59 million), China (1.57 million), Malaysia (1.14 million), Australia (956,000) and India (868,000), making up 49.5 % of overall international tourist arrivals [33].

61.3   Rationale for IRs and Casino Tourism

The concept of Integrated Resorts (IRs) or casino tourism has been approached from different perspectives among researchers. Some suggest that IRs are well-planned and proactive tourism initiatives while others view IRs as merely reactive strategies to boost the tourism sector [25]. It is assumed that IRs is a valid strategy adopted by government to generate tourism revenue and to boost the economy.

Destination managers should not equate tourism growth with tourism success without evaluating the actual impacts of casino developments and their contributions to the tourism industry. It appears that casino gambling is effective in promoting tourism and contributing to the economy, but some question the potential implications in economic and social changes to the country. It is advisable to identify the benefits and costs that have resulted from the promotion of casino tourism in some of the world's leading gaming destinations especially Macao and the United States. For example, Macao has grown to become an international casino gaming destination with 33 casinos established in 2009 compared to only 11 casinos in 2002. [39] noted that casino revenue enabled the government to fund public projects to enhance economic and social development in Macao. Visitor arrivals increased by 16 % from 18.7 million in 2005 to 21.7 million in 2009 [5]. However, this rapid expansion posed three new challenges with respect to social and economic issues:- a lack of qualified human resources to meet the high demand for staff in casinos; a higher inflation rate of 8.62 % in 2008 compared to 0.98 % in 2004; and a 41.6 % increase in crime from 9,786 crimes committed in 2004 to 13,864 in 2008 [5].

The gaming industry has gained popularity in the U.S. where governments view casino gambling as an effective tourism development strategy in generating high tax revenue and boosting economic development projects. As the number of gaming casinos increase, studies debating the social and economic impacts of gaming also

escalate. [3, 8] observed the effects of casino gambling in boosting the tourism industry in the 1990s. While a study by the League of Women Voters in Hawaii emphasized the need to analyze the pros and cons of legalizing gambling and its implications to the community [6]. According to USA Today, cash-strapped Hawaii is considering legalized gambling and launching a casino in Oahu or Waikiki in an attempt to create 4,000 jobs and generate US$100 million of tax revenue from the casino [24]. Research has assessed whether legalized casino gambling could result in higher economic gains and/or creating more social problems in a country. For example, Grey (1995) found that after Atlantic City legalized gambling in 1970s, it experienced a 230 % increase in rates of crimes compared to 15 % nationwide by 1995. Zipser (1995) argue that positive economic benefits are often exaggerated whereas negative economic costs (addictive gambling, traffic congestion, lower job productivity) are understated (Grey, 1995; Zipser, 1995); cited in [26]. [35] investigated the impact of casino gambling on crimes and quality of life in eight casino communities in U.S. and found that not all communities experience the same 'casino effect' with crime rates and tourism statistics varying between communities. In contrast, study of 7,010 adults in New Zealand suggested that local residents suffered poor health and lower quality of life due to high gambling losses [17].

61.4 Destination Competitiveness

Destination managers should define the nature of tourism destination in an attempt to enhance its appeal and competitiveness. Tourism destinations are characterised by four common features. The destination is a product in itself with economic value. Secondly, that economic value is perishable due to issues such as carrying capacity, seasonality and the unsustainable use of natural resources. Thirdly, both tourists and residents must compete for the limited available resources. Finally a quality product must be delivered to visitors in order to achieve economic success [2].

It is widely accepted that a tourism destination can only be competitive and sustainable if it delivers a superior product or travel experience and more importantly, also enhances economic prosperity of the local residents. This is in accordance with Article 5 of 'WTO Global Codes of Ethics for Tourism' which states that tourism should be mutually beneficial to a nation and the local residents in terms of higher tourism receipts, improvements in standard of living, creation of jobs, and environmentalism [7, 10].

61.4.1 Destination Competitiveness Frameworks

Current destination competitiveness models are generic and may not be applicable for a geographically small destination, particularly Singapore. [30] argue that a destination will be competitive if it has five determinants including core resources and attractors, and supporting factors and resources. It will be interesting to research Singapore as a case study as while it has limited inherited resources, it has developed

strong supporting factors (good infrastructure and accessibility), innovative destination policy (IRs), STB's sound destination management strategies (stakeholder management) could enhance Singapore's appeal as an attractive destination to international visitors. Dwyer and Kim's model focuses on the local residents' social well-being and measures competitiveness in the form of 'socioeconomic prosperity'. However, they did not suggest specific criteria in measuring the social welfare or identifying specific quality of life variables, for examples; infrastructure, cost of living, income or recreational opportunities. Future research on identifying elements that enhance the welfare of local residents will be useful. It is meaningless if the IRs are an economic success generating higher tourism receipts and creating more jobs in the service sectors, if on the other hand, the rise of social problems such as money laundering, high crime rates, high divorced rates hurt Singapore as it could become a gambling city rather than an attractive destination for travellers.

A successful and sustainable tourism sector requires effective destination management strategies. There are five benefits of managing a destination: (a) *establishing a competitive edge* by creating a unique tourism experience; (b) *ensuring tourism sustainability* by focusing on the welfare of local residents; (c) *spreading benefits of tourism* including rural areas; (d) *improving tourism yield*—extending average visitor length of stay and increase per capita visitor expenditure; and (e) *building a strong and vibrant brand identity*—delivering excellent value can boost brand loyalty and repeat visitations [40]. An example of a successful destination management policy during a tourism disaster was implemented in Singapore during the outbreak of the Severe Acute Respiratory Syndrom (SARS) that led to a decline of 74 % year-on-year tourist arrivals to Singapore in May 2003. STB together with industry players unveiled the S$200 million *Singapore Roars* program and attracted 8.3 million (34 % increase) visitors in 2004 [34].

61.4.2 *Local Residents' Perceptions and Attitudes Toward Tourism Development Projects*

Tourism scholars have classified residents' attitudes toward casino gaming according to three main benefit and cost domains: economic, sociocultural, and environmental [28] (Dimanche and Speyrer 1996; Ham et al. 2004; Stokowski 1996; Tosun 2002); cited in [3]. A review of literature suggests four popular thereotical frameworks have been applied in an attempt to understand and explain resident perceptions towards impact of casino gambling; social disruption theory, social carrying capacity, social exchange theory (SET) and social representation theory (SRT). In the study of eight communities in Colorado, [29] discuss the social disruption theory on the temporary negative effects on the quality of life caused by casinos, but they found that over time positive impacts follow as residents adapt and eventually support casinos. Social carrying capacity theory assumes that residents view casinos positively as long as changes do not exceed the carrying capacity of the community such as noise, traffic congestion, prostitution, bankruptcy, divorce and crimes. Studies on casino gambling

in Korea (Lee and Black 2003) and Foxwoods, U.S. (Carmichael et al. 1996) suggest that the local residents' perception and attitudes towards casino tourism initiatives is dependent on how fast the community adapt to casino (Lee and Black 2003; Carmichael et al.1996); cited in [36]. Some researchers are concerned that SET as it is too macro-oriented and recommended the use of SRT which is micro-oriented in order to comprehend the local residents' attitudes and perceptions toward tourism projects. The aggregated cost and benefits approach on perception of residents in SET focuses on only macro level indicators. SRT emphasizes that the perceptions, attitudes and behaviours are different within the community and it is important to consider the micro-level values, perceptions and resulting behaviours. Further studies found that the SRT's micro segmentation of variables within the community such as; race, educational attainment, annual household income can assist destination managers better understand the local residents' attitudes toward tourism development [3].

Based on previous works by Carmichael et al. (1996); Ryan and Montgomery (1994); [39] investigated the residents' perception of casino tourism in Macao and introduced the Gaming Impact Perception Matrix (GIPM) which consists of four quadrants which classify four types of perception based on perceived costs and benefits– *skeptical, neutral, reserved optimists* and *optimists*. This matrix is aligned with SRT as it revealed the perception of local residents can assist destination managers to launch appropriate programs to educate and influence local residents' perception of casinos favorably, i.e. from 'reserved optimist' to 'optimist'. For example, casino operators can set up research funds in environmental studies to improve public image.

[3] suggest destination managers consider applying a demographic approach using the Gambling Tourism Support Model (GTSM) by dividing the community into smaller segments based on race and educational background to understand local residents perceptions and attitudes.This model assumes that race and education are reliable predictors, and residents are supportive of casino tourism if they are benefiting from the tourism project. GTSM combines the best of SET (personal benefits) and SRT (demographic) to ensure destination managers fully understand the attitudes and perceptions of the residents and to ensure sustainable and successful launching of casino development. Hence, this model can be a useful reference to comprehend the local residents' perceptions and attitudes towards promoting IRs in Singapore.

61.5 Destination Branding

Destinations are facing challenges in enhancing their appeal to the well-informed and demanding tourists. (Echtner and Ritchie 1991); [11] view destination image as complex phenomenon since the process of creating impressions for individuals is subconscious, difficult to measure, and involves influencing the knowledge, feelings and perception of tourists about a destination. It is important to enhance the image of a destination relative to competitors and to understand destination image as perceived by different tourist segments. For example, [37] noted that tourists from North Asia view Singapore as a food/shopping paradise compared to cultural heritage perception by tourists from Oceania, U.S. and Europe.

Branding aims to create a positive image, boosts visitation intention and builds customer loyalty. Branding increases consumer awareness and creates a destination image congruent with the lifestyle and expectations of tourists. Some view establishing an emotional relationship between tourists and destination is a priority as destination branding can be a tool to attract visitors or to gain advantage over other destinations [20, 23].

Researchers propose different approaches in establishing effective branding strategy for a destination. [21] view that the destination branding process consists of five phases—firstly, the brand's core values are identified and need to be sustainable and meaningful to tourists; secondly, a unique brand identity is created; thirdly, a corporate vision is developed to share to all stakeholders; fourthly, the brand must be effectively implementated and communicated, and lastly, there is a need to monitor, evaluate and review branding strategy. An example of a successful branding strategies implemented included '100 % Pure New Zealand' brand campaign as the brand communicated a clear, consistent, quality and unique identity of a destination.

[1] focuses on differentiation rather than brand identity [21] and suggests five strategies in destination branding; (1) *vision and stakeholder management*—tourism vision is shared and promotes a service-oriented culture; (2) *target customer and product portfolio matching*—understanding attitudes and perceptions of customers and matching image with the customers' profile; (3) *positioning and differentiation strategies*—a good positioning statement should be simple, truthful and it enables customers to make rational decisions; (4) *communication strategy*—adopting a clear communication strategy in branding and select a suitable media type and word-of-mouth (WOM) recommendations; (5) *feedback and response management strategies*—conduct market research to evaluate strategy effectiveness. Balakrishnan's approach is relevant as the Singapore government launched the IRs with the vision to be a leading casino tourism destination, supported by good stakeholder management, effective positioning and promoting Singapore to targeted tourist segments effectively. It remains to be seen if setting a specific tourism vision enhances a destination's appeal and how destination branding affects tourists' purchase decision process.

Creating a distinctive brand personality can enhance brand equity; influence consumer behavior; develops emotional ties; promotes trust and loyalty within the brand; and enhances a destination's image and influence tourist choice behavior [9]. [12] surveyed 250 tourists and local residents on the *New Asia-Singapore* brand campaign and identified five personality characteristics of Singapore brand: youthful, cosmopolitan, vibrant, modern, reliability, and comfort and the image is efficient, sophisticated, contemporary, safe and secured. However, 90 % of respondents were unaware and 60 % were unimpressed of Singapore's brand and its brand personality as a destination. [15] suggests that it is vital to enhance the destination image and unique brand personality of the IRs and Singapore as an attractive destination.

Gaming destination marketers recognize that understanding the perception of tourists, both casino gamblers and non-gamblers will enable them to position and implement marketing strategies more effectively [15]. [22] made three observations: first, casino gamblers have high expenditures on non-gaming activities, second,

heavy spenders are not attracted to a destination because of the presence of casinos, and third, casino gamblers prefer a variety of vacation experiences.

[15] examined the brand images and perceptions of 222 respondents on with respect to four top revenue generating gaming destinations based in the U.S. and found that the most favorable to least favorable were Las Vegas, Atlantic City, Chicagoland (IL, IN), and Connecticut. Las Vegas was perceived favorably in entertainment, restaurants, weather, casino promotions, shopping, tourist attractions, customer service, value for money, affordable room rates, relaxing and exciting. Connecticut scored highest mean scores in cleanliness, safety and security. Respondents would rate Las Vegas top in overall image, recommendation and revisiting. The study also revealed that 63.5 % prefer land-based destinations and 46 % view gambling as a fun and entertainment activity. It is worth examining and comparing the images and perceptions of the two casinos in IRs relative to other gaming destinations such as Genting Highland, Macao, that could determine the success of a gaming destination.

61.6   Destination Choice

Destination managers need to understand how a tourist's decision making process is influenced by destination image, safety and travel costs, travel philosophies, motivation, travel benefits, destination attributes, perceived risk and cultural values [16]. Destination managers can focus on identifying unique cultures and behaviors of tourist segments to facilitate in understanding tourist's DMP in destination choice. Socio-economic and demographic variables are reliable factors in perceiving and forecasting a tourist's destination choice. Examples include, household income, age, gender, educational levels, occupation, family size, geographic location and ethnic background are relevant factors as they can affect tourists' perceptions and experiences of a destination [16, 38]. It is necessary to identify a segment's unique characteristics by analyzing tourist's vacation lifestyle information to comprehend customers' attitudes, interests and opinions about tourism [14].

[13] analyze the various concepts and summarize that the tourists' DMP can be influenced by two categories—'push' and 'pull. The study found that the 'internal/push forces' motivating visitors to Taiwan were escape, rest and relaxation, visiting friends and/or relatives. Personal safety, environment safety, destination image, and quality were 'external forces/pull forces'. The three main concerns of visitors were rest and relaxation, personal safety and environment safety.

61.7   Conclusion

This paper highlighted the development of the Integrated Resorts or casino tourism. Singapore has taken the initiative and implemented the first IR and the issues of competition and social costs should be carefully addressed to achieve destination

competitiveness. The three inter-related studies proposed to address Singapore's attempt to achieve destination competitiveness:

1. Are the IRs perceived positively by the stakeholders—tourism partners? If this is the case, they will support the IRs.
2. Are the IRs consistent with and do they contribute to enhance Singapore's destination brand image?
3. Are the IRs perceived to be also benefiting the local community, i.e. economic contributions outweigh social costs?

61.7.1   Study 1—Tourism Development Planning in Singapore

The study aims to look at the history and new tourism developments in Singapore. STB, formerly the Singapore Tourist Promotion Board (STPB) attracted foreign visitors with the iconic Merlion and new attraction such as the Jurong Bird Park. With the two IRs newly launched, Singapore has attracted an exponential number of tourists and recorded more than 11 million visitors in 2010. However, there are concerns about whether there are any negative perceptions of IRs if so how these might affect Singapore's image. Qualitative semi-structured in-depth interview will be conducted with STB and key stakeholders (hotels, travel agencies, coach firms, restaurants, attractions) to explore whether STB is leading and coordinating with its stakeholders in communicating and promoting Singapore as a leading gaming destination to international visitors. STB should involve all key stakeholders by sharing the tourism vision, educating on the impact of the IRs in the tourism landscape, developing and coordinating with tourism partners to deliver a memorable travel experience for visitors. This will enable STB to promote the IRs to be a sustainable casino tourism initiative.

61.7.2   Study 2—Comparative Study of Tourism in Singapore with Other Resource Limited Destinations

The study aims at identifying a proposed destination competitiveness model for promoting Singapore as the preferred destination. Has the IRs enhanced tourists' perceptions of Singapore as an attractive tourism destination? This is useful to destination managers to understand as part of the destination marketing process and to focus on enhancing Singapore's strengths and make it a preferred tourist destination. A quantitative research method employing a survey questionnaire will be conducted on 250 overseas visitors to Singapore for vacation, business or pursuing studies. The preferred types of survey can be street, on-site, and electronic or captive as they are cost effective and have higher response rate and the questionnaire will comprises of a mix of structured and open-ended questions. The survey aims to measure the
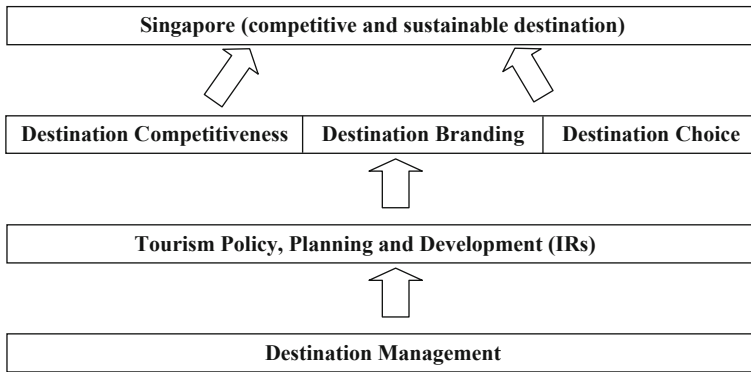
Fig. 61.1 Singapore's new destination competitiveness model. (Source: adapted from Ritchie and Crouch 2003; Dwyer and Kim 2003)

perceived brand personality of Singapore tourism destination and whether the development of IRs is consistent with tourists' perceptions and images of Singapore. The research findings can be compared to previous image studies of casino destinations [15]. It will also be interesting to analyze the results if it matches the 36 destination competitiveness attributes identified by [4].

61.7.3 Study 3—Local Residents' Views of the Integrate Resorts in Singapore

The study aims to determine the perceptions and evaluations by the local residents of the IRs. It is necessary to analyze both the merits and demerits of this new tourism initiative in Singapore as destination competitiveness involves both local residents' well-being and economic success. The GTSM model and SET suggest that local residents will initially perceived the new tourism initiative negatively but will change their attitudes and perceptions as they enjoyed net benefits from the positive effects (economic growth, job opportunities) of casino tourism. It will also be useful to develop a demographic profile of local residents such as age, occupation, lifestyle, and understand their attitudes and perceptions towards IRs. The merits will include the economic gains, employment opportunities and taxation revenue. The demerits will focus on the impact of social costs including problems caused by compulsive gambling, divorce, crimes and money laundering. Both quantitative and qualitative methods are proposed for this study. Six focus group studies comprising of 8–12 respondents on each study is recommended which will have a good and fair representation of those who supported and those who are against casino gambling. The National Council on Problem Gambling (NCPG) will be a good source of reference regarding statistics and issues related to problem gambling in Singapore, and in-

dividuals or family members who applied for the casino exclusion to find out the effectiveness of this deterrent measure.

Tourism marketers can boost Singapore's attractiveness as a gaming destination and create a sustainable competitive advantage. To achieve this, tourism in Singapore must be socially responsible and be proactive towards managing stakeholders. More specifically, Singapore should adopt the approach of being resident-responsive tourism in an attempt to maintain its destination competitiveness on a sustainable basis (Pearce et al. 1996). Figure 61.1 illustrates a resident-responsive tourism approach in promoting IRs and enhancing Singapore's quest for destination competitiveness.

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Chapter 62
Visitor Interest in Heritage Railways of Asia

Josephine Pryce, Taha Chaiechi and Abhishek Bhati

Abstract Interest in heritage railways has grown phenomenally in the last 50 years, with countries like the UK, Australia and US, noting the value of this interest to visitors, workers, volunteers, and communities; and more broadly, to conservation of historic artefacts and their environments. This paper explores visitor interest in heritage railways of Asia. The sustainability of heritage railways is dependent on visitor numbers; and so, factors which contribute to the appeal of heritage railways are worthy of investigation. This paper focuses on three heritage mountain railways, and examines websites and blogs to gauge the level of visitor interest, highlighting themes which shed insight into the appeal of heritage railways. The findings indicate that operators of heritage railway attractions need to engage a variety of initiatives to meet the needs of the leisure market and continue to attract visitors. Such information will inform continued optimism in the conservation of heritage railways for all stakeholders.

62.1 Heritage Railways as Tourist Attractions

Heritage railways have experienced phenomenal growth over the last 50 years [1]. Timothy [2] comments that, "Since the 1970s, there has been a substantial growth of heritage railways catering to tourists ... their popularity lies in the novelty of historic trains and renowned railway routes". For example, there are those that are "historic in nature and become a heritage experience" because they have operated for decades, such as the Trans-Siberian Railway [2]. Generally, "heritage railways are old and famous lines that have been restored to offer heritage experiences" [2]. The latter includes the infamous luxury Orient Express. In addition, heritage railways are often associated with historic routes, frontier settlements, mining, forestry and

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such areas linked with significant natural or cultural amenity, e.g. the Grand Canyon Railway established in 1901 was originally used for mining purposes but quickly assumed the role of transporting tourists through natural and cultural landscapes [2]. Whatever the history, today there are "hundreds of heritage railways" throughout the world which have become tourist attractions [2].

As tourist drawcards, heritage railways compete with other attractions such as museums, galleries and other historic sites [1]. Nonetheless, greater engagement with leisure for people from across the world, affords opportunities for heritage railways to appeal to broad cross-sections of people. This paper explores visitor interest in heritage railways of Asia and seeks to determine factors which contribute to the appeal of heritage railways. The sustainability of heritage railways is dependent on visitor numbers; and so, such research is worthy of investigation. This paper focuses on three heritage mountain railways. It examines websites and blogs to gauge the level of visitor interest, highlighting themes which shed insight into what makes these heritage railways so special, unique and such a drawcard.

62.2   Research Approach: Qualitative Blog Analysis

The approach taken in this study was twofold. First, websites identifying heritage railways in Asia were examined. This search sought to eliminate tours which utilised modern trains on tours through heritage areas, e.g. Maharaja's Express, Palace on Wheels; rather, it sought to identify and examine genuine heritage railway. In the search, three such heritage railways were identified in Asia. These three were particularly unique because they were designated as a UNESCO World Heritage Site: Darjeeling Himalayan Railway, Kalka-Shimla Railway, and Nilgiri Mountain Railway.

Second, blogs relating to each of the heritage railways noted for this study were investigated with a view to exploring aspects of visitor interest in heritage railways and to ascertain key themes. Use of blogs as a source of data and basis of analysis is increasingly becoming recognised as an appropriate technique in qualitative re-search [3, 4]. As travellers are more notably using blogs to document their travels, blogs present a naturalistic approach to research, which captures visitors' experiences through their own voice, in the stories, narratives and comments they write in their blogs [5, 6]. Hence, there is a strong case for use of blogs as qualitative data which can inform understanding of visitors' interest in heritage railways.

Visitors' blogs were collected using the "Google Blog" search engine (http://www.google.com/blogsearch) and by searching for the relevant heritage railway, e.g. "Kalka-Shimla Railway". For the purposes of this study, the search engine was systematically explored until four blogs for each heritage railway were retrieved. Blogs were deemed suitable if they contained at least one page of textual content. This approach is consistent with approaches used previously [e.g. [7, 8]]. Common terms and themes were then sought by using qualitative methodological approaches and utilisation of NVivo 10 and Leximancer 4 software programmes to analyse the

abandoned adamjee alishan along arch barog base became bengal bridge british built capital carriages cart cepu climb complete connect constructed criteria daily darjeeling day dhr diesel engineer english famous first forest galleries gauge gradient heritage hill himalayan himalayas horns important india jalpaiguri japan java kalka kameoka kilometres known kurseong line local located locomotives logging main matheran metres mettupalayam mountain narrow new nilgiri now number often ooty open operational originally passengers peerbhoy popular presently rail railway reverses road romney route run sagano scenic section services shimla siliguri site started station steam still summer torokko tourist town track trains tunnel west world

Fig. 62.1 TagCloud from websites of the UNESCO World Heritage Site Railways

data. Both programmes were used to compare and contrast data *in situ* and determine if different insights emerged, without coding and other detailed handling of the data.

62.3   All Aboard

When one thinks of the mountain ranges of India, the Himalayas immediately come to mind. Lohani [9] says of the Himalayas, "No other mountain range in the world offers such mighty peaks, like Mount Everest, Kanchendzonga, Nanda Devi etc. and such beautiful landscapes and fauna and flora". Three heritage railways connect the plains with the hills, providing passengers with transport and unique tourist destinations: Darjeeling Himalayan Railway, Kalka-Shimla Railway and Nilgiri Mountain Railway. As noted by Touristlink, (2012) these three mountain trains are the most popular heritage railways in Asia (http://www.touristlink.com/asia/cat/heritage-railway.html). Following these in ranking of popularity are: Matheran Hill Railway in India, Alishan Forest Railway in Taiwan, and Cepu Forest Railway in Indonesia. As a preliminary exploration, information drawn from the links on this Touristlink website to each of the three heritage railways was collated and NVivo software was used to identify the most common terms affiliated with these Touristlink heritage railway sites. Figure 62.1 presents a TagCloud with these words.

Figure 62.1 shows that 'railway' is the most striking word, followed by 'line', 'station' and 'trains', all of which can be subsumed under the theme of *railways* [10]. The next lesser major words were: Shimla, steam, heritage, constructed, locomotives, operational, tunnel, Darjeeling, site and world. These are also in line with the idea of *railway* but heritage and steam are affiliated with the idea of *heritage*, which draws

Fig. 62.2 Tag Cloud from blogs for the three UNESCO heritage railways

lesser words such as abandoned, and historical terms such as logging, originally, first, and British [11]. Also, of interest is the mention of words around the *surrounds*, e.g. bridge, hill, forest, mountain, and scenic; and, those associated with the *tourist*, e.g. tourist, services, day, famous, galleries, important, passengers, and popular [12]. The Tag Cloud provided an initial insight into some of the themes around heritage railways in Asia. Since the aim of this research was to determine what makes these heritage railways so special, unique and such a drawcard for visitors, blogs were trawled as noted above.

62.4 Along the Railway Line

Information from blogs relating to each of the three heritage railways was collated and NVivo was again used to produce a Tag Cloud (Fig. 62.2).

Figure 62.2 shows that 'railway' and 'train' are the most equally predominant words, followed by Darjeeling, station, mountain and Shimla. These terms, but for mountain, resonate with the theme of *railways*.Subsequent lesser major words are: line, coach, time, Coonoor, Himalayan, hills, Nilgiri and track, all of which potentially link with themes identified earlier. A cluster analysis from NVivo (Fig. 62.3) was sought to lend some insight into the relationships between words. It shows that 'railway' is positioned near open, site, class, new and old; and further afield, Shimla. Similarly, 'train' is positioned close to passenger, station, hills, toy, metre, small,

Word Frequency Query

Fig. 62.3 Cluster analysis of the three heritage railways (NVivo)

and tunnels; 'line' is adjacent to locomotive and heritage; and Nilgiri close to tourist. Despite these arrangements, the cluster analysis from NVivo was not definitive or convincing. However, it did clarify some of possible associations in Fig. 62.2 and highlighted aspects in Figs. 62.1 and 62.2 which were sustained. For example, lesser words affirmed the theme of *heritage*, e.g. heritage, locomotive, years and British. Less notable but still present are words relating to the *surrounds*, e.g. mountain, hills and views. More noticeably are words associated with the *tourist*, e.g. travel, trip, visited, tickets, passenger, attraction and journey; and some descriptive words around the experience, e.g. beautiful, like, special, tea and wonderful.

The results from Figs. 62.1 and 62.2 show some consistent themes, e.g. *railways*, *heritage* and *tourist*, but equally there are some differences, e.g. *surrounds*. The NVivo cluster analysis does lend some insight into possible relationships but in a further attempt to extract and visualise the major themes from the data, Lexminancer 4 was used to produce cluster analyses and show the relationships between the themes. Figure 62.4 presents a cluster analysis of the results.

The results from Fig. 62.4 lend greater insight into the emerging themes and indicate that the railway travel is important and that the Darjeeling Himalayan Railway is the most noteworthy of the three heritage railways, and the Nilgiri Mountain Railway not so well-known. This is consistent with the results from NVivo and raises the question as to why this is so; especially when, surprisingly, the idea of *heritage* is mentioned but not largely recognised as a prominent element. Further research is required to explore the reasons behind the overwhelming interest in the Darjeeling

Fig. 62.4 Cluster analysis of the three heritage railways (Leximancer)

Himalayan Railway; although the 'social concept map' produced in Leximancer does afford some insights.

In the meantime, other key elements emerging from Fig. 62.4 are the 'railway' and its links with station and train, resonating with the previous *railways* theme from NVivo. Also, the latter's connection between old and British echo aspects of *heritage*. Likewise, aspects of the *tourist* are reiterated, e.g. tickets, journey, ride, travel, and trip; with a minor mention of the *surrounds*, e.g. hills. These aspects are expounded in the 'social concept map' produced in Leximancer (Fig. 62.5). Figure 62.5 shows that comments reflected that sites were visited because they were 'famous' and 'special', affording a 'memorable' 'trip' into the 'mountain' or 'hill' for 'children' and the 'tourist' for a 'fare'. The 'journey' was also peppered with 'tunnels', a 'climb' or two, and 'travel' in a 'coach'. Again, these highlighted the themes of *railways*, *heritage*, *surrounds* and *tourist*.

62.5 Into the Future with Heritage Railways

This paper has examined heritage railways in Asia with a view to identifying the factors which draw visitors' interest to these attractions. It examined websites and blogs to gauge the level of visitor interest, highlighting themes which shed insight into the appeal of heritage railways: *railways*, *heritage*, *surrounds*, and *tourist*. These findings align with some of the research to date on heritage railways. For example, Tillman [1] notes that heritage railways are typified by: conservation and recreation
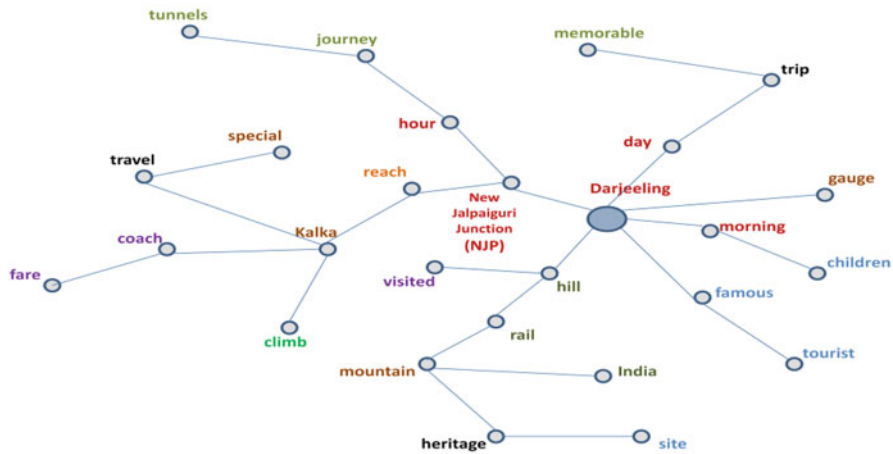
Fig. 62.5 Social concept map of three heritage railways (Leximancer)

of the character of a traditional railway; visitor travel and special heritage events; and, restaurant, shops and marketing memorabilia. By contrast, other literature suggests that further research is required to capture a more holistic perspective on the appeal of heritage railways in Asia. For example, Orbaşli and Woodward [13] found that The Hijaz Railway drew visitors because of its "unique cultural" significance; its connections with holy sites and past political situations; and its associated value with the landscape. They also comment on the accessibility of 'anchor sites' and complimentary attractions of less significance to create "linear heritage sites for tourism" [13]. Nonetheless, the findings from this paper indicate that operators of heritage railway attractions need to engage a variety of initiatives to meet the needs of the leisure market and continue to attract visitors. For example, visitors do not always visit the attraction because of the heritage factor. This information affords continued optimism in the conservation of heritage railways for all stakeholders and sheds some light on the development of heritage railways as tourism attractions in a way which enhances the cultural richness of a region.

62.6 Conclusion

This paper showed that blogs provide a rich source of data, which can be utilised to gain insights into factors which influence the appeal of attractions, such as heritage railways. The paper focused on three heritage mountain railways which are designated as UNESCO World Heritage Sites. It identified characteristics of heritage railways which form the seed for future studies. Further research is required to validate the findings but this is an interesting and fruitful genesis.

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Chapter 63
"Tourists' *Me Time* in Asian Spas"

Benefits and Contributions of Spa Experiences

Jenny H. Panchal

Abstract The Asian spa is a rapidly growing segment in tourism, which has received much attention from various sectors. This paper focuses on tourist spa-goers in the South and Southeast Asian region. More specifically, it aims to profile spa-going tourists based on their previous spa-experience. In segmenting the spa-going tourists, concepts from the literature and an industry report were used. The second aim is concerned with identifying the benefits that tourists have achieved as a result of their spa experiences. The findings of the study of 137 tourists in South and Southeast Asian countries consist of establishing three distinct types of tourist spa-goers (high, moderate and low experience). Broadly, the findings also suggest that spa experiences are beneficial to tourists' well-being and the travel experience as a whole.

63.1 Introduction

Spa and wellness tourism in Asia is recognised as a booming industry [4] (Global Spa Summit (GSS) Report 2008). While enthusiastic promotional statements about rapidly growing tourism sectors often exaggerate the rising importance of a special area, the basic numbers of properties and participants support a claim that in this instance, spa tourism is of considerable importance. Research focussing on this form of tourism in the Asia Pacific region, nonetheless, is very limited. There are descriptive accounts the spa industry, much promotional material and many claims, but little published academic research.

This paper is part of a larger study that addresses aspects of this gap in knowledge. The project collects information about tourists' travel and spa-going motives. Motives are indeed intertwined with benefits sought. In understanding the benefits identified in this study, it is important to make the linkages between motives and benefits sought clear. In the context of this study, it is assumed that tourist spa-goers are motivated

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to visit spas to achieve certain benefits. The results of the motive-related part of the project closely mirror that of Pearce and Lee's [9] travel career pattern (TCP) theory which was used as a framework in studying the motivation aspect of this [7, 8]. In the original study, *novelty, escape/relax* and *strengthening relationship* were the most important factors in forming travel motivation. The least important factors in both current and original studies were recognition, romance and nostalgia. Beauty, health and wellness, the additional index in the TCP was added to address another motive dimension in the model, was a less important motive in terms of overall travel [7, 8].

Smith and Kelly [10, 11] as well as the Global Spa Summit (GSS) Report [2] suggested that health and wellness tourists can be defined by their prior knowledge and practice, perception of the experience, type of holiday, perception of the surroundings during the holiday and how the wellness experience influence their lifestyle upon returning home. They used the colour purple to depict the segmentation, hence using a spectrum from lilac (experimenters) to a deeper shade of purple (purists).

63.2 Method

The data collection tool was an online survey which consisted of six main parts: (1) pre-travel plans; (2) most recent spa experience in the South/Southeast Asian region; (3) travel and spa-going motivation; (4) post-spa experience; (5) previous spa and travel experience; and (6) demographic information. This paper, however, explores the types of spa-goers based on the previous spa experience of tourists. It also chiefly reports on the the post-spa experience of tourists, primarily the benefits which they obtained from visiting spas while travelling in South and Southeast Asian countries. Snowball sampling technique was employed in the recruitment of respondents.

One hundred and thirty-seven (87 %) out of the 167 surveys collected were usable. The sample consisted of 70 % females, reflecting the findings in several spa and wellness-related studies that women comprise the majority of the spa-going population [2, 3, 5, 6]. In the sample, spa-going activity is most popular among individuals in their 20s (38 %) and 30s (40 %). About a quarter of them had professional/technical nature of work. Interestingly, almost 63 % of the sample were international tourists. Notably, 42 % of the resopndents were based in the Philippines, which can be linked to the researcher's personal contacts and network. Forty-five of the 58 Philippine residents (32.9 % of the total sample) were domestic tourists. The other domestic tourists were based in Thailand.

63.3 Findings

The first aim of the study is concerned with identifying the types of tourist spa-goers based on their previous spa experience. To explore the concept of previous spa experiences more fully, it was stratified into different levels. The different levels of spa experience can be linked to the existing literature. Inspiration was drawn from Smith and Kelly's [11] and the Global Spa Summit's (GSS) [2] notion of tourists'

wellness segments, which was used in this research as a framework for these results. Smith and Kelly used the colour purple to depict the segmentation. They suggested that the less-experienced spa-goers (experimenters) can be depicted by the faint purple (lilac), and that as they increase in spa experience, they can be depicted by a darker shade of purple. The highly experienced spa-goers (purists) can therefore be represented by very deep purple. To represent moderately-experienced spa-goers in this model, the researcher labelled the cohort the 'intermittent users' of spas.

Indeed, there are several dimensions that make each cohort distinct from each other. Experimenters have very little knowledge compared to their occasional and regular spa practitioners. While experimenters find novelty in the spa experience, the intermittent users are somewhat motivated by the destination pull factor of spa offerings. For the more experienced individuals, spa-going is a continued or relocated experience and they are more likely go on spa holidays than the other cohorts. Whereas highly experienced spa-goers find the surroundings less relevant, the less experienced counterparts look for comfort. Because the intermittent spa-goers occupy a mid-range on the spectrum, they tend to look for a range of surroundings and activities. In terms of instruction, the experimenters require more focused attention while the purists need more advanced instruction and space for self-directed practice.

The timing of the spa experience, that is the length of time between the tourists' most current Asian spa experience and the completion of the survey, varied from one day to 18 months. The respondents reported that in the 12 months prior to participating in the survey, more than 30 % have never visited a spa while travelling domestically. Further analysis of descriptive data revealed that the participants in the study were more likely to visit as spa as international tourists in South/Southeast Asia than as domestic tourists.

The second aim of the study is about the benefits that the tourists have acquired from the spa experience. The post-spa experience in this study refers to the feelings and thoughts that the respondent was prompted to recall while completing the questionnaire. Because the temporal gap between the tourists' spa experience and the survey completion varied from one day to 18 months, it was recognised that the questionnaire must be focused on the positive experiences. While it was thought to be potentially helpful for further analysis, a segment on the possible negative spa experiences was thought to possibly cause confusion among respondents in terms of the main aim of assessing the benefits of the spa experience while consciously accessing the memory. Also, instead of an open-ended question about the perceived benefits of the experience, a list of benefit-related statements was presented.

In identifying how the spa-going tourists felt after the spa experience, a set of 12 constructed benefit-related statements were presented. The respondents were asked to rate their agreement using a Likert scale with a minimum of 1 *(strongly disagree)* and a maximum of 7 *(strongly agree)*. The descriptive Table (Table 63.1) shows that the mean scores ranged between 5.15 *(gaining a sense of belongingness)* and 6.27 *(more relaxed).* The result that the respondents were mostly relaxed after the spa experience ($\overline{x} = 6.27$) was perhaps predictable. In reference to Chap. Spas and the global wellness market;3, it has been discussed that the most important spa-going motives were to escape/relax. Hence, by connecting the benefits-sought and

Table 63.1 Benefits after the spa experience

After the spa experience:	N	Mean	Mode	Std. Deviation	Min	Max
I was more relaxed	132	6.27	7	1.16	1	7
My physical appearance has improved	132	5.31	6	1.89	1	8
I felt better about myself than before	132	5.45	6	1.67	1	8
I felt more youthful and energized	132	5.69	7	1.51	1	8
My overall physical health has improved	132	5.43	7	1.76	1	8
I slept better	132	5.86	7	1.36	1	8
I gained a sense of belongingness	132	5.15	7	2.29	1	8
I gained self-confidence	132	5.38	6	2.18	1	8
I gained a sense of independence	132	5.30	6	2.26	1	8
I became more peaceful and calmer	132	5.63	7	1.65	1	8
I learned to love and appreciate myself even more	132	5.55	7	2.11	1	8
I became a better person	132	5.39	8	2.28	1	8

motivation constructs, a consistent linkage is evident that indeed, benefits are linked to motives. Reports of better sleep ($\bar{x} = 5.86$) and feelings of youthfulness and being energized ($\bar{x} = 5.69$) were also noted. Arguably, the ability to sleep better as a benefit of the spa experience may appear too simplistic considering that there may also be other factors that contribute to one's notion of a "better sleep" such as sleep-inducing medications. The presentation of the question, however, was very specific and was clearly about the spa-experience only. In the questionnaire, the respondents were asked to rate their agreement to the statements which started with *"After the spa experience..."*

The comparatively higher standard deviation scores for the statements about gaining a *sense of belongingness, self-confidence, a sense of independence* as well as *learning to love and appreciate one's self* and *becoming a better person* can be attributed to the ambiguity of the statements. In a spa setting where treatments lasts for as little as 20 min and as long as five to six hours, it is certainly a challenge to measure belongingness (SD = 2.29) and self-independence (SD = 2.26). Further, it is also difficult to measure one's value as a person from a single spa visit. Although the statement is open to individual interpretations, it can argued that even multiple treatments from a spa are unlikely to affect one's personality simply because the focus of spa treatments are on the physical being and only to a minor extent on the psychological well-being of a person. Personality, as defined by Allport [1], is the "dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to the environment". The dynamism involved in this construct suggests that "becoming a better person" (SD = 2.28) is a very broad and vague statement to be measured after a single visit to a spa.

Gaining self-confidence(SD = 2.18) and *loving and appreciating one's self* (SD = 2.11) are thought to be closely linked. The association between these two statements is based on the premise that one's capacity to love and appreciate his/her own self is a manifestation of self-confidence. Although the mean scores for these items were high, the standard deviation scores may also suggest that these statements

Table 63.2 Respondents' reported benefits of spa experience

The spa experience:	N	Mean	Mode	Std. Deviation	Minimum	Maximum
Was a relaxing way to unwind and get away from the usual stress and demands of travelling (*escape/relaxation*)	131	6.16	7	1.175	2	7
Gave me the chance to be pampered, which I do not get so often at home (*novelty*)	131	6.11	7	1.236	2	7
Made me feel important (*recognition, belongingness*)	131	5.63	7	1.689	2	8
Made me appreciate nature (*nature*)	131	5.11	6	1.774	1	8
Made me appreciate my relationship with my partner/spouse/family/friends (*strengthening/securing relationships*)	131	5.64	7	1.781	1	8
Strengthened my ties with my partner/spouse/family/ friends (*strengthening/securing relationships*)	131	5.50	7	1.927	1	8
Was an opportunity to learn more about the place, the local people and their culture (*novelty, stimulation, personal/self-development*)	131	5.49	7	1.816	1	8
Was an opportunity to try a new and different experience while travelling (*novelty, stimulation*)	132	5.94	7	1.471	2	8
contributed to my achievements as a traveller (*recognition, self-actualization as a traveller*)	132	5.37	6	1.696	1	8
Was a unique part of the trip (*novelty*)	132	5.16	6	1.897	1	8
Made the trip a memorable one (*stimulation, nostalgia*)	132	5.40	7	1.720	1	8
Made the trip more enjoyable (*stimulation, relaxation*)	132	5.84	7	1.507	1	8

were imprecise and the lack of a uniform interpretation may have caused a degree of confusion among respondents. It was later realized that some respondents may not even have thought of the concepts of self-confidence and/or self-acceptance in terms of their spa experience.

In relation to travel, the respondents were queried about how the spa experience contributed to their trip (Table 63.2). Again, they were asked to rate their agreement to 12 benefit-related statements. Unlike the material in the preceding section, this set of statements was based on the key motives in the TCP model. Each statement depicts the motives from the TCP. The statements *"the spa experience gave me the chance to be pampered, which I do not get so often at home"* and *"the spa experience was a unique part of the trip"*, for example, indicate novelty. Interestingly, the item which states *"the spa experience was an opportunity to try new and different experience while travelling"* may also connote a sense of novelty, stimulation and personal development at the same time. The derivation of these statements from the TCP also aims to test the notion that benefits-sought and motives are closely intertwined.

The connection between benefits-sought and motives in the context of spa-going and how spa experiences contribute to the trip was supported by the participants' responses. The statements *"the spa experience was a relaxing way to unwind and get away from the usual stress and demands of travelling"* ($\overline{x} = 6.16$) and *"the spa experience gave me the chance to be pampered, which I do not get so often at home"* ($\overline{x} = 6.11$), which were based on relaxation/escape and novelty respectively, were rated very highly by the respondents. The tourist spa-goers were also convinced that the spa experience was an opportunity for them to *"try a new and different experience while travelling"* ($\overline{x} = 5.94$) and that it *"made the trip more enjoyable"* ($\overline{x} = 5.84$). These statements signify novelty, stimulation and to some extent, relaxation.

63.4   Conclusion and Implications

Similar to the original TCP study, this study suggests that while spa-going motives may change over time, the need to search for novelty, to escape and to relax will endure as the core motives for visiting spas as it is for travel. This contention is seen to be associated with the perspective that tourists travel to satisfy not a single but multiple motives. The multi-motive approach in this context emphasises that tourist spa-goers do seek to satisfy several motives at once.

In essence, the benefits that an individual aims to attain from undertaking an activity are based on their motives. In the context of this study, it is assumed that tourist spa-goers are motivated to visit spas to achieve certain benefits. The concept of benefits sought is closely linked with the motivation construct. This study is part of a larger project that examines not only the tourists' perceived benefits from spa experiences, but also their motivations and on-site spa experiences. It was discovered that escape and relaxation are the very important motives among tourist spa-goers regardless whether they were inexperienced, moderately or highly experienced. It was also discovered that the spa experience provided a sense of novelty to their trip notwithstanding their previous spa experience.

This study is part of a larger project that examines not only the tourists' perceived benefits from spa experiences, but also their motivations and on-site spa experiences. It was discovered that escape and relaxation are the very important motives among tourist spa-goers regardless whether they were inexperienced, moderately or highly experienced. It was also discovered that the spa experience provided a sense of novelty to their trip notwithstanding their previous spa experience.

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Chapter 64
Managing Graffiti at Tourist Attractions

K. Thirumaran

Abstract The study of vandalism, particularly graffiti at tourist attractions is dispersed across several academic disciplines; within the field of tourism itself, vandalism has received limited attention. This paper examines vandalism prevention methods employed at the Borobudur Temple in Indonesia to suggest alternative approaches to heritage management that takes into account tourists' desires to deface attractions through graffiti. Drawing on fieldwork observations and examples of graffiti deterrence found in North America and Asia, this study suggests that managing attractions in Asia has to consider tourists desires as much as placing emphasis on traditional punitive actions and preventative measures.

64.1 Introduction

The rise of the Asian century raises new issues in the management of tourist attractions in Asia. Where tourism intersects vandalism, there are renewed concerns about not only protecting resources but also affecting a change in tourists' behaviours. Most recently, a youth from Jiangsu province in China had scratched the phrase "Ding Jinhao was here" at the Luxor Temple in Egypt. This incident among many other evidences found at attractions such as the Singapore Botanical Gardens, Sword Lake in Hanoi, the Borobudur and Angkor Wat temple complex suggest that acts of vandalism, in particular graffiti, is a significant management issue.

As O'Gorman concurs that after more than 3500 years, human beings still "see something new, experience something different and leave one's mark behind." Vandalism, by definition, is antithetical to tourism. Indeed, pressures on academics to ride the moral high ground with regard to the impact of vandalism may be a contributing factor to the lacunae of research on the topic as well as the quest for alternative and creative solutions to the problem. Certainly, most tourists too, would agree that vandalism is wrong, yet, some of them still engage in such acts.

Therefore, both a new approach to understanding the material phenomenon of vandalism as well as its management must constantly keep touristic desires in mind,

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even those desires which we may find deviant or morally reprehensible. A broad sweep of tourism literature suggests that there has been very little investigation and reflection on the intersection of vandalism and tourism. This paper examines preventative measures as observed at the Borobudur Temple Complex to understand ways in which heritage sites can be successfully managed and innovations introduced.

64.2   Literature Review

Graffiti is a major form of vandalism at attraction sites that has received scant attention in tourism studies. Therefore, I survey the term vandalism first and where possible make direct reference to graffiti. According to Cheetham [2] vandalism is caused by "a wilful damage of property." Gamboni [7] emphasises the idea of intention more sharply, carrying strong words such as "barbarous, ignorance, blindness, stupidity, and inartistic." By these choice of words, Gamboni views vandalism as a terrible act. According to Gamboni [7], the term vandalism is derived from a metaphor, vandal, to symbolize barbaric conduct towards art in England by the early seventeenth century. Nickens' examination of historical and archaeological sites conclude that such acts only result in destruction.

The basic idea of vandalism is the act of damaging, however the motives that influence the action can be different. According to Stanley Cohen in Cheetham's [2], Gamboni's [7] and Knuth's works, there are several types of vandalism based on motives of the doers. The first type is 'acquisitive vandalism' which includes looting or stealing several parts of properties. Then, tactical vandalism is done to attract attention from other groups of people. As an example, the doer wants to be arrested so they can get shelter for the night. In addition, vandalism is about ideology. For instance, making graffiti to mock or protest against another community or government due to differences in ideology. This kind of vandalism is similar to vindictive or malicious type of vandalism. Finally, 'play vandalism' is done by children perhaps to test boundaries imposed by adults.

Graffiti as one of the most common form of vandalism is an unpermitted activity of drawing or writing on a wall or other surfaces [4]. These types of activities, when carried out on a continuous basis, devalues the property. However, such acts and the marks left behind reveal significant characteristics of visitors and their relationship to natural or man-made sites. Adopting a historical approach, graffiti is a natural form of expression that has existed since the beginning of time, when graffiti appeared in the form of messages and pictures carved on cave walls. Goldstein [8] points to the importance of the purpose of graffiti to determine the difference between graffiti art and graffiti vandalism.

Lagrange observes that while individuals may be motivated to vandalise with specific intentions, there is also an often ignored proximity factor that leads to such acts. Lagrange cites weak social factors and lack of guardianship in the city of Edmonton, Alberta which converged to create the necessary ingredients causing a high degree of vandalism in shopping malls and public spaces. Offenders may commit vandalism out of boredom [6].

In Manfredo, a collection of chapters relating to visitor behaviours and motivations was studied. Of these collections, Knopf and Dustin perceive the propensity for depreciative behaviour by individuals at leisure and recreation parks as influenced by society, park management and the physical setting. Therefore, the authors suggest alternatives to coercive methods of prevention and to consider the existence of multiple forces beyond individual motivations and responsibility. In another landmark study, Pizam, Tynon and Chavez studied crime and violence at tourist destinations and parks. They proposed a qualitative method of understanding the different types of crimes and violence in order to mitigate such acts and recover the destination from notoriety. Herstine, Hill and Buerger [9] in a study of Zeke's Island in North Carolina suggest that natural settings and signage can be most successful in shaping visitor behaviours. The value of these literature contributions is undeniable and necessary for the protection of significant sites but as a whole they do not address the desires of travellers.

In an attempt to contribute to tourism and public policy literature, due consideration is given to tourists' intention of leaving a mark construed as vandalism and how this "feeling" could be better managed with non-punitive sanctions.

64.3 Approach

Using fieldwork observations, the discussion of managing graffiti at attractions in Asia focuses on control measures and its effectiveness. This research employed the use of visual evidence and participant observation to obtain an understanding of two key features. Firstly, to understand the measures put in place to prevent or allow graffiti at these sites. Second, is to review existing practices and suggest solutions to managing heritage sites in the age of heightened travel in the Asian region. The Borobudur Temple in Jogjakarta was selected for this research which was carried out between 2009 and 2012. The purpose of the visits was to observe visitors as well as self-actualise the experience.

Graffiti may lead to damages to man-made or nature based property. Such acts may be acceptable or in contempt of social norms and values. It is pertinent to elaborate this filtered definition. For example, a tree shrine at the One Pagoda in Hanoi bears inscriptions created by visitors who freely mark their names on the walls surrounding the tree as a way to receive blessings. While domestic visitors and locals do not see it as a crime, vandalism in this sense is a positive articulation despite the fact that police or park authorities may not necessarily condone such acts. Elsewhere, like the Keramat—a special burial site of pious and religious person(s) at Singapore's Kusu island, visitors may tie talisman's to the branches of trees, leave offerings of food and scribe on the stairways and surrounding walls which are simultaneously sites of living religious activity. Therefore, the use of the word vandalism in the context of tourism can be either positive or negative subject to the conditions of the host and policing authority as well as acceptable practices by the community.

Approaching this subject in a discursive and reflective way, the Borobudur Temple provides a case study to ascertain successful preventative measures and consider alternative ways to engage the visitors. With references to other attractions in Asia, we are better able to consider more innovative methods of protecting visitor attractions.

64.4   Analysis

Built between the 8th and 9 centuries, the historical Borobudur Temple is in UNESCO's World Heritage List since 1991. The Indonesian government has to follow regulations established by UNESCO in safeguarding the Borobudur Temple. For example, the government has to submit periodic reports on management and maintenance once every 6 years to UNESCO. In this respect, graffiti is one of the common form of vandalism activities the authorities have to prevent. Vandals use tools to write or draw, such as ballpoint pen, paint, knife, or scissors. As a result, there are more than 20 spots of graffiti crafted in 1 year. But this is no longer the case today, where there appears to be a drastic drop in graffiti.

On my first visit to Borobudur Temple in 2009, there were not many security personnel present in the main temple complex. There were a fair number of scribes visible in parts of the Borobudur Temple. In the past, a few have raised their concerns about the potential rise of graffiti and other acts of vandalism with the rising number of tourists visitation to the site. In 2012, on my last field work trip, I witnessed the presence of many more security personnel deployed at the Borobudur Temple to police the premises during visiting hours. Since the last concerns were raised about the number of tourists allowed into the temple, a visit today to the Borobudur Temple reveals that the authorities do keep a count and do control the number of tourists flowing in and out of the main temple complex.

PT Taman Wisata Candi Borobudur dan Candi Prambanan (Borobudur and Prambanan Temple Tourism Park Company) is the state company which runs tourism in both temples. Established in 1992 based on *Keputusan Presiden No. 1 1992* as its policy, this company has significant role in helping the government manage tourism in Borobudur and Prambanan heritage sites. One of their functions is reducing vandalism brought by tourists in Borobudur Temple. Monitoring and establishing regulations focusing on visitors are two methods employed to reduce this problem.

Another strategy used by the management of this company is dividing tourists' attention toward Borobudur Temple by promoting other attractions near this temple. This diversion method is to reduce crowding effects on the heritage site. In some parts of the attraction, it can only accommodate 72–84 visitors at any one time (*The Jakarta Post*, 2011a). There are several other temples, such as Mendut Temple, that can be enjoyed by tourists near Borobudur Temple. There are quite a few tourists who had expressed outrage about the way visitors are allowed to flagrantly violate the attraction's sanctity. A tourist, Lindsay Flakelar commented in *The Jakarta Post* (2010), "I suggest they should also consider the merits in allowing thousands of site-seers to climb all over the temples, causing untold damage through wear and

tear, scratching graffiti on the stones and throwing rubbish all over the place." Since Borobudur Temple is the popular one, tourists are more attracted to visit this temple than others. This distributive method helps in balancing the visitor arrivals and prevent overcrowding that in some ways contribute to better policing. Having these strategies helps PT Taman Wisata Candi Borobudur, to reduce crowding at any one time and thus eliminates the chances of visitors carrying out graffiti as they are easily spottable.

The national government has taken several measures to protect this temple from wayward acts of tourists. The Indonesian government established a policy: Undang— Undang No. 5 1992 which is further detailed in *Peraturan Pemerintah no. 10 1993*. These policies explain the prohibition of vandalism, which are moving, taking, changing, separating, and trading several or all parts of cultural sites without permission from authorities. Also, there are elaborations of punishment; perpetrators may face a maximum of 10 years prison or pay a maximum of one hundred million rupiahs. These policies also act as a deterrent.

Buddhist organizations, such as Konferensi Agung Shangha Indonesia (KASI) or Indonesian Shangha Conference and HIKMAHBUDHI (Indonesian Buddhism Students Organization) also keeps an eye on the heritage site and advises the national government from time to time to pay more attention toward damages inflicted by tourists. On the other hand, the Indonesian based Conservation Institute indicates that increasing number of visitors appear to have an acceptable impact on the site. The erosion of stairs was a mere 0.2 cm over 5 years and only 4 cases of vandalism took place in 2005 out of 2 million visitors.

The Borobudur Temple security was also upgraded in 2011 with CCTV cameras which played both a security and anti-vandalism role. The sophisticated security network can record all activities from about 10 cameras directly into a nearby security post's monitor and can also be accessed from the Jakarta Office. Mr. Marsis Sutopo, Chief Officer of Borobudur Heritage Conservation Office said that,

> This installation of cameras it is an effort to upgrade the security standards. If the temple is secured, no doubt tourists will feel much safer and even more comfortable in visiting the temple, and when tourists see cameras all over the place they will think twice before doing any vandalism to the monuments.

PT Taman Wisata Candi Borobudur has also made a recent rule that tourists are not allowed to go into Borobudur temple in short jeans. PT Taman Wisata Candi Borobudur will also provide them sarong for tourists' convenience. PT Taman Wisata Candi Borobudur hopes that these new rules will discourage tourists to climb around the stupas where the image of Buddha is mostly found and discourage the tourists to vandalize the temple and its monuments [3]. The monitoring system at the temple is now much better than before. Security personnel make rounds in and around the temple, keeping a close watch on visitors' movement. With all these measures in place, acts of graffiti is unlikely to take place particularly with the heavy presence of security personnel within the attraction complex itself.

64.5 New Thinking In Eliminating Graffiti

The tension between protecting the site *for* visitors (inclusive of future generations) and protecting sites *from* visitors is a challenge for managing attractions in much of Asia. The management of tourists as vandals could go either way. The act of vandalism could be outlawed and strict regulations and policing could be affected. On the other hand, the authorities may decide to envelope the values of accepting vandalism as a human behaviour deviant as it is but to accommodate such behaviour. While the practitioners in the industry have moved towards novel ways of satisfying visitors interested in graffiti, tourism scholarship has yet to catch-up with such studies.

One city in the US, Vail-Colorado had just the same strategy [1]. After discovering that the street signs and manhole covers of the town are quite popular amongst tourists, the authorities decided to make souvenir versions of these items and sell them to visitors. Another city, Minnewanka Landing in Alberta, famous for its underwater heritage faces serious vandalism of all sorts by tourists. At one stage the Alberta Report hinted the closure of the Minnewanka Landing Park altogether to protect the site from serious damage. This drastic step would have deprived people the chance to appreciate nature.

The desire to vandalize needs to be taken into consideration in the management of attractions. Protection of places is only part of the solution since it leaves desires of tourists unappeased. Tourists are not merely passive spectators and consumers of the attractions they visit but may seek more active and physical means of engagement with a place. These means of engagement include those which may be deemed morally inappropriate, such as vandalism. If "leaving a mark" is important to tourists, this needs to be taken into account in attraction planning and management of attractions, even at those sites which demand respect from visitors.

Given these insights, some innovations in managing vandalism might be (1) As seen at Borobudur, in addition to reliance on prohibitive signs, an active management of tourists' movements through the use of security guards. (2) Another option might include the creation of a designated area(s), perhaps a replica of part of the monument itself, for tourists to fulfil their wish to imprint their presence at the site.

Stakeholders of attractions can capitalize on tourist desire to leave a footprint. Looking at it in a more radical but rational way, the cognizance of global travel and exchange need not just be in the form of souvenir purchases and signing of autographs or guests books and abiding prohibitive rules. One method is to allow placing a placard or other innovative stands or replicas for visitors to actually leave a mark of their visit. With due consideration catering to deviant tourists desires such as graffiti acts, a balanced approach to managing tourist attractions can be achieved. This is an area further research is needed to understand if such facilitation will help mitigate unwarranted acts of graffiti.

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Chapter 65
Shopping Experience and Their Influence on Satisfaction in Australia and Indonesia

Tjong Budisantoso and Teik Toe Teoh

Abstract This study investigates the influence of shopping experience in terms of store atmosphere and cognitive responses on store patronage satisfaction. The paper reports the results of a cross-cultural survey carried out in Perth (Australia) and Surabaya (Indonesia). There are four hypotheses tested in the study. The first hypothesis is the shopper's cogntive responses are associated with store atmosphere; and the second hypothesis is store patronage satisfaction is associated with the cognitive responses of customers.

There was a total of 618 shoppers in two locations participated in the study. The store environment chosen for the study are supermarket, specialty store and department store. The number of respondents was equally distributed between types of stores. This study used measurement instruments developed by other researchers. The study found significant relationships in both places between shopper's cognitive responses and store atmosphere and store patronage satisfaction and cognitive responses.

65.1 Introduction

Retailers, nowadays face more intense competition. In order to survive, they have to develop strategies that can build a customer loyalty. Membership program emerges as a main strategy applied by many retailers. Another strategy is to improve the atmosphere of their stores. Most retailers have invested significant amount of money to create an exciting shopping experience. However, the body of literature on store atmosphere reveals a lack of empirical findings as how store atmosphere affects store patronage satisfaction which in turn influences repatronage intention.

Literature reveals that store atmosphere stimulates the emotional, cognitive and physiological responses of shoppers which in turn may influence approach avoidance behaviour in the service sector [3]. Most store atmosphere studies concentrate on how

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store atmosphere induces emotional responses, which in turn influence shopping outcomes [5, 6]. Some studies such as those of Baker et al. [1] and Baker et al. [2] found that store atmosphere stimulates cognitive responses such as the perception of merchandise quality and service quality. These perceptions are important for the consumer's decision making [7, 10], the store image [1] and repatronage intention [2].

Satisfaction is an antecedent of repatronage intention. Store patronage satisfaction could be influenced by factors such as merchandising, perceived-value, staff and store atmosphere. The relationship between satisfaction and the cognitive responses particularly the perception of merchandise quality and service quality induced by store atmosphere has not been well acknowledged. To study this relationship could help to justify the retailer's investment on store atmosphere and to maximize the outcome of the investment.

In addition to investigating the relationship between satisfaction and cognitive responses, this study aims to confirm the relationship between cognitive responses and store atmosphere. This research reports the results of a cross-cultural survey carried out in Perth (Australia) and Surabaya (Indonesia). The findings of the two countries will be compared and contrasted. By employing two distinct samples, the study will be able to isolate any influence of culture. As this could have implications for global retailers, the results will provide needed information.

65.2   Literature Review

Store atmosphere stimulates the emotional, cognitive and physiological responses of shoppers which in turn may influence approach avoidance behaviour in the service sector [3]. Most store atmosphere studies concentrate on how store atmosphere induces emotional responses, which in turn influence shopping outcomes. Some studies such as those of Baker et al. [1] and Baker et al. [2] found that store atmosphere stimulates cognitive responses such as the perception of merchandise quality and service quality.

Baker et al. [1] studied ambient, design and social factors in the store environment. They found that ambient and social factors enhance the customers' perception of merchandise quality. In contrast, social factors influence the perception of service quality.

In a later study, Baker et al. [1] investigated the relationship between store atmosphere, the perception of merchandise value and repatronage intention. They hypothesized that merchandise value is associated with the customers' perceptions of service quality, merchandise quality, monetary price, time or effort cost and psychic cost. The study found that the customers' perception of service quality is influenced by their perception of the store employees, in other words, the social factor. In contrast, their perception of design factors enhances their perception of the quality of the merchandise.

This leads to this hypothesis:

H1 The shopper's cognitive responses are associated with store atmosphere in Perth and Surabaya.

The literature reveals a debate about the relationship between the perception of service quality and store patronage satisfaction (Bitner 1990; Bitner and Hubbert 1994; Taylor and Tversky 1992; Anderson and Sullivan 1993; Brady et al. [4]). Brady et al. [4] explain that there are three approaches to the relationship between perceived quality of service and satisfaction. The first approach is that the situation or the context of the research influences the relationship between the perceived quality and satisfaction (Dabholkar et al. 1995; Brady et al. [4]). More affectively dominated countries may place satisfaction before perceived service quality, which in turn affects the behavioral intention of customers. In contrast, more cognitively dominated countries may identify the perception of service quality as the antecedent to satisfaction, which in turn influences the behavioral intention of customers.

The second approach identifies the relationship between perceived service quality and satisfaction as "satisfaction $\rightarrow$ perceived service quality $\rightarrow$ behavioral intention". According to this approach, satisfaction is an antecedent to the perception of service quality, which in turn influences behavioral intention.

The last approach recognizes the relationship between perceived service quality and satisfaction as "perceived service quality $\rightarrow$ satisfaction $\rightarrow$ behavioral intention". According to this approach, the evaluation of service quality, which is cognitive in nature, may influence satisfaction, which in turn affects behavioral intention (Parasuraman et al. 1988; Oliver 1997; Brady et al. [4]). Rust and Oliver (1994) also explain that the perception of service quality is one dimension that influences satisfaction. Therefore, it is hypothesized that:

H2 Store patronage satisfaction is associated with the cognitive responses of customers in Perth and Surabaya.

65.3 Research Methodology

A total of 618 shoppers, 288 shoppers in Australia and 330 shoppers in Indonesia were recruited randomly to serve as subjects. The store environments chosen for the study are supermarkets, specialty stores and department stores. Ideally, each type of store should be similar in terms of store design between Australia and Indonesia. However, this aim was difficult to achieve. The following stores were selected in Australia: Woolworths (supermarket), Target (department store) and Jeans West (specialty store). All stores were located in the Murray street shopping centre, Perth, Western Australia. The stores in Indonesia were: Hero (supermarket), Matahari (department store) and a local jeans store (specialty store).

The number of respondents was equally distributed between types of stores. The data was collected in two shifts over 30 days at each store. The two shifts were a morning shift from 10.00 a.m. to midday and an afternoon shift from 3.00 to 5.00 p.m. It was expected that the different times and days would provide different types of shopper: household, professional worker and student. This study used measurement instruments developed by other researchers such as De Vaus (2002), Sherman et al. (1997), Baker et al. [2], Magi's (2003) and Stoel et al. (2004).

65.4   Data Analysis

65.4.1   Reliability and Validity of Measurements

All of the measures were reliable, ranging from 0.759 to 0.863 in Australia. Similar results were found in the Indonesian sample with coefficients ranging from 0.707 for store atmosphere to 0.730 for store patronage satisfaction. This suggests that there is sufficient consistency among the measurement variables of most constructs studied in the survey (Malhotra et al. 1996).

Indonesian shoppers and Australian shoppers also have different interpretations of store atmosphere. Australian shoppers perceive the store atmosphere in terms of interior layout, design factor, social factor, store space, store attractiveness and crowding. Indonesian shoppers identify store atmosphere as interior layout, design factor, social factor and store attractiveness.

The results of factor analyses indicate that cognitive response has a different factor loading pattern in Perth and Surabaya. The Australian sample has one factor which called as store quality; in contrast, the Indonesian sample has service quality and merchandise quality. The findings of factor analyses indicate that store patronage satisfaction has the same factor loading pattern in Perth and Surabaya.

65.4.2   Findings

65.4.2.1   The Relationship Between Cognitive Responses and the Perception of Store Atmosphere

The studies in Perth and Surabaya support the relationship between cognitive responses and the perception of store atmosphere. The regression analysis for the relationship between the perceptions of store quality and of the store atmosphere in Perth produce an adjusted R^2 of 0.465 ($F = 39.923$, $p = 0.000$). This output shows that the perception of store quality is strongly influenced by the perception of store atmosphere in Perth. The reported betas indicate that the perception of store quality is not associated with every part of store atmosphere. The perception of store quality has a significant relationship with interior layout, store attractiveness, social factors, and store space. The betas are 0.576, 0.103, 0.333 and 0.157 respectively and significant by the t test at $p < 0.05$.

The regression analysis for the relationship between the perception of merchandise quality and the store atmosphere in Surabaya results in an adjusted R^2 of 0.141 ($F = 13.144$, $p = 0.000$). This statistics indicate that the perception of store quality is influenced by the perception of store atmosphere in Surabaya. The reported betas show that the perception of merchandise quality associates with most parts of the store atmosphere. The betas for design factor, social factor and store attractiveness are -0.264, 0.272 and -0.120 and significant by the t test at $p < 0.05$. These

figures indicate that the social factor has the strongest influence on the perception of merchandise quality and the design factor and social attractiveness have inverse relationships with the perception of merchandise quality. Interior layout is the only aspect of store atmosphere that does not associate with the perception of merchandise quality.

The regression analysis for the association between the perception of service quality and the store atmosphere in Surabaya produce an adjusted R^2 of 0.393 (F value of 48.152, $p = 0.000$). This relationship is statistically significant. The reported betas indicate that the perception of service quality also associates with most parts of the store atmosphere. The betas for interior layout, design factor and social factor are 0.391, 0.227 and 0.413 accordingly and significant by the t test at $p < 0.001$. The perception of service quality does not associate with store attractiveness.

65.4.2.2   The Relationship Between Store Patronage Satisfaction and Cognitive Responses

The studies in Perth and Surabaya confirm the relationship between store patronage satisfaction and cognitive responses. The regression analysis for the relationship between store patronage satisfaction and the perception of store quality in Perth produces an adjusted R^2 of 0.613 ($F = 410.476$, $p = 0.000$). These figures indicate that store patronage satisfaction is influenced by the perception of store quality.

The regression analysis for the relationship between store patronage satisfaction and cognitive responses in terms of the perception of merchandise and service quality in Surabaya produces an adjusted R^2 of 0.463 ($F = 134.359$, $p = 0.000$). These figures indicate that store patronage satisfaction is influenced by cognitive responses. The reported betas for the perception of merchandise and service quality are 0.161 and 0.663. These figures show that the perception of service quality has a bigger influence on store patronage satisfaction than does the perception of merchandise quality.

65.5   Conclusions

This study confirms that shoppers take their store quality cues from the store environment cues, but that they do not utilize all store environment cues to form their perceptions of store quality. The study finds that shoppers give different meanings to components of the store atmosphere in relation to the perception of store quality. This is consistent with the definition of perception as "the process by which an individual selects, organizes and interprets stimuli into a meaningful and coherent picture of the world" ([8], p. 144).

This study also finds that the perception of merchandise quality is not associated with all components of store atmosphere. As explained earlier, the perception of merchandise quality is not associated with layout and interior. The possible reason why this relationship is not supported is that shoppers perceive layout and interior

in terms of the functional purpose. The purpose of layout and interior is to facilitate and attract the shopper's interest in exploring the store. Thus, this aspect of store atmosphere is not utilized as a quality cue.

This study supports the point of view, that the store atmosphere and the cognitive responses of shoppers are found to be associated with store patronage satisfaction. The emergence of the perception of service as the most important variable to influence satisfaction is reasonably acceptable. Shoppers put a higher priority on service quality than on merchandise quality in evaluating their shopping experience.

Westbrook and Oliver [9] explains that there are eight sources of shopper satisfaction: store salesperson, store environment, merchandising policies, service orientation, product or service satisfaction, clientele, value or price relationship and special sales. Parasuraman et al. (1988), Rust and Oliver (1997), Oliver (1997) and Brandy and Robertson (2001) suggest that the evaluation of service quality, which is cognitive in nature, could influence satisfaction.

There are some limitations of this study. Firstly, the literature reveals that the mediating responses which are induced by store atmosphere are emotional and physiological in nature [3]. This study focuses on cognitive responses, comprising the perception of merchandise quality and service quality. Other cognitive responses such as the perception of merchandise value and prices are not part of this study. Secondly, as a result of using real retail settings rather than experimental ones, some factors such as pre-existing image, pre-existing emotional state and pre-existing mood could not be controlled in this study. Shoppers who have already patronized the store may have a pre-existing image of the store, whereas, shoppers who have not been to the store may not have one. Thirdly, this study may suffer from the effect of memory recall. Respondents are approached after they have finished shopping. To answer the questionnaire, they have to remember their experiences when they were in the store. It is possible the respondents had difficulty remembering their experience. However, this possibility can be considered to be very small, since the shoppers were asked to answer the questionnaire immediately after finishing shopping. Fourthly, this study groups all types of stores together. The types of store in this study are supermarket, department and specialty store. The relationships are not analyzed separately for each type of store. Lastly, all proposed relationships are examined in two countries only. Therefore, caution is needed in generalizing these findings to all geographic location.

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Part IX
General Topics

Chapter 66
Family Ownership and Board Independence, Evidence from Thailand

Parichart Rachapradit

Abstract This paper examines the effects of family ownership on board structure in Thailand. Multiple regression models and univariate analysis are used. Family firms are found to have less independent directors and higher proportion of directors with excessive multiple directorships suggesting that the controlling family prefers controllable board. The results also show that in larger firms, independent directors have higher multiple directorships. Since larger boards in larger firms need more independent directors in order to fulfil the regulated minimum proportion of independent directors on board, the results suggest scarcity of qualified people for independent director positions in Thailand.

66.1 Introduction

Corporate governance literature from western countries focuses on conflicts between managers and shareholders [1]. In developing economies where majority of firms have controlling owners, agency problem shifts from managers-shareholders conflicts to majority-minority shareholders conflicts [2]. In these firms, the controlling shareholders may prefer boards with lower monitoring intensity and probably exercise their substantial voting rights influencing board structure to weaken monitoring effectiveness of the board.

In Thailand, over 60 % of firms are controlled by family [3]. Family members are active in management of the firm and management positions tend to be passed on from one generation to another implying the intention to retain control over the firm management within family and thus suggest that the controlling family has motives to lessen monitoring role of the board. Moreover, an absence of market for corporate control in Thailand can make the family managers even more entrenched. This study therefore seeks to investigate influence of family ownership on board structure in Thai firms.

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66.2   Related Literature and Hypotheses

Agency theory focuses on monitoring role of the board. Recommended character-istics of the monitoring effective board include small size, high independence and low multiple directorships. Large board is viewed to have poor communication, slow decision-making, free-riders problem and can be easily controlled by the CEO. Independent directors are expected to have independent view and thus be able to make unbiased decision, especially toward management monitoring. Multiple di-rectorships occur when an individual director serves on more than one board. A director with excessive multiple directorships is expected to be over-committed and becomes less effective in performing board member duties particularly in monitoring the management. Empirical findings support.

This research is supported by a grant from Naresuan University, Thailand the agency theory that small, independent and low multiple directorships boards perform better in monitoring role. Directors with higher multiple directorships are found to be associated with lower board meeting attendance.

Resource dependence theory focuses on consulting role of the board. Boards with diversity of expertise and experience are expected to provide better guidance for the management. Additionally, network ties brought by directors can be benefits to firm performance. As a result, the desirable characteristics of the board include larger size, higher independence and higher multiple directorships. Empirical results for the impact of board size, independence and multiple directorships to firm performance are mixed.

The board structure in Thai family firms may reflect the controlling family's mo-tives to maintain control over the firm's management. Even if the firm performs poorly, the controlling family may not be willing for the family manager's perfor-mance to be questioned. As a result, if the controlling family would seek to utilize functioning of the board at all, it would be more of consulting role than monitoring role. In the case of board size, board in family firm is therefore expected to be larger in order to gain broadening perspectives and network ties. Additionally, if the con-trolling family has any intention to lessen monitoring intensity of the board, it can be another reason to have larger board. Therefore, the first hypothesis is as follows;

H1: The number of directors on board is higher when the firm is controlled by family.

Securities and Exchange Commission (SEC) requires that Thai listed firms have at least three independent directors and the proportion of independent directors on board must be at least one-third. According to agency theory and resource dependence theory, independent directors are expected to be effective in both monitoring role and consulting role. If the boards in family firms are expected to focus on consulting role while the boards in non-family firms are expected to focus on probably both roles, the degree of board independence is therefore expected to be indifferent between the two types of firms. However, if monitoring effectiveness of the board is not favourable to the controlling family, less independent board is probably a more attractive option. The degree of board independence in family firms are thus expected

to be lower, probably just to fulfil the SEC's minimum requirement. Therefore, the next hypotheses are;

H2a: The number of independent directors on board is lower when the firm is controlled by family.

H2b: The proportion of independent directors on board is lower when the firm is controlled by family.

Regarding multiple directorships, directors serving on multiple boards are expected to perform better in consulting role but worse in monitoring role. Non-family firms are expected to try to find the balance between the two roles to maximize shareholders' value. In family firms, on the other hand, the controlling family may find the over-committed directors not so harmful for their control over the firm. This study follows reference defining directors who serve on three or more boards as over-committed directors or 'busy directors'. Therefore, the final hypotheses are;

H3a: The number of directors serving on three or more boards is higher when the firm is controlled by family.

H3b: The proportion of directors serving on three or more boards is higher when the firm is controlled by family.

66.3 Methods

This study uses cross sectional data of 367 non-financial firms listed in the Stock Exchange of Thailand (SET) in 2012. Sources of the data include SETSmart database provided by the SET which discloses financial data, shareholders with 0.5 % or more shareholding, list of directors, and company files. Company files contain extensive details of aggregate shareholding of the controlling family and ultimate shareholders of private firms. Supplementing sources of data are the company web sites. Firms with incomplete ownership data or running under rehabilitation plans are excluded from the sample.

Following reference, a firm is defined as family firm if the family has meaningful control of its votes. The cut-off levels—the minimum voting right determining whether the firm is controlled by family—are 20 % and 25 %. The dummy variable is used to represent family ownership of the firm. The dummy equals one if the firm is controlled by family, zero if otherwise.

Multiple regression models are conducted to investigate the relationship between family ownership and board structure. Firm size measured by log scale of total assets is included as control variable. The estimated regression models are as follows;

$$\text{Board size} = f(\text{family ownership}, \log \text{total assets}) + \text{error}$$

$$\text{Board independence} = f(\text{family ownership}, \log \text{total assets}) + \text{error}$$

$$\text{Board multiple directorships} = f(\text{family ownership}, \log \text{total assets}) + \text{error}$$

Table 66.1 Sample Firms

	Mean	Std. Dev.	Median	Max	Min
Proportion of firms controlled by family					
20 % cut-off	64 %				
25 % cut-off	61 %				
Board structure					
Total number of directors	10.34	2.61	10	21	5
No. of independent directors	4.07	1.19	4	11	3
Proportion of independent directors on board	0.40	0.08	0.38	0.73	0.2
No. of busy directors on board	1.95	2.00	1	12	0
Proportion of busy directors on board	0.18	0.16	0.14	0.80	0.00
No. of busy independent directors	0.99	1.03	1	4	0
Proportion of busy independent directors on board	0.23	0.24	0.25	1.00	0.00
Book value of total assets (Bt. Million)	23,069	93,555	4,314	1,402,412	186

Busy independent directors refer to independent directors serving on 3 or more boards

Proportion of busy independent directors on board $= \dfrac{\text{the number of busy independent directors}}{\text{total number of independent directors on board}}$

66.4 Empirical Results and Discussion

66.4.1 Descriptive Statistics

Table 66.1 presents descriptive data of sample firms. More than 60 % of the sample firms are controlled by family. Average board size is 10.34. The minimum number of independent directors is three which is the minimum amount required by SEC. The minimum proportion of independent directors on board is 0.20 showing that not all sample firms have fulfilled the SEC's minimum requirement of one-third. However, average proportion of independent directors on board of 0.40 indicates that sample firms are generally willing to have the higher degree of board independence than the minimum requirement. The average number of busy directors on board is 1.95 while the maximum number reaches 12. The average proportion of busy directors serving on board is 0.18. In the case of multiple directorships held by independent directors, the average proportion of independent busy directors is 0.23 (Table 66.1).

66.4.2 Univariate Analysis

Univariate analysis is first conducted to examine the difference of board structure between family and non-family firms. The results in Table 66.2 reveal that boards in family firms have lower number of independent directors at 5 % significant level for both 20 % and 25 % cut-off ownership. H2a is therefore supported. The results also show a mild evidence for 25 % cut-off ownership level that family firms have lower proportion of independent directors on board and higher proportion of busy directors on board. The results therefore support H2b and H3b at 25 % cut-off ownership level. H1 and H3a are not supported by the results of univariate analysis (Table 66.2).

Table 66.2 Univariate Tests

	20 % cut-off			25 % cut-off		
	Family	*Non-family*	*T-statistics*	*Family*	*Non-family*	*T-statistics*
Board size	10.217	10.583	− 1.287	10.197	10.533	− 1.219
No. of independent directors	3.957	4.280	− 2.261**	3.929	4.251	− 2.526**
% of independent directors	0.394	0.407	− 1.536	0.392	0.408	− 1.889*
No. of busy directors	2.009	1.841	0.842	2.096	1.784	1.525
% of busy directors	0.183	0.167	0.951	0.191	0.162	1.685*
No. of busy independent directors	0.935	1.080	− 1.268	0.974	1.006	− 0.290
% of busy independent directors	0.225	0.252	− 0.994	0.234	0.237	− 0.104

*$p < 0.10$; **$p < 0.05$

66.4.3   Multiple Regression Results and Discussion

Multiple regression results displayed in Table 66.3 support only H3a and H3b. Controlled by firm size, boards in family firms tend to have higher number/proportion of busy directors. In the case of proportion of busy directors, family ownership at 25 % cut-off level produces the more significant correlation.

According to the SEC's definition of independent directors not involving in management of the firm, having no relationship with major shareholders and owning less than 0.5 % of shares in the firm, non-independent directors can be any person with any of those prohibited qualities. Non-independent directors with multiple directorships can be family/non-family member executive directors of the firm who also serves on boards of other firms and/or family members themselves holding board member positions. Another possibility is that non-independent directors can be board members of other firms in the chain of ownership control. Apparently, family firms tend to follow resource dependence theory encouraging their directors to sit on board of other firms to gain wider perspectives and bring in connection ties that benefit the firm. In that case, it can be argued that agency problems between controlling owner and minority shareholders are not so severe (Table 66.3).

The controlling shareholders have their ways to magnify their control over the firm with significantly lower ownership in cash flow rights. One way to do so is through pyramid structure which can be created by holding a majority of shares in one firm which in turn holds a majority of shares in another firm. This process can be repeated a number of times resulting in more layers of the pyramid. Pyramid structure is found to be popular among Thai family firms. If multiple directorships in family firms occur just because the controlling family appoint the same person to multiple boards in their chain of pyramid, widening perspective and network ties is unlikely to be the main purpose. Instead, multiple directorships can benefit only the controlling family by enabling them to have substantial control over the board and thus ultimate control over the firm. When conflict between controlling family and minority shareholders arises, it will not be surprising if the board's decision turns out to be maximizing the controlling family's interests not overall shareholders'.

Table 66.3 Regression results

	Dependent variable						
	Board size	Independent directors		Busy directors		Busy independent directors	
		Number	Proportion	Number	Proportion	Number	Proportion
Panel A: 20 % cut-off ownership level							
Intercept	3.821	0.968	0.370	−3.493	−0.194	−1.251	−0.134
	(4.511)***	(2.595)***	(12.966)***	(−5.439)***	(−3.544)***	(−3.613)***	(−1.608)
Family ownership dummy	0.026	−0.131	−0.011	0.477	0.037	−0.009	−0.004
	(0.090)	(−1.015)	(−1.121)	(2.149)**	(1.941)*	(−0.072)	(−0.127)
Log total assets	0.026	0.857	0.010	1.380	0.094	0.603	0.100
	(8.297)***	(9.225)***	(1.375)	(8.631)***	(6.853)***	(6.989)***	(4.803)***
Model R^2	0.198	0.244	0.013	0.209	0.143	0.153	0.079
Panel B: 25 % cut-off ownership level							
Intercept	3.915	0.994	0.370	−3.417	−0.191	−1.309	−0.148
	(4.748)***	(2.748)***	(13.383)***	(−5.475)***	(−3.580)***	(−3.898)***	(−1.835)*
Family ownership dummy	−0.079	−0.196	−0.016	0.513	0.042	0.058	0.012
	(−0.279)	(−1.589)	(−1.542)	(2.410)**	(2.321)**	(0.506)	(0.446)
Log total assets	1.740	0.856	0.010	1.367	0.093	0.608	0.101
	(8.282)***	(9.289)***	(1.398)	(8.597)***	(5.838)***	(7.109)***	(4.909)***
Model R^2	0.198	0.248	0.017	0.212	0.148	0.154	0.080

T-statistics are shown in parentheses

$*p < 0.10$; $**p < 0.05$; $***p < 0.01$

Firm size is found to be positively associated with every attribute of board structure except proportion of independent directors on board. The positive correlation between firm size and board size indicates that when firm grows, the board needs more members to deal with increasing amount and complexity of board tasks. Large boards in large firms tend to demand for directors with expertise and connections and thus have more directors with multiple directorships. Additionally, the results showing higher degree of multiple directorships of independent directors in larger firms can be the evidence of scarcity of qualified person for board member positions in Thai public firms. However, it should be noted that generalization of the results is limited due to regression model fit (R^2) is not so great.

66.5 Conclusions

This study examines the influence of family ownership on board structure of Thai firms. Family ownership is found to have negative impact on the number of independent directors on board. However, when controlled by firm size, there is no significant distinction of board independence among family and non-family firms. In fact, this study finds no strong evidence of factors influencing board independence of Thai firms at all. The only hypothesis supported by the study is that directors on the board of family firms tend to have higher degree of multiple directorships than directors on the board of non-family firms. The results suggest that the controlling family prefer controllable board and thus implying potential agency problem between the controlling family and minority shareholders. Additionally, the findings of higher level of multiple directorships of independent directors in larger firms challenge the SEC's policy promoting corporate governance in public firms through board independence by implementing minimum requirement of the number and proportion of independent directors on board. Independent directors added into the board may not be able to perform effective monitoring when they sit on too many boards. These busy independent directors will have no time to learn operational information of the firm, less time to prepare for board meetings and consequently cannot possibly effectively monitor the management.

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Chapter 67
A Study on Supply Chain Sustainability in Asia

Purnendu Mandal and Ayon Chakraborty

Abstract Developed nations such as United States of America and Europe have already learnt to an extent to how to manage their resource movement judiciously but developing countries especially in Asia have a long way to go to reach the level of the developed world. This research will look into the problems faced by the countries in Asia, namely Malaysia, India, Indonesia and Thailand, to develop good supply chain management systems. The objective is to analyse why the emerging Asian countries are not able to manage the supply chain with the same efficiency and conviction as the developed countries.

67.1 Introduction

The importance of sustainability concept is raising both at local and global levels. Thus, it brings up the questions on how to integrate sustainability with business operations and strategy. We are aware of the impending problem of depleting resources, use of fuels creating green house gases and turbulent changes in weather. These problems are originating due to inefficient use of the non renewable resources at our disposal and wastages without any concern of the natural order. Due to these alarming problems, the organizations all around the world have started practicing Sustainable supply chain management (SSCM) or Green supply chain management.

Sustainable supply chain management in developing countries is a bit difficult to practice. It is as we have understood a vicious circle where because these countries do not have proper supply chains in place they cannot practice sustainable supply chain management. When one practices SSCM it involves reduced inventories to avoid any forms of wastage, using environment friendly raw material in the manufacturing processes, using the most efficient ways of logistics to avoid green house gas emissions and practicing social welfare. The companies in developing nations are more concerned about first monetary sustenance and getting the basics of the

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supply chain management (SCM) right before moving on to the SSCM. A survey performed on Malaysian manufacturing firms showed that the transaction costs and overall costs show strong vertical integration between SSCM practices and the four outcomes namely environment, economic, social and operational. It showed that estimated business benefits have a significant effect on the SSCM practices [2].

The concept of Sustainable SCM is still in its immaturity in countries such as India. Therefore, there is inadequate social request from customers and competitive challenge from rivals for making supply chains sustainable. Firms that are practicing Sustainable SCM are only doing it to the limited extent with minimal significance to the entire business process. Normally, firms adopting sustainability for regulatory compliance and deploy little or no SSCM practices. As the adoption of SSCM increases, the benefits from economic stand point are forecasted to be gained not only in the short term, but also in the long term through the development of competitive advantages. Although voluntary adoption of SSCM has an insignificant impact on competitiveness, it has a significant positive effect on economic performance, reinforcing once again the importance of engaging in SSCM practices to a significant extent for firms that have adopted voluntarily.

The current situation reveals that majority of firms practicing SSCM in countries such as India is multi-national companies (MNCs). They extend their environmental practices across all the countries in which they operate, however less stringent the existing rules and regulations may be, for ease of replicability, standardization and economies of scale. Domestic MNC firms in contrast voluntarily adopted sustainability at a very lower extends.

Thus, domestic firms should take over MNC's experience and learn how to adopt and practice SSCM practices. Interestingly, many of the domestic firms are supplying to MNCs. This put them in the situation to expedite the adoption of the sustainability principles in order to retain the status of preferred suppliers in the long run.

Cost and complexity are considered to be the biggest barriers to implementing SSCM, which brings up the urge of creation of cost effective and easy to implement solutions. Adoption of sustainable practices is highest in those areas of the supply chain where there is a direct relation to cost savings and efficiency, for example in inventory reduction, recycling of raw materials. The signals that SSCM practices can bring value to both the organizations and the external environment will lead to a reduction in resources, material and waste, thereby enabling better resource utilization.

67.2   Current State of SCM in Asia

After analyzing every country closely and determining and narrowing down the reasons, it has become clear that there are a few common factors that are holding these countries back from reaching the same level as the top one's in supply chain management. In order to understand the commonalities first we will have to see what ranks these countries have been placed by credible reports in terms of supply chain management. Below is a table showing us the ranks of the countries in question (Table 67.1).

Table 67.1 Overall supply chain ranking. [1]

Factors	Singapore	Malaysia	Indonesia	Thailand	India
1st pillar: Domestic and foreign market access	1	32	17	59	130
2nd pillar: Efficiency of customs administration	1	47	69	36	70
3rd pillar: Efficiency of import-export procedures	1	26	38	20	79
4th pillar: Transparency of border administration	3	42	88	82	84
5th pillar: Availability and quality of transport infrastructure	2	12	74	34	76
6th pillar: Availability and quality of transport services	1	10	50	30	59
7th pillar: Availability and use of ICTs	11	37	89	73	97
8th pillar: Regulatory environment	1	22	49	52	50
9th pillar: Physical security	20	46	91	90	87

The ranks shown above are out of 132 in ascending order with one being the best rank. It can be seen that out of 132 countries tested against the parameters Singapore is at the top in terms of ranking. This is an anomaly among the Asian countries as all other countries are ranked in double digits where as Singapore top ranked not only in Asia but also in the world. After analyzing it is seen that the report is consistent with our findings and that India is the least ranked in the selected countries of our study.

After reading various literatures and reports our analysis led us to believe that supply chain management as practiced in the developed countries cannot be applied in similar manner to the developing countries where the basics of logistics management have not yet been fulfilled. These various reports which have ranked countries in terms of supply chain management have considered all countries to have the basic platform ready. Supply chain management in the higher form operates on information technology; concepts such as e-retailing, e-supply management, RFID which are standard practices in developed countries such as USA are unheard of in some of the developing countries and will take years of growth and development to come to that level. But the argument here is that even if the higher form of technology is applied forcefully in these countries it is in the end only software. The reason that these technologies work with excellent efficiency in developed countries is that they already have state of the art hardware in place. What it means is without efficient infrastructure in place no amount of advanced technologies will help any country to move forward in the supply chain management arena. We have already seen in our findings that apart from Singapore and Malaysia all other countries are far behind in terms of infrastructure and application of modern technology in supply chain.

Now in order to come to a conclusion that it is the hardware that needs to be taken care of we correlated core demographic data such as purchasing power parity, population density, percentage of urban population etc. with the data hinting at the world rankings of SCM. Following is the table that was put together (Table 67.2).

Table 67.2 World development indicators, 2013

	Population in millions	Vulnerable Unemploy-ment rate	Population Density people per Sq. Km (2011)	Urban Population % of total population (2011)	Purchasing Power parity Per capita ($) (2011)	% below poverty line	Labor force Participa-tion rate (2013)	Individuals using Internet (% of pop)	Overall Supply Chain ranking (2012)
Singapore	5.2	10	7405	100	59380	0	67	71	1
India	1241.5	81	418	31	3640	29.8	56	10	100
Thailand	69.5	54	136	34	8360	8.1	72	24	57
Malaysia	28.9	22	88	73	15650	3.8	60	61	24
Indonesia	242.3	57	134	51	4500	12.5	68	18	58

Let us now see how these parameters are correlated to supply chain indirectly. It can be inferred that the world rankings are directly proportional to the provided factors. Supply chain ranking decreases with the increase in population, and unemployment rate. Whereas with the decrease of urban population percentage, and internet usage ranking decreases.

67.3   Preliminary Insights

It can be ascertained now that supply chain management is not only necessary but also crucial for a business operation to adapt to the ever changing market environment. In fact supply chain management has been researched thoroughly and various models have used the policy of trial and error leading to advanced concepts such as 4PL—an expert logistics provider acting as the intermediary who will provide all the answers to supply chain complexities. A thorough literature review of supply chain operation lead to a logical conclusion that without a platform of infrastructure (transportation and communications), advanced internet technology, and an equally capable human force, the advanced concept of supply chain systems will not be applicable. Less rigorous implementation of these parameters used for supply chain will lead to a sporadically effective operation. The objective of this research is to analyze to an extent, whether countries such as Thailand, Indonesia, Malaysia, and India have a conducive platform for advanced supply chain management.

The favorable environment, geographical context, pool of highly learned capable work force, state-of-art educational institutions and impeccable infrastructures have helped Singapore secure number one position on the chart of Global Enabling Trade Report. A similar platform needs to be developed in Thailand, Indonesia, Malaysia, and India to become effective in providing good supply chain operations. World Bank has provided us with a list of important factors on which economic, social and cultural growth of countries can maintain healthy levels. Advanced levels of technology require working force of a country to be at ease with using internet and related technology. It plays a very important role as a catalyst to aid the crucial element—supply chain visibility. A very low number of people have good practice in using the internet in India, an arguably acceptable level in Thailand and Indonesia, a prudent development in Malaysia corresponds to the ranking on the chart of global enabling trade report. Rigid bureaucracy, complex and exploitative taxation laws can be linked with the social and economic development of a country. A crucial factor, which explains the obligations on part of humanity—reducing poverty has haunted the plans, hopes and aspirations of the Asian countries and has now resulted into a protracted problem. The list provided by the World Bank promotes urgent action on part of countries to reduce their poverty levels. A very unhealthy per cent age of unacceptable poverty level thrives in India and high incidence of vulnerable employment has laid down some challenging issues for the people and for the country. All the Asian countries have high number of people and if their path of development is not monitored, aided and acknowledged, it will lead to the formation of a constant barrier

posing as a debilitating force for countries to provide high levels of business platform for the developed countries. A sudden automation of processes running widespread quantitative grounds for employment will throw thousands of under acknowledged poor people who had no identifiable access to practical expertise and no social ladder to access required levels of education into a state of forced unemployment.

Dr. Nash, a renowned economist explains that with the promotion of globalization and the creation of new jobs around the world, only the rich, middle income people are able to derive the benefits. The poor societies are drifting further away from the path to recovery leading to a very dangerous wide gap between the rich and poor in Asian countries. Quick implementation of highly advanced supply chain will provide the added value to the customers who are rich and are only asking for more comfort. The poor are losing their jobs, leading to de-motivation, non acceptance in a society and inevitable rise in crimes. A country, whose population is a formidable factor, has to look at ways to bridge this gap. Even though experts will state that automation increases the capacity of a country to adapt to the global platform, the results can only be positive for some time. Civil unrest from the gap between the rich and poor will undo the success story that the countries have been able to maintain for a long time. Cursory adaptation to the purpose of gaining more wealth has to be practiced with a lot of caution. There is high chance that the ranking of Asian countries such as Indonesia and India will lag behind for years to come as people are not managed properly. As rich collect more wealth, urban cities gain prominence leading to mass migration to cities and a lack of attention towards rural areas and third tier cities. This is only going to result into weak infrastructures in important cities and a complete lack of infrastructures in rural areas. This non uniform development will never help countries to develop a stable platform for supply chain.

Supply chain should be flexible, according to the existing market mechanisms of a country. It is highly complex and arguable exploitative after studying the ongoing developments in business operations to impose advanced levels of supply chain on the workforce of a country. Malaysia has done well with managing people, building infrastructure and technology to invite major players and now realize their goals for implementing reputed international supply chain procedures. However, agrarian countries like Thailand, India and a growing economy like Indonesia need to focus on employee engagement. Their supply chain operations will always be considered improving, yet effective and productive, as they have to focus on managing people, create a reliable platform for technology, infrastructure and then finally move up the charts on supply chain effectiveness in the reputed global trading report.

67.4 Discussions

This paper is an initial attempt to explore the challenges in developing a world class supply chain management system. The analysis of literature provides us with an understanding of various factors which need to be considered. The contribution of our work is not only in identifying these factors but also to provide a theoretical

framework in the form of recommendations for countries such as India, Indonesia, Malaysia and Thailand.

Employee engagement   Employee engagement is the need of the hour in Asian countries. For years, it has been observed that all the players in a business chain have been observing different goals. The concept of supply chain requires all the intermediaries that are used should be working toward a single goal. Employee engagement should be inter-organizational as well as intra organizational in nature. An employee who can be any player in the supply chain should be motivated, have a thorough knowledge of organizational culture and should have enough belief in him or her to bring about a positive change by implementing new ideas. Periodic surveys can be conducted to know about the rate of satisfaction that the employee has associated with working in a responsible position.

Adaptive 3PL model   In the western countries today, an advanced concept of 4PL model is doing rounds in the modern business environment. This model is based on excellent expertise in technology and highly educated workforce. Asian countries that have analyzed in this report barring Singapore do not have the platform of abundantly available sophisticated technology and educated workforce. For the time being, small pockets of business centers are used in order to source raw materials, transport consultation and any other crucial processes that are instrumental for the supply chain. Asian countries need to continue implementing help from these domestic sources and form an adaptive 3PL model. The best practices in available technology and other beneficial processes should be mutually shared among the players. One can even implement the system, wherein effective players from each company that plays an important part in the supply chain can form an adaptive 3PL model.

Training to the suppliers   A supply chain's goal is to maximize the revenue making model of the firm by providing best value to the customer. A firm uses various physical attributes, supplements and beneficial processes to give maximum value to the final product. This is where the role of suppliers is extremely important. All the suppliers should be aware of the mission and the vision of the primary firm and should be working diligently towards exponentially increasing the value of the primary firm. By doing so, the value of the suppliers themselves will increase and will have good reputation attached to their causes.

Route optimization   In Asian countries, vast amount of freight movement takes place between two points using the road transport. Delays are caused due to the conditions of these roads and the huge number of vehicles on account of the existing population. Business firms should draw out a plan where they can locate effective routes and find different ways of funding to support the building of good driving conditions. Also the business firms together can appeal to the government to reduce toll fees, and other duty charges along these routes proving smooth operation of supply chains.

Effective building of 2nd tier cities and 3rd tier cities   Countries with more rural population should work on building on more cities. If not, mass migration of people takes place from rural areas toward urban areas applying a lot of unprecedented

pressure on the infrastructures of the lesser urban cities. The current situation of high dependency upon less urban cities will lead to water supply degradation, congestion on roads and possibly more slum pockets. Cluster analysis can be used to build these new cities. New firms with related goals and processes should find it prospective and economically beneficial to build operational centers in these cities and provide huge employment opportunities in these new cities. In the long run, time delays will be avoided due to better infrastructure available in vital areas used in supply chain.

The future work will involve working on the development of a framework to understand the interplay of the identified factors. The framework will then be validated through empirical studies. The study will help us in identifying and relating the identified factors in order to achieve successful implementation of supply chain management system for the selected countries.

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Chapter 68
To Hire Foreign Talents or Groom Locals? The Singaporean Workforce Dilemma

Crystal Tang Jieyi and Koong Hean Foo

Abstract Many countries depend on profit-oriented corporations to maintain economic growth through employment of their local workforce. This is especially true for Singapore whose only resource is a knowledge-based workforce. In spite of efforts to develop and sustain its indigenous workforce through educational reforms and meritocratic hiring policies, the Singapore government has recognized a need for more skilled workers. This has to come from foreign talents of whom an increase of 40 % is seen since 2007 notwithstanding the growing dissatisfaction of its citizens. Similar sentiments are echoed throughout the world (e.g., in China, Thailand, and Hong Kong) where job security of locals is threatened by immigration policies. Although it appears to be predominantly an economic issue, social and political reasons are implicated as well in governmental policies through the increased reliance on foreign talents in sustaining a competitive workforce. These factors will be evaluated in the paper.

68.1 Introduction

The world is experiencing a global meritocracy of sorts, where workforce talents are travelling to anywhere their expertise are demanded, and it may not even be for lengthy periods of time. This fluid movement of contemporary workforces comes as no surprise in the fast-paced lifestyle and economic climate of today. Human capital is highly sought after as countries seek to amass and protect vested interests and individuals capable of sustaining economic development. As for Singapore, the hiring of foreign workers has increased drastically during the past decades. The mentality of "the grass is always greener on the other side" has set Singapore into motion towards a global war for talent.

This has led to a situation where governments employ strategies and initiatives in order to compete for such talents [1]. The Association of Southeast Asian Nation (ASEAN) region's move to allow the ease of movement for skilled labour, innovators

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and entrepreneurs facilitates the recruitment of such in-demand individuals. Certain countries have stringent principles; for example, Malaysia's *Bumiputera* policy which was in accordance to guidelines under the New Economic Policy allowing protectionist policies for the native *Bumiputera* workforce (NEP). In contrast, Singapore, has the Manpower 21 Plan, Contact Singapore and Singapore Talent Recruitment (STAR) committee, along with the International Manpower Program of the Economic Development Board as examples of the extensive plans and contingencies set forth to ensure that foreign workers would be well incentivized to situate themselves in Singapore.

The Singapore government believes it can anticipate the "ebb and flow" of global trends, and situates the nation advantageously to ensure the sustainability of the impressive economic growth evident since the 1960s. Moreover, the incumbent ruling party in Singapore, the People's Action Party (PAP), has marshalled Singapore to deal with this in what is described as the "metapragmatics of globalisation." The influx of foreign workers appears to be an economic move by the government in a bid to ensure that Singapore maintains a competitive edge in today's robust global economy. The emphasis is on economic restructuring, globalization, productivity performances, hiring and changing immigration policies.

However, the very involvement of the government in Singapore does not preclude social and political agenda. Restructuring of the economy coupled with the inflow and/or outflow of the workforce demonstrates that labour competition and lowered costs, while being precursors to the government's recent moves to ensure future economic stability, does not take into account the future preservation of the rights of present citizens here. It has led to a perceived marginalization of localized Singaporeans who claim the added competition is not welcome, much less the policies [1]. "If anything is wrong, blame gah-men [sic] (government)," is such a local sentiment that is aired in public forums like *Talking Cock* and *Stomp*. The sentiment neither justifies nor debunks the view of the government's culpability; rather the reflexive action of drawing attention to the government when negative issues occur denotes a possible nomothetic attribution error. According to Fritz Heider, "our perceptions of causality are often distorted by our needs and certain cognitive biases", and in Singapore now, the outflow of jobs to foreign workers has created a cognitive bias and a corresponding dissatisfaction as seen with *learned helplessness*, denoting passivity in the citizens. Directing responsibility to the authorities is pervasive and has become a normative view in Singapore. As such, the Singapore government's role has evolved to undertake a large responsibility for the continued economic success of the nation. Every policy and legislation would be greatly scrutinised, notwithstanding those affecting employment outlook.

With the recent White Paper's projection of a 6.9 million strong population in Singapore by 2030, and the steadily declining birth rates in Singapore along with the corresponding ageing workforce, the government's moves to ease immigration policies to allow greater hiring of foreign workers appears to counter any form of protectionism for present citizens. The grooming of local talents, a process which

requires investments in time and resources become secondary in the face of the alternative of hiring foreign talents that are readily available to meet necessary needs of industries. This comes as contradictory in view of the years of advocating meritocracy and a concern for developing a national identity based upon a core of diverse individuals, as Singapore appears to have shifted its attention towards protecting economic growth rather than nurturing its citizens.

Is the growing dissatisfaction of workers in Singapore, as evidenced by Ho's study where Singapore was deemed to have, "the least satisfied workforce in the world," and the daily criticisms on the internet by unsatisfied citizens, due to the government's policies or due to an attribution error on part of Singaporeans? The economic, social and political reasons of the government's move to allow more foreign workers into Singapore, possibly at the expense of localized Singaporeans is explored in this paper.

68.2   Why are There so Many Foreign Talents in Singapore?

Based on past literature, reasons for the influx of foreign talents into Singapore can be broadly classified into factors stemming from the economic, social and political perspectives. Singapore has been known as a small country with a noteworthy economic growth moving towards a knowledge-based economy ever since its independence in 1965. With the rapid globalization taking place amidst this little island, Singapore had to quickly inaugurate both economic and educational developments which were imperative to the nation's growth and successes [1], the move towards a knowledge-based economy to maintain its competitive edge does entail an infusion in both infrastructure and education. Moreover, early research supported the essence of developing human capital through training and education so as to keep up with the competitive international economy.

Since the 1970s, foreign talents have been greeted with open arms as Singapore transcended from being an industrial city to a world city. World economies have been classified due to the available networks of communication and transport, reaching to their counterparts all over the world for more fluid economic movements. As such, the massive developments taking place in Singapore from an initial port city has landed itself into a stage that requires the slacking of immigration policies to welcome foreign talents. Foreign talents as such, were crucial as Singapore hastened itself towards a knowledge-based economy, thus requiring a large pool of skilled foreign talents in both governmental (e.g., health, research, education) and private sectors. In fact, it is difficult to deny the efficiency of hiring foreign workers to fill in the gaps, rather than to train locals. The rise of foreign workers in Singapore is thus seen more of a necessity in order to keep pace with various issues at hand, for instance, low birth rates, aging population, and sustaining a competitive edge. But the question entails: Are we training our own people enough?

68.2.1   Implications of Singapore's Education System

While Singapore continues to pace itself within the top three rankings of the bi-annual Global Competitiveness Report, many changes were made behind the scenes in order to maintain its competitive edge and to retain these foreign talents. One of the changes pertains to the heavy investments in the education system which has been deemed crucial in order to keep up with the fast-growing knowledge-based economy. This applies to other countries (e.g., England) where the focus on a well-trained and knowledgeable workforce to suit the twenty-first century economy that is reinstated by the integral knowledge growth. To the Singapore government, education is viewed pivotal towards the country's economic developments and is deemed an investment for future gains [1]. This is evidenced by the increasing budget set aside for education despite the worldwide financial crisis in 2008, the development of an education hub in Singapore has been widely mentioned amongst the literature pertaining to Singapore and the global war for talent while it continues to be an area of research till date.

Education is indeed one of the most viable developments that can spur the economic growth of a country modeled after the Silicon Valley template that places importance on highly knowledgeable workforce (e.g., scientists, programmers, entrepreneurs) worldwide. As such, policies pertaining to the changes in education system have been popular to meet the birth of global meritocracy—molding future local talents and attracting foreign talents. Global meritocracy speaks of the inequality present in a world economy due to the escalating global talent war [1]. Not surprisingly, the relationship between education and knowledge-based economy is a direct one—higher education level leads to greater contribution, thus a higher income. In the words of Singapore Prime Minister Lee HsienLoong during an interview with CNA's 30th anniversary report, he mentioned that the greater need to 'help workers upgrade and train for an era in which knowledge is absolutely critical'. Cohen echoes likewise pertaining to the talented workers becoming the 'critical difference between those companies that grow and innovate, and those that falter or merely survive'. Indeed, it is the talented, skilled worker that is being sought after rather that the mediocre workers—a distinction of foreign immigrants into Singapore [1]. In other words, in spite of the establishment of better education, Singapore lacks talented, skilled workers.

68.2.2   Implications of Social Issues

In a recent paper by Tatli and colleagues, Singapore was one of the five economies identified within the Asia-Pacific region. These potentially rising economies (e.g., China, Thailand, Singapore, Taiwan and Hong Kong) were selected due to certain features that they had in common: high economic growth potential; faces a lack of talent and a problem of untapped female potential. No doubt, one of the social implications leading up to the global war for talent relates to the gender inequality evident in the mentioned countries. The issue of gender inequality has not changed, and

continues to impact the economies in the form of a major barrier towards promoting equality in the workplace. Gender biases against women have deterred potential female talents from career advancements and recruitments within the workforce, thus raising a concern amongst various companies due to the untapped female talents. In the efforts to deal with these shortages of foreign talents, various strategies including on-demand employment practices, outsourcing and alterations in educational and migration policies have been implemented, yet meagre attempts have been made to explore the already available untapped female talents within the country. Despite the national attempts to further develop Singapore as an education hub, talent shortages remained while the underutilized female potentials continue to be left untouched. Similar to its neighbouring countries, there were underlying barriers towards mobilizing female talents which were largely based on the societal attitudes and cultural values intertwined with the negative thought of females escalating up the industrial ladder. The need for effective talent management has thus been extensively felt and recognized since its inception in *The War for Talent* by McKinsey & Company during the 1990s.

The 'glass ceiling' effect is a recognized impediment for females to advance above a certain level within the organization and in their given fields. After the struggle for equal rights in the 1960's, a need for meritocracy was needed to contextually apply the ideology of woman's liberation. Meritocracy is the product of centuries of effort to gain an equivalent foothold in access to resources. However, with the 'glass ceiling' effect, it has become a normative unspoken rule that certain 'outgroups' (e.g., females) would have diminished chances and access to opportunities (e.g., promotions) and resources (e.g., money). Besides the cultural and societal values imbued within the country, there were other factors to explain this phenomena. As such, it is more greatly felt in most Asian societies. It has created a self-fulfilling prophecy where women can expect to have fewer opportunities for advancement, as compared to their male counterparts. A close review of local newspapers found a general influence of media's portrayal within the cultural scene—managers were deemed to be 'naturally' males, whereas portrayal of women's stories were casted as distressful and heavy-laden. While some women try harder in order to attain the position that they desire, they do so at greater cost and effort. Traditional gender ideologies were the driving force behind, shaping people to believe that females have a different role within the society and should continue to fulfil their situated responsibilities as a 'homely', domestic personnel. More recently, there has been a debate pertaining to the work-life balance issues of females while various researches have followed through to encourage a levelling of domestic responsibilities in Singapore. Despite the awareness of organizations on the policies to help encourage female workers, there appear to be an on-going gendered bias leading to the females being disadvantaged in the workforce. Work–life balancing has been less of a focus within Singapore, while females, in order to be successful both at work and home requires a greater support from the organizations in terms of flexible working hours which has been most sought after. Organizations should thus incorporate policies in order to assist females in managing both domestic and occupational demands. These benefits may include paid maternity and paternity leaves, flexible work arrangements and

certainly a greater understanding to prevent unnecessary dismissals due to legitimate absence from work. As such, it would not be an ill-considered option for women in Singapore to be a homemaker as it not only helps an ease of family functionality but it also allows them to avoid fighting an uphill battle to reap economic benefits and social statuses that are mostly situated with men. Though it appears that women have found a manner of compromise and adjustment, it can be likened more to a state of learned helplessness, where the self-fulfilling prophecy of fewer expected opportunities has become more accepted and lulls women to think that their settings are comfortable and would not get any better. Further effort would be unneeded as returns are more likely to be diminishing and so the utility of career advancement is not at the forefront especially when considering work-life balancing issues.

The advent of such implicit corporate practices stems from the retaining of previous pre-liberation ideologies and in an Asian context, which furthermore revolves around patriarchal traditions, it appears to be expected. Hence, despite the great advances made by females due to corporate culture diffused from the West remnants of the traditional patriarchal still remain; more so than in the West. The glass ceiling has diminished greatly, but its effects are still tangible. Thus, meritocracy, which is a socially steeped concept, is not uniformly seen in a society like Singapore. It points to the maintenance of both systemic and individual outlook that perpetuates this inconsistency. While the localized citizens aim to find an appropriate balance of work and family that can decrease work standards and performance, the government looks to ensure a status quo of greater competitiveness in bringing in foreign talents. As such, the localized citizen, especially women, would attribute greater responsibility to the government to alleviate the issue as not only are their needs not being met, but they face would encounter dissatisfaction with knowledge that further competition is to be expected.

68.2.3   Implications of Singapore's Political Climate and Policy Making

Government policies have always been used to mobilize Singapore to maintain economic stability and also a manoeuvrability to keep in touch with the demands of the present global economic climate, especially with the war for talent [1]. However, through such strategizing, many mismatched expectations are created, highlighting socio-economic inequalities and ideological contradictions. Democratization in Singapore indicates a shift is mitigated by the incumbent party who names its own opposition and this prudence has become a double-edged, with the public's acknowledgement of dependence on government policies to decide life outcomes. With moves to focus on keeping Singapore competitive and not tending to the individual needs of the localized citizens, feelings of alienation would occur, and in a bid to proclaim these sentiments, the citizens would further attribute their perceived losses (e.g., job opportunities) on the government. A fundamental attribution error is likely to be shared by the affected individuals and this extends towards most of a predominantly

middle-class nation. The tendency to diminish personal responsibility by claiming a reliance on the government to troubleshoot every potential issue, whether health, property or employment, is further exacerbated when the issue unavoidably reflects individual short-comings (a lack of competition and personal growth). Citizens, when faced with a reality that is perpetuated by their inertia, indiscriminately attribute culpability to external factors and the government, which everyone is reliant upon, bears a much greater burden as a result.

In a bid to retain a competitive edge, the Singapore government shifted focus to attract foreign talents and this has created dissonance amongst the localized citizens as they are met with greater meritocratic competition and possibly fewer job opportunities awaiting them. To better facilitate the needs of these foreign talents, an additional International Manpower Program was launched by the Economic Development Board to better customize the influx of global talents. To name a few, these benefits surround areas like covering types of recruitments, housing, leveraging taxes and fellowship positions within universities. One such policy regards the launch of Manpower 21 in August 1999 which aimed to develop Singapore to sustain its competitive edge, maintaining its stature as a knowledge-based economy. The launch of Manpower 21 has further led the Ministry of Manpower to change its vision in order to suit the incoming talents globally–'A Great Workforce, A Great Workplace–Towards Singapore as a Global City and Home'. The government is seen to undertake extensive measures to ensure that Singapore continues to bring in talented individuals to ensure competition, especially in the ASEAN region.

Although the government still aims to cultivate local talents, immigration laws indicate otherwise. Hegemony, depicted as the "negotiated power whereby members of a class are able to persuade other classes that they share the same class interests," appears challenged. Prime Minister Lee was quoted in a speech to the Associate of Muslim Professionals (AMP) saying that 'AMP has a mission and a role, and if AMP gets diverted into these matters, then I think it will lose its focus on its primary task which is to tackle the social and economic issues facing the Malay-Muslim community and improve the well-being of the Malay-Muslim community.' These comments not only indicate that the government has delegated the possible fate of a prominent community of localized citizens to an ancillary body and not engage the matter to a greater extent, but it possibly depicts the perceived economic utility being weighed out by the governments' policy makers. The move demonstrates pragmatism, although it comes at the expense of the immediate future of particular communities. It goes against one of the three core principles of policy makers as quoted by then Prime Minister Goh (now Senior Minister): they must not put Singapore's unity and harmony, growth and prosperity and long-term interests at risk. Unity and harmony appears to be diminished at the expense of prosperity and long term interests. Moreover, greater emigration rates are a further indication of individuals who have decided that their interests are better supported beyond Singapore's shores. They were deemed, by then PM Goh, to be 'fair-weathered Singaporeans' in a bid to address the growing exodus from the city-state. Unity is most definitely not on the citizens' minds with the ensuing 'brain drain' where many talented individuals

left the country and continue to do so. The authoritarian regime then appeared stifling for many individuals who possessed an individualistic mind-set to move on to opportunities abroad.

With the growing need for entrepreneurs and other individualistic and skilled workers, the Singapore government's stance towards these individuals appears to have changed, especially with the growing democratization of educational and labour policies. It is easier now for entrepreneurs to start-up a small-medium enterprise (SME) than it was when then PM Goh made his comments. People are even encouraged by the ease of bank loans and bureaucratic procedures in order to establish small businesses. However, it appears that these opportunities are not utilised to a great extent as most Singaporeans have maintained a dependent mentality and would prefer to seek a stable income as opposed to a venture with inherent risks. Singapore had engineered a 'thoroughly modern, technologically based society by promoting a highly disciplined and educated workforce'. This sentiment has remained prevalent until the government itself acknowledged that its ability to mould and shape its citizens has reached a limit and action needed to be taken to ensure Singapore remains functional and relevant to global demands of a knowledge driven workforce, especially with the need for more independent and skilled workers. It seems plausible that the government's policies would have functioned much better than when more opportunistic and individualistic citizens were still around as opposed to the present overly dependent, moulded workforce.

The government seems to have identified the issue of a need of a skilled workforce and has wasted no effort to seek them abroad. However, it is seen during the time when talents were being scouted from abroad, many talented, 'fair-weathered' Singaporeans would have left as well in the 'brain drain'. The over-pollicising appears to work to the benefit of foreign talents as opposed to the development of localized Singaporeans who have either left the country or stagnated in dependence on the incumbent (learned helplessness). The pragmatic policies of the government to ensure a fertile business environment which takes a global perspective would be perceived disadvantageous to citizens, who would expect protectionist schemes for personal benefit. Dissonance would be expected to ensue, with incongruent goals. This growing dissatisfaction of the localized citizens gives rise to the notion that the "world's most successful marriage of modern capitalism and electoral authoritarianism has faltered".

Notwithstanding recent reports of Singapore being the most dissatisfied workforce, the decreased confidence with the incumbent PAP is demonstrated by voting margins of 60.14 % in 2011, from 66.6 % in 2006 and 75 % in 2001. As Lee Kuan Yew said of the PAP in 2011 that 'if it declines in quality and the opposition fields a strong alternative', it would decline and while it appears to be in decline, it might not be entirely due to shift in power, rather it points toward a dissatisfaction that would only be alleviated through efforts to pacify the localized citizens. The GST offset package is an example of monetary incentives that has not elicited the anticipated gratitude. It appears that greater efforts to generate systemic changes possibly in education and employment protectionist schemes would invoke greater confidence in the government's policies, as opposed to stop-gap measures.

68.3   Conclusion

Based on an extensive review of literature and governmental reports, the current paper seeks to re-look into the challenges faced by Singapore in terms of its struggle to produce sufficient workers to tackle with its focus on economic growth. The major contribution of this paper taps on the economic success of Singapore and the openness of its government on the hiring of foreign talents. Singapore is not alone in facing the shortage of talented skilled worker in Asia. Reportedly, China, Hong Kong, and Thailand face the same issue and are dealing with them in similar ways. Whatever is being done, there is no satisfaction with any economy.

The issue of foreign talents is not just limited to the knowledge-driven workforce of Singapore but in a competitive global climate that has every country vying for the best talents. In Asia, China, Hong Kong, and Thailand face the same issue and are dealing with them in similar ways. The public's reaction to this may vary due to the differences in social, economic and political situations in the respective countries. The problems faced by Singapore are centred on the growing dissatisfaction of localized citizens who feel marginalized due to the government's emphasis on foreign talent. The amalgamation of income inequality, patriarchal traditions, gender inequality, social engineering, democratization and growing emigration, have intermingled to create a unique situation where the continued growth of a nation is dependent on proper policies being made. Both localized citizens and government have contributed to the situation where growth is needed to ensure future well-being, even if it is decreased in the short-term. Attributions demonstrate the dissonance faced by localized citizens due to the increased competitiveness and lack of jobs available. With income stability threatened, their immediate well-being is at threat. The Singapore government should be aware of being clear, yet receptive towards the people whom the policies are directed. While the welfare of citizens is a primary concern of any nation, it is important to note that economies run on the basis of foreign investments. It is important to realize the global outlook that the government focuses on and not overly compromising at the expense of competitiveness.

As recommendations, perhaps, it is time that citizens of economies look at the issue in a different light—to restructure cognitively their present views in hiring foreign talents and grooming locals for jobs.

Firstly, the world of economies is now an interdependent and integrated field. In other words, the world is like a huge company, where countries are like branches of the company, specializing or sharing in some skills, services and products for use within the country or among countries. Hence, workforces are free to move around the company and its branches. Where a branch lacks a skilled talent, it takes from another branch which could spare one.

Secondly, in cases where a skilled or talented workforce is deficient, schools will be set up to train more people for that. Training of personnel itself is a job. Countries that are proficient in skills, for example, technical skills or services skills are already doing this. More is needed if talents or a skilled workforce is much needed worldwide.

Thirdly, on the use of people not formerly employed adequately in the workforce (for example, females and retirees), it is time to open the gates for this workforce to join in the company for economic productivity. If necessary, retrain them in the appropriate jobs. Based on the second and third point, learned helplessness can thus be reduced through empowering the workers with greater aptitude and purposefulness.

Fourthly, no matter how well a country trained its workforce in job skills, there will always be an inherent gap in the skills. Because human beings live in different country of different environments, there will be different viewpoints about the same object or subject. So let foreign talents move about to share their viewpoints on the matter—as the saying goes, "more heads are better than one". It is an unwritten acceptance that Singaporeans generally 'do not view matters outside the box'. Accept foreign talents for that too is not unwise. The same could be said of a Singaporean working in a foreign country; he or she may provide a different view to the employer—thus linked tightly with the attribution theories mentioned.

Lastly, countries may maintain some means of protectionism for their own workforce but at the same time open a percentage of jobs to foreign talents to augment and broaden the viewpoints of the job at hand. If every economy does this, with proper management of its population growth, the world is set to benefit from economies of scales than competition.

References

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Chapter 69
Trust or Cultural Distance—Which Has More Influence in Global Information and Communication Technology (ICT) Adoption?

Kallol Bagchi, Purnendu Mandal and Khendum Choden

Abstract Interpersonal trust (or simply trust) plays an important role in global information and communications technology (ICT) adoption. Similarly, cultural distance (CD) could also be an important factor. This article provides empirical evidence that trust matters in global ICT adoption, but not CD, after controlling for education and economy. This may provide a partial explanation as to why Asian tiger nations, despite their big cultural distance values were successful in phenomenal ICT/economic growth. Pooling data for three ICT products from multiple nations, it was found that trust is significant when ICT adoption is considered. It is possible that although the direct influence of CD on ICT adoption is not significant, CD may influence global ICT adoption indirectly.

69.1 Introduction

The adoption of information and communication technology (ICT) varies greatly across countries. Identifying all of the factors promoting or inhibiting ICT adoption is of great concern to ICT vendors, national policy makers, business managers and decision makers. As more organizations enter the international market, and international unions increase, the need to identify these factors becomes more pronounced. In particular debate rages when one tries to explain how Asian tiger nations were able to demonstrate phenomenal ICT/economic growth in spite of their high cultural distance (CD) values (as measured from the U.S. using four Hofstede's cultural dimensions).

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Clearly roles of different variables need to be examined empirically. One factor which has been rarely empirically considered in ICT adoption at a global level (involving many nations) is that of interpersonal trust or simply trust [1]. In its broadest term, trust can be used to denote a shared understanding about who is or is not to be included, contracted or relied upon. The role of trust in conducting business has been well known for quite some time [2]. Similarly, cultural distance (CD) is an important concept in international business. CD is defined in this paper as the difference in culture between a nation and the U.S. CD can be a separate and important factor that may play a role in ICT adoption at a global level. Additionally, it is a parsimonious construct designed from several cultural dimensions that can be used at a global level of study in ICT adoption. As Shenker [3] mentioned the construct cultural distance may simplify and sometimes bypass the often-complicated concept of culture and thus has been used as a hard variable in some international management studies.CD is an important dimension that has been used to point out the dichotomy of ICT/economic growth between Western nations and Asian tigers.

Interpersonal trust data as well as CD data (cultural distance from the U.S.) varies significantly across nations. In 1994 WVS survey, Brazil had a trust index value of approximately 5 (low trust) whereas Norway had a trust index value of roughly 64 (high trust) [4]. India and China, although considered as third world nations had high values of trust. The CD of the U.K. from the U.S. is 12.88 whereas the CD of Japan from the U.S. is 73.66. This wide divergence in trust and CD values emanates from different social values and belief systems across nations.

This paper examines the relationship between trust, CD, Economy and Education and ICT adoption at a global level, with a view to find out which variable is most important in ICT adoption.

69.2   Theoretical Framework

It has been recognized that country-to-country differences exist that should be taken into account when developing and implementing global IS applications [5]. This logic can also be applied to ICT adoption. Kirs and Bagchi [1] have argued and found support for the influence of trust in a variety of adoption of ICTs. As noted earlier, trust varies from one nation to another. A key to understanding global ICT adoption, therefore, could be based on understanding the differences in trust and CD. Prior research in global ICT adoption has largely ignored the influence of trust and cultural distance and other factors on ICT adoption simultaneously at a global level, although the role of cultural values in ICT adoptions has been considered [6]. There could be additional factors such as economy and educational level that contribute to ICT adoption. The various postulated relationships are shown in the model of Fig. 69.1. The components of the model are described next.

Trust and Cultural Distance   According to Hofstede, there are several dimensions of national culture. Cultural values such as uncertainty avoidance (UAI), power distance (PDI), masculinity/femininity (MAS), individualism/collectivism (IDV) and
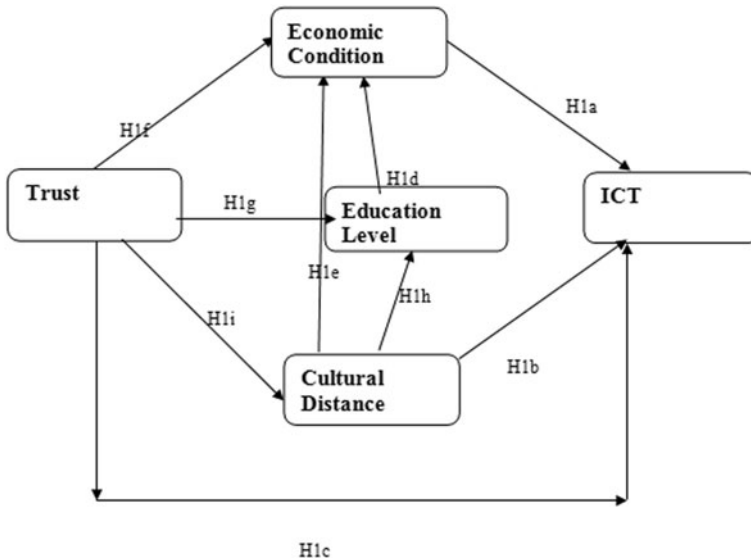
Fig. 69.1 A Model of ICT adoption

long term/short term orientation, which form the core of nationality, vary from one nation to another. These cultural dimensions vary widely for different nations [7]. The CD in the present paper is measured based on Hofstede's cultural dimensions using Kogut and Singh's formulation [8]. The CD of a nation is calculated with the U.S. as the base country. Different nations will exhibit different cultural distance values from the U.S., Like CD, trust is a fundamental concept. There could be both way causation between trust and CD; however, in this article we confine ourselves to only one-way relationship from trust to culture. The U.S. has a rank of 19 among 74 nations in MFI (high MFI), a rank of 57–59 in PDI (low PDI), a rank of 1 in IDV (highest IDV) and a rank of 62 in UAI (low uncertainty avoiding). So nations with high CD (from the US) may typically have a low IDV, low MFI, high UAI or high PDI or some combination of these. As mentioned above, like CD, trust is a fundamental concept. There could be both way causation between trust and CD; however, in this article we confine ourselves to only one-way relationship from trust to culture.

The U.S. is a nation with low UAI score. In fact, a low Uncertainty Avoidance value is related to high trust as people in nations with low UAI scores tend to trust most people (correlation value: − 0.72). One of the UAI index question is: most people can be trusted. Again the U.S. has a high ICI value (high individualism) and high trust is related to high ICI [9]. Thus low cultural distance (and high trust) can result from nations with high ICI, low PDI and low UAI values. Since the nations are selected on the basis of early adoption data (at least for the two technologies, PC and the Internet), ICTs first emerged and adopted in the U.S. (a high trust nation) will subsequently be adopted more aggressively in other (mostly western) nations with whom the U.S. has low cultural distance. Thus we expect that as cultural distance (CD) value from the U.S. increases, trust will decrease.

Trust and ICT Adoption The role of trust in a computational context on security issues [10] or the human-machine relationship [11, 12] has been investigated. Any computer-based system, however, must have the trust of its users otherwise it will not be used. Many computer-based systems have earned the trust of its users through continued use and familiarity. Parties have to trust each other using a complicated set of mechanisms. Trust at a national level may not only relate to economic growth [13] but also technology use and adoption. Trust may give a competitive edge to nations in adopting ICT as people from more trusting nations will take risks and adopt new ICT more readily than less-trustful nations.

Trust and Economy Trust contributes to economic growth. According to Putnam [14], Trust brings economic growth and prosperity. Trust can also influence economic growth [2]. In an empirical study, Zak and Knack [15] observed that interpersonal trust impacts economic growth as trust affects the transactions costs associated with investment.

Trust and Education Trust can contribute to educational level of a nation. A high level of trust is conducive to better educational level. As Uslaner [16] notes, societies with higher levels of trust have institutions that function better. Trust leads to better institutions–including educational ones. It also produces higher spending for education. So the countries with the higher levels of trust will are those with higher education levels.

CD and Economy Economic growth is dissimilar in different nations. Wealthy nations may tend to exhibit less uncertainty avoidance and thus they may have a low CD. Hofstede [9] noticed that countries whose uncertainty avoidance was low were slightly wealthier than those with strong uncertainty avoidance. Power distance was also found to be statistically related to national wealth. We expect that as cultural distance (CD) value from the U.S. increases, economic condition will go down.

CD and Education It is believed that people of high UAI nations receive less education. Humana has shown that education as a % of budget is related negatively to UAI ($r = -0.37$). The U.S has a low UAI value. We expect that as cultural distance (CD) value of a nation from the U.S. increases, education level will mostly decrease.

CD and ICT adoption Nations with low UAI value insures openness to change and innovation, which could be helpful for ICT adoption from another nation with high UAI value, as ICT is often a new and innovative product. High individualism difference may also be conducive to ICT adoption. Also differences in Power Distance can cause the difference in ICT adoption between nations [17]. It is expected that as cultural distance (CD) value from the U.S. increases, ICT adoption level will decrease.

Education and Economy It is well known that better education improves the wealth of a nation [18]. So education influences economy. It may also be mentioned that education influences ICT adoption through economy.

Economy and ICT adoption It is well-known that better economic nations are better off to adopt ICT than less resourceful nations. Bagchi et al. [17] have empirically shown the impact of GDP per capita on both ICT adoption rates and levels.

Based on the above discussion, the following hypotheses are formulated which are related to ICT adoptions:

H(1a): ICT adoptions are positively dependent on economic condition.
H(1b): ICT adoptions are negatively dependent on CD.
H(1c): ICT adoptions are positively dependent on Trust.
H(1d): Education contributes positively to economic condition
H(1e): CD contributes negatively to economic condition
H(1f): Trust contributes positively to economic condition
H(1g): Trust contributes positively to Educational Level
H(1h): CD contributes negatively to Educational Level
H(1i): Trust contributes positively to CD

## 69.3   Method and Data

We pooled the data of PC, Internet, telephone to form the dependent variable ICT adoption (or IT in short for this paper) and applied SEM technique (using AMOS) to explore in detail the interrelationship between various variables simultaneously including ICT adoption. A structured equation model (SEM) using AMOS 17.0 is developed and is used for answering various hypotheses. Using AMOS, a multivariate analysis involving complex dependencies among variables can be undertaken. In AMOS, parameters are estimated by maximum likelihood (ML) method, instead of OLS method. Figure 69.2 shows the measurement and structural model.

To maintain parity in time with trust data (average of three surveys starting from 1981) [4] and Hofstede's cultural data (collected in 1980), we selected 1988 as the year for ICT adoption data (collected from the World Bank). Economic (GNP value at purchasing power parity, 1988) and Education data (secondary school enrollment (% net), 1980) were also collected from the World Bank. Also since culture and trust at a national level change slowly over time, the overall data set makes more sense for analyzing purposes. This resulted in 81 cases, adequate for applying SEM techniques for a preliminary study, as the set of 27 nations cover a substantial portion of the world population.

69.4   Analysis and Results

The final model with path coefficients is shown in Fig. 69.2. Symbols e1-e4 denote the error terms. We first discuss the goodness of fit results. Table 69.1 denotes such results from SEM analysis. The second column in Table 69.1 shows the hypothesized model of this article.
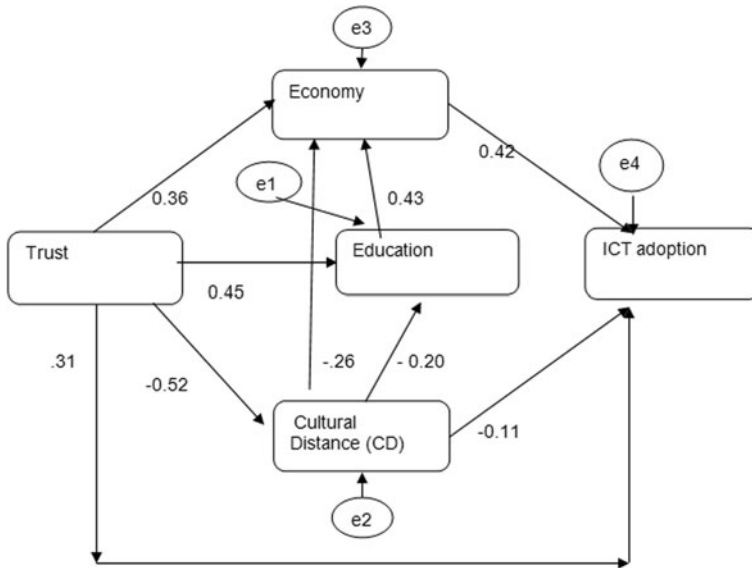
Fig. 69.2 The final SEM with standardized regression weights

Table 69.1 Goodness-of-fit for structural equation model

Goodness-of-Fit Statistic	Our Model
Degree of freedom	1
Chi-sq	0.02
Chi- sq/df	0.02($< =2.00$)
P	0.9 ($> .05$)
GFI	1.00 (close to 1 for good models)
AGFI	0.99 (close to 1 for perfect fit)
NFI	1.000(> 0.90)
RMSEA	0.000 (< 0.05: close fit in relation to df)
TLI	1.044 (close to 1 for very good fit)
Standardized RMR	0.0016 (close to 0 for a perfect fit)

We next discuss measures based on minimum value of discrepancy. Table 69.1 shows that the Chi-sq value (2) as well as the *relative* chi-square Chi-sq/df (= 0.02 < 0.5) are well within the permissible limits. **P** is a "*p* value" for testing the hypothesis that the model fits perfectly in the population and should have a value > 0.05 for a good fit. Our model has a p-value of 0.9.

Two measures based on population discrepancy are next discussed. The root mean square error of approximation, (RMSEA) should have a value of about 0.05 or less which would indicate a close fit of the model in relation to the degrees of freedom. In the present case, the value is 0.000 indicating a good fit. A related measure, the RMR (root mean square residual) is the square root of the average squared amount

by which the sample variances and covariances differ from their estimates obtained under the assumption that hypothesized model is correct. The standardized RMR value for the present model is close to 0 (= 0.0016), as required for a good fit.

We next discuss four overall fit measures. Various overall fit indices values are also close to 1 and (> 0.90) as required for a good fit. The typical range for The Tucker-Lewis coefficient (*TLI)* lies between 0 and 1 (but it is not limited to that range) and *TLI* values close to 1 indicate a very good fit. The present model yielded a TLI value of 1.044 showing a good fit. The normed fit index (*NFI*) should have a value > 0.90 and close to 1. Our model provides a value of 1 indicating a good fit. Another goodness of fit measure, the GFI (goodness-of-fit index) had a value of 1 indicating a good fit. The AGFI (adjusted goodness-of-fit index) additionally takes into account the degrees of freedom available for testing the model and is bounded above by 1 to have a good fit. The present model yielded a value of 0.99, which indicated a good fit.

Table 69.2 denotes the structural fits containing path coefficients and their significances. The structural model examines the relationships between the unobserved or latent variables.

All of the path coefficients except the path ICT → CD was significant. Thus hypotheses 1(a) to 1(h) could be supported from the model testing results with the exception of hypothesis 1(i). The results are summarized in Table 69.3.

69.5   Discussion and Conclusions

The SEM approach tested the validity of the model proposed in Fig. 69.1. It found that the model could prove to be valid with the exception of only one path: CD→ ICT. Although the correlation coefficient between CD and ICT was significant (− 0.54), the path coefficient in the model was not. This could be due to the fact that CD influences ICT adoption through other measures (Trust, Economy and Education in the model). CD influences economy and education as hypothesized. As postulated earlier, trust does influence ICT adoption, together with the economy. Trust also influences education, economy and CD, as expected. For example, in cross-national studies, trust has been shown to contribute to economic growth [15].

This preliminary research empirically examines the influence of trust and CD on global ICT adoption. Naturally, it has several limitations. First, the number of nations used is limited due to data availability that has led to a more parsimonious modeling scheme. Second, the nature of data is secondary, as in the case of many cross-national studies. However, this is perhaps inevitable in a cross-national study involving many nations. Lastly data is based on only one year, and the results need to be interpreted with caution. In spite of these drawbacks, the study contributes in several ways. This article provides empirical evidence that trust matters more than CD in global adoption of ICT. This may also partially provide explanation of why Asian tigers with high CD values were able to register phenomenal ICT/economic

Table 69.2 Path coefficients

Paths	Estimate	S.E.	C.R.	P
GNP ← EDU	199.89	33.03	6.05	0.000
EDU ← CD	− 0.13	0.069	− 1.91	0.056
EDU ← Trust	0.45	0.11	4.24	0.000
GNP ← CD	− 78.13	20.96	− 3.73	0.000
CD ← Trust	− 0.81	0.147	− 5.50	0.000
GNP ← Trust	167.89	34.97	4.80	0.000
ICT ← Trust	4.52	1.57	2.89	0.004
ICT ← GNP	0.013	0.004	3.51	0.000
ICT ← CD	− 1.02	0.89	− 1.14	0.25

S.E. Standard Error, *C.R.* Critical ratio, *P* P value, *ICT* The set of ICTs per 100 in year 1998, *EDU* Secondary school enrollment (% net) per 100 in 1980, *CD* Cultural Distance of a nation from the U.S., *GNP* GNP per capita of a nation in 1998, *Trust* Average Interpersonal Trust Index value of a nation

Table 69.3 Summary of results

Hypothesis	Relation between	Statistically significant?
H(1a)	ICT adoption and economic condition	Yes
H(1b)	ICT adoption and CD	No
H(1c)	ICT adoption and Trust	Yes
H(1d)	Education and economic condition	Yes
H(1e)	CD and economic condition	Yes
H(1f)	Trust and economic condition	Yes
H(1g)	Trust and Educational Level	Yes
H(1h)	CD and Educational Level	Yes
H(1i)	Trust and CD	Yes

growth in recent times. Variables such as various forms of trust and cultural values need to be examined. Second, the study includes a set of emerging nations, not merely developed ones. The SEM technique provided additional insight in the interrelationship between various other indicators. The study has implications for researchers and practitioners. Trust creates a favorable environment of cooperation and productivity, which in turn contributes to ICT adoption. Future studies may focus on testing with more nations and a larger set of ICTs and with later year data on trust and a broader CD (including long term/short term orientation and subject to availability) to examine the strength of trust and CD on global ICT adoption, after suitable controls. This study has implications for Asian nations. Some of the Asian nations are well-developed and are high collectivistic in nature (Asian Tiger nations), while others are developing and have various CD values. Developing Asian nations may also pay more attention to low CD and high trust generation as these may help them with faster ICT adoptions. For developed Asian nations, high economic growth took place in spite of low Individualistic values. It needs to be investigated in detail what CD and trust values have led to such higher economic growth in these nations and more importantly whether those values influence ICT adoption.

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Chapter 70
A Critical Review of Cultural Stereotypes Underpinning Research on Self-Construal and Cognitive Dissonance

Jamie J.Y. Lee and Senthu Jeyaraj

Abstract Prior cross-cultural dissonance research has relied on cultural stereotypes and assumed that participants from Western cultures are individualistic and have independent self-construals while participants from Asian cultures are collectivistic and have interdependent self-construals. The present article provides a critique of the theory of independent and interdependent self-construals as well as prior cross-cultural research on dissonance, and suggests using self-construal priming to avoid relying on cultural stereotypes in accounting for differences in dissonance experienced. Implications and future research directions are discussed.

70.1 Culture and Self-Construal

Self-construal describes how individuals characterize and assign meaning to themselves [1]. In their seminal article on culture and self-construal, [2] compared independent self-construals typical of American and Western European cultures with interdependent self-construals typical of Asian, African, Latin-American and some southern European cultures.

All individuals construe themselves in independent and interdependent terms, and exposure to cultural practices encourages the expression of one self-construal over another [1]. Similarly, [3] distinguished between the private, public and collective selves, and argued that different cultures led to differences in the expression of these selves. Individualistic cultures encourage the development of the private self while collectivistic cultures encourage the development of the collective self [3].

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Fig. 70.1 Theory of independent and interdependent self-construals
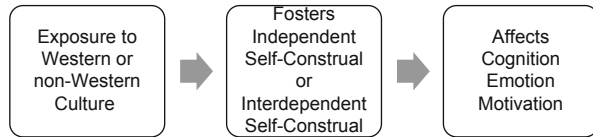
70.1.1 Theory of Independent and Interdependent Self-Construals

Self-construal has a major impact on individuals' cognitive, emotional, and motivational processes [2]. As part of their review of evidence in support of their theory, [2] examined research highlighting cultural differences in perception of the self and other, causal attribution, nature of self-knowledge, emotional experiences, and motivational processes.

As shown in Fig. 70.1, [2] concluded that empirical evidence supported their argument that exposure to a Western or non-Western culture encourages the development of an independent or interdependent self-construal respectively, which impacts upon cognitive, emotional, and motivational processes.

Even though [2] never explicitly stated that independent and interdependent self-construals correspond to the cultural dimensions of individualism and collectivism respectively, individualism has typically been associated with independent self-construal and collectivism with interdependent self-construal [1, 4].

More specifically, [2] maintain that Western cultures espouse independent self-construals, where individuals are encouraged to view themselves as distinct from others, and define themselves with internal and stable traits such as personal attributes and abilities. For those with independent self-construals, interpersonal relationships serve as a means of social support and social comparison [1, 2]. Being the same person in different situations is a hallmark of maturity for individuals with independent self-construals [1].

In contrast, non-Western cultures espouse interdependent self-construals, where important interpersonal relationships and group memberships factor significantly in self-definition [1, 2]. As such, behaviour is largely affected by the thoughts, feelings, and actions of close others [2]. Emphasis is placed on cooperation, fitting in, and on maintaining harmonious interpersonal relationships while the regulation of emotions and actions to suit situational demands are considered mature behaviour [1, 2].

70.2 Cognitive Dissonance and Self-Construal

Cognitive dissonance theory asserts that dissonance is an uncomfortable tension state that occurs when an individual has two or more cognitions that are inconsistent with each other. That individual is then driven to action in order to reduce the psychological discomfort associated with the state of dissonance. Dissonance can

thus be understood as a driving force that leads to activity targeted at dissonance reduction.

Cognition refers to any knowledge, beliefs, or opinions about oneself, others, or things in the environment. The theory of cognitive dissonance thus extends to different psychological concepts and has a wide scope in terms of applicability. Two cognitions that are consistent are said to be consonant while two cognitions that are inconsistent are said to be dissonant.

Motivation for dissonance reduction increases as the magnitude of dissonance experienced increases. Dissonance reduction can be achieved through a number of ways, one of which is the elimination of discrepant cognitions. For example, if dissonance existed between the behaviour of smoking and the concern about the effects of smoking, dissonance reduction could be achieved by not smoking.

Alternatively, dissonance reduction could be achieved by way of adding consonant cognitions. Thus, using the aforementioned example, adding a consonant cognition to reduce dissonance could take the form of seeking out information regarding the benefits of smoking.

Research has also shown that reducing the importance of discrepant cognitions and increasing the importance of consonant cognitions are effective means of reducing dissonance. Using the aforementioned example, an individual who smokes could actively seek information regarding accident rates on the road and remind himself about the relative harmlessness of smoking compared to driving his vehicle as a means of reducing the importance of a discrepant cognition. On the other hand, he could think about how important it is to him that smoking enables him to socialize with colleagues at work as a way of increasing the importance of a consonant cognition.

The self has been implicated in early revisions to cognitive dissonance theory. To this end, the self-consistency theory of dissonance maintains that dissonance is not merely a result of just any two inconsistent cognitions, but is dependent on significant aspects of an individual's self-concept and expectations about behaviour derived from these self cognitions. As most individuals have positive self-concepts, dissonance reduction is targeted at maintaining a view of the self as morally good and capable.

Similarly, the self-affirmation theory of dissonance asserts that a person engages in self-affirming, image-maintaining processes when confronted with information that threatens the integrity of his or her self-image, and does so until this image is repaired. Hence, dissonance is experienced when a person's positive self-view or self-concept is threatened.

Research has shown that dissonance reduction results from inconsistency between behaviour and cognitions about the self. For example, [16] examined dissonance effects as a result of performances that were inconsistent with performance expectancies. They found that participants demonstrated the greatest dissonance effects when they had high performance expectancies but received low test scores, and they had low performance expectancies but received high test scores. In a study undertaken by [14], participants wrote counter-attitudinal essays and completed a value scale that was either consistent (self-relevant) or inconsistent (not self-relevant) with their value orientations. Results indicated that when participants completed a self-relevant

value scale, they experienced self-affirmation, and did not engage in attitude change indicative of dissonance reduction. However, completion of a value scale that was not self-relevant did not eliminate attitude change indicative of dissonance experienced. Hence, empirical evidence highlights the role of the self in dissonance processes.

70.3 A Critical Review of the Theory of Independent and Interdependent Self-Construals

Reference [4] found fault with the theory of independent and interdependent self-construals [2], stating that the cross-cultural evidence reviewed failed to: (a) directly measure the cultural dimensions of the countries tested, (b) directly measure the self-construals of participants tested, (c) establish that the cultural dimensions of participants tested were associated with the specified self-construals and (d) establish that the specified self-construals were associated with various cognitive, emotional, and motivational outcomes.

Likewise, [17] conducted a meta-analysis of research on individualism and collectivism as well as their psychological implications, highlighting that prior research lacked empirical evidence demonstrating that European Americans were higher in individualism than the comparison group (often East Asians). Reference [17] also criticized prior research for accepting cross-national differences as evidence indicative of between-group differences having a cultural source without directly assessing the cultural dimensions of participants tested.

Hence, past research that purportedly examined cultural differences has really been comparing country or ethnic group differences, where country or ethnicity was the independent variable and the dependent variable was the psychological variable of interest [4]. That is, the observation of between-groups differences does not justify the conclusion that these differences have a cultural source.

70.4 A Critical Review of Cross-Cultural Dissonance Research

Similarly, cross-cultural research on dissonance has typically been undertaken by comparing country (e.g., America vs. Japan) or ethnic group (e.g., European Canadian vs. Asian Canadian) differences. More specifically, prior cross-cultural dissonance research is based on the assumptions that individuals from Western countries come from individualistic cultures that foster independent self-construals while individuals from Asian countries come from collectivistic cultures that foster interdependent self-construals. Researchers have subsequently argued that differences in dissonance findings between countries or ethnic groups tested are due to differences in participants' culturally sanctioned self-construals, thereby assuming that culture was responsible for observed differences without making use of empirical justification.

Furthermore, self-construal differences have potentially been confounded with other variables (e.g., socioeconomic, demographic, or religious variables) that differ between cultures [4]. Reference [4] thus argued for more rigorous methodology to demonstrate that observed differences between groups of individuals tested can be accounted for by differences in culturally sanctioned self-construals.

70.5   A Proposition to Avoid Cultural Stereotypes: The Use of Priming

Priming can be understood as mentally activating a concept to make it accessible. In the field of cultural psychology, the development of priming techniques enabled researchers to move away from self-report measures and from relying on culture as a proxy towards experimental manipulation of self-construal [1]. Furthermore, the use of priming allowed investigation of causal hypotheses by way of temporarily activating a mode of self-construal, while ensuring greater internal validity than relying on quasi-experimental methods of cross-national studies [1].

Even though exposure to one's culture encourages the chronic activation of one self-construal over the other, the rationale underpinning priming is that regardless of cultural background, all individuals think of themselves in independent, relational, or interdependent terms [1]. Priming allows temporary access to an independent, relational, or interdependent self-construal so that the effects of any kind of self-construal on behaviour can be observed [1].

Research has made used of priming to show that temporarily accessible self-knowledge influences behaviour and that the same pattern of behaviour has been observed in comparisons of individuals from individualistic and collectivistic cultures. For example, [26] developed the Similarities and Differences with Family and Friends task to examine the effects of priming the private (independent) or collective (interdependent) self among North American and Chinese students from the University of Illinois [1]. Results indicated that irrespective of cultural background, participants who thought about differences provided more idiocentric responses (responses that referred to personal qualities, beliefs, and attitudes) and less group responses (responses that referred to an experience of common fate or group membership) than participants who thought about similarities. Reference [29] and [30] also found the Similarities and Differences with Family and Friends priming task effective.

Other priming techniques also demonstrated success in making different self-construals accessible. For example, [31] adopted the pronoun-circling priming task to examine self-construal variations on a social judgment task. European American undergraduates read a paragraph about a city trip and were asked to circle pronouns within the text. Participants in the independent condition circled pronouns that represented the individual (e.g., I, mine), while participants in the interdependent condition circled pronouns that represented relationships (e.g., we, our). Results

indicated that participants in the independent condition endorsed more individualistic values while participants in the interdependent condition demonstrated a more collectivistic orientation in social values and judgements, supporting the notion that priming an independent or interdependent self-construal within an individualistic culture mirrored commonly observed differences in individualistic and collectivistic cultures.

In summary, prior research has demonstrated the effectiveness of priming the independent and interdependent self.

70.6 Implications and Future Research Directions

Prior cross-cultural dissonance research has relied on the assumption that Westerners come from individualistic cultures that foster independent self-construals while Asians come from collectivistic cultures that foster interdependent self-construals in surmising that self-construal differences account for observed differences in dissonance findings.

The current review highlights that it is erroneous to assume that those who come from individualistic cultures make use of independent self-construals while those who come from collectivistic cultures make use of interdependent self-construals. Prior research [1] demonstrates that regardless of their cultural background, individuals may be primed to make use of either an independent or interdependent self-construal style—this implication extends to businesses at the professional development level—for example, when new staff are being inducted into a company, priming may be used to assimilate them into the existing corporate culture.

Future research may address the aforementioned limitations by making use of priming to avoid relying on cultural stereotypes. For example, regardless of their cultural origin, participants may be exposed to an independent or interdependent prime before they complete a dissonance inducing task. In this way, direct evidence demonstrating that self-construal variations account for differences in dissonance experienced can be obtained.

70.7 Conclusion

In conclusion, this paper critiques the theory of independent and interdependent self-construals [2], as well the methodology made use by prior research that examined how self-construal differences affected cognitive dissonance experienced. The authors suggest that future research make use of priming to strengthen methodology and obtain empirical evidence which demonstrates that differences in dissonance experienced between individuals from an individualistic Western culture and collectivistic Asian culture were due to self-construal differences.

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Chapter 71
Issues in Transnational Higher Education Regulation in Vietnam

George Nguyen and Anna Shillabeer

Abstract The expansion of western education into many Asian countries has raised concerns about maintaining the quality of higher education as compared to the home location and complying with quality requirements in the destination location. Similar to other countries in Asia, Vietnam is in a period of significant transnational education influx from the West (Mok, International Journal of Educational Management, 22(6):527–546, 2008). Research has identified that the role of government in setting up appropriate regulations to regulate HE offerings from external providers is very important to safeguard benefits and address issues faced by Vietnamese students. A series of violations of cooperation programs with western partners in Vietnam demonstrate that there is a lack of appropriate governance in quality control for the penetration of western transnational education in this country(Vietnam Breaking News, 2012; Vietnamnet Foreign business school closes down, leaves students in lurch, 2012). This paper examines the approach of the Vietnamese government to the regulation of transnational higher education and the impact of residual issues.

71.1 TNE Overview

According to Hussain, the three major types of transnational education are: People mobility-based education, Program mobility-based education, Institution mobility-based education [4].

People mobility-based education is where students or academics travel for teaching and studying. Program mobility-based education involves the mobility of educational programs and curricula via e-learning or educational partnerships with joint courses and joint curricula. Institution mobility-based education is the mobility of the institution moving across borders to set up a campus abroad. The delivery is diversified and may include franchising, program articulation, branch campuses,

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off-shore institutions, corporate universities, and international institutions, distance-learning and virtual universities [4]. Vietnam is host to all of these models of operation with people and institution based mobility being the most prevalent and the focus of the work presented here.

The WTO, defines four categories of higher education [5]:

1. Consumption aboard: consumer travels abroad to receive services in provider's countries. This is the model for most of the countries where TNE is provided and parallels the people based mobility model listed above.
2. Cross-border delivery: consumers and foreign providers are in their home locations and the service is delivered through communication channels as in the program mobility option outlined by Hussain. Distance learning and remotely-supported international distance education are in this category. If local support for delivering is provided such as persons providing academic or administrative services, this is considered a commercial presence. This is the least common model in Vietnam with the vast majority of students preferring face to face instruction in a standard classroom. This is the traditional delivery model they become accustomed to throughout their primary and secondary schooling.
3. Commercial presence: providers deliver educational services in the consumer's home country. In education, this is the model where foreign courses are taught through a local campus or a private college that acts as a local partner with arrangements for offshore programs. Such an example is where RMIT University, Australia, delivers its programs through Taylors College in Singapore through a commercial licensing agreement [6].
4. The movement of natural persons: the mobility of people across borders to deliver services. In education, it refers to academics movements to student's countries to deliver an intensive course, a seminar or workshop. It might be a subset of a commercial presence. This is model employed by Carnegie Mellon University in Vietnam to provide training and workshops to government and other professionals.

Vietnam is a relatively new player in the TNE space and is still developing capability to deliver western style education programs. There is not always a sufficiently strong language capacity in local academics which reduces the capacity to deliver as an employee so external staff are brought in. Most students also do not usually have the required English or other language skills and hence language training is usually a part of the university's student service provision for commencement. This environment makes applying a commercial only and cross border or program mobility based education model a less effective proposition, especially where they wish to graduate students with globally relevant skills and attributes. English language in particular is a desirable outcome for many students in Vietnam and they are willing to pay a premium to be taught by foreign instructors and gain the benefit of being highly functional in a second language. Given that many graduates wish to work outside of Vietnam and up to 30 % of RMIT Vietnam graduates engage in higher degrees for which there is a pre requisite of previous learning in an English speaking environment, the benefit of an institution based mobility program is self-evident. However this method of TNE provision is potentially the most risky in terms of financial, personnel, legal and

other considerations due to the increased investment required. Commercial presence seems to be the most popular model in Vietnam as it brings student an economic way of study a foreign degree at their home countries.

71.1.1   Regulatory Models

There are a number of regulatory models for transnational education applied around the world [4]:

No regulations: This is a free operation mode that has no regulation or control over the foreign providers. Providers have freedom in running their academic programs in the host country with their own criteria and strategies. This model has been very popular in countries such Czech Republic, France, Malta, Mexico, Nigeria, Russia, Serbia, and Sri Lanka.

Liberal-Flexible: The academic programs can be flexibly negotiated between the foreign provider and host country as long as foreign providers meet the host country minimum conditions and any criteria of the host country before operations start. This model is applied in Argentina, Bahrain, Estonia, the Netherlands, New Zealand, Norway, Peru, Slovenia, Sweden, Switzerland, and the United Kingdom.

Moderately Liberal: Forms rules & regulations of registration and requires that foreign institutions gain accreditation or other formal permission by the host country before operation. This model is mostly applied in some Asia countries including Australia, Pakistan, Bangladesh, China, Egypt, Hong Kong, Israel, Jamaica, Singapore, and Vietnam. As this model applied in Vietnam and it requires close observation of the governmental frameworks for business and education operations

Transitional: From Liberal to More Restrictive: Moving to a more restrictive regulatory framework where registration and/or accreditation is compulsory to the national system in order for foreign institutions to be allowed to operate and/or for their degrees to be recognized. This model can be found in India and Pakistan

Transitional: From Restrictive to More Liberal: In contrast with the transition from liberal to more restrictive, this loosens regulatory restriction to create more opportunities for foreign institutions who wish to enter and operate in the host country. Japan and South Korea are the countries that are moving from restrictive to more liberal.

This regulatory framework is important as it will drive all planning and quality assurance and guidelines for program providers as well as academic and administrative guidelines.

71.2   The Vietnamese Context

In 2012, Vietnam had 111 international projects investing in the provision of local education. These projects were located in six cities including Hanoi, Ho Chi Minh City, Vung Tau, Can Tho, Hai Phong and Danang. Projects in Hanoi and Ho Chi

Minh City account for 39.6 % and 45.9 % of projects respectively [7]. Total foreign education investment in Vietnam for 2012 was estimated at USD$ 235.72m [8]. Vietnamese Ministry of Education 2012 Q4 statistics for foreign educational investment are shown in Table 71.1. Whilst the higher education sector currently has the least investment it has attracted a disproportionate number of negative reports concerning regulation non-compliance [2, 3] and hence is a focus for the work presented in this paper.

The benefits of TNE to Vietnam include the accessibility of learners to higher education, the mobility of students and academics and the uniqueness of international TNE programs of study. Similar to many other countries in the region, Vietnam is eager to take advantage of these advantages. International education collaborations have been prioritized by the Vietnamese government as a key policy focus for the future. It is hoped that these collaborations will provide greater choice in higher quality education options for Vietnam and will better equip graduates to compete in the global marketplace.

A key concern of the Ministry of Education is the need to ensure that education providers who enter the Vietnamese market do not infringe local education regulations. This is not only in regards to the provision of education but also recruitment of staff and general business management. This is especially relevant where the provider is using other licensed or franchised institutions to run their businesses, recruit students, or where they are investing heavily to meet infrastructure or faculties commitments. These are common areas where local requirements are not being adequately met [9]. Some foreign institutions including the Senior Management Training Centre (SITC) in HCMC, Hanoi Raffles from Singapore and the International University of Asia and International University VINAJUCO have already received warnings regarding their operational processes[9].

The impact of non-conformance, or an inability to conform, with local regulations is that the quality of education that has been promised to students is not guaranteed and in the worst case the institution leaves the country and leaves students with little protection and no qualification.

71.2.1 Vietnamese Regulatory Environment

President Truong Tan Sang claimed in 2013 that education and training are important for the sustainable development of each country, especially in the context of globalization and the knowledge economy developing today [10]. Vietnam is ready and able to embrace of global trends in education and become a player on the world stage in terms of graduate placement in the workforce. In recent years the Vietnamese Government has prioritized education at the top of the national policy and allocates resources, proposed mechanisms and policies to actively and sustainably develop it and achieve positive results. Positive results are measured in terms of realised continuous improvement of the national education system and student outcomes, the coverage and accessibility of quality education especially in the higher education

Table 71.1 Foreign education investment in Vietnam in 2012 [8]

Short training course	40 %
General education	32.4 %
Kindergarten	25.2 %
University	5.4 %

and vocational training sectors and the quality of education across the board in comparison with global best practice [10].

In 2001 the Ministry of Education and Training [11] issued Decree No.18/2001/ND-CP regarding the setting up and operation of Vietnam-based foreign cultural and/or educational establishments. In article 5 where granting, extension, modification, supplementation and withdrawal of operations permits are outlined, it states that in order for a foreign educational institution to establish as a sole entity it must meet the following criteria:

Having legal status under the law of the country where it has been set up;
Having a charter, clear operation guidelines and objectives and an operating duration of 3 years or more;
Having programs and/or projects, which the Vietnam is interested in and which are feasible and aimed to promote the development of Vietnam's culture and/or education.

And for a joint-venture establishment the Vietnamese party must fully meet the following conditions:

Being an organization or individual that has operated for at least 5 years in the field intended for joint-venture;
Having documents certifying that its legal status and financial situation satisfy the joint-venture conditions specified in the joint-venture contracts.
The foreign party must also fully meet the following conditions:
Being an organization with legal person status or an individual with legal capacity in the home country;
Having operated for at least 5 years in the field intended for joint-venture;
Having necessary material conditions and technical facilities and equipment as required by the agreed contracts.

If all parties conform and meet the requirements, permits will be granted by The Prime Minister for independent or joint venture operations to provide tertiary or postgraduate education. FCE (Foreign Cultural and/or Educational Establishments) operating mainly in the field of education and training will be considered by The Minister of Education and Training. Those organisations operating mainly in the context of job training will be considered by The Minister of Labor, War Invalids and Social Affairs. Importantly, if an authority permits the setting up of FCE establishments in Vietnam, they will also be responsible for extending, modifying, supplementing and withdrawing permits, temporarily suspending, terminating and dissolving FCE establishments in Vietnam [12].

This suggests that there are a number of levels of governance over TNE providers and their operations and some overlap exists between functions and definitions. This creates a complex and often ambiguous environment in which to operate and naturally

attracts the potential for unintended non-compliance unless there is a very clear definition of the jurisdiction prior to commencing operations. Where the incoming provider does not have the capacity to work within the Vietnamese language, culture and legal systems the landscape is fraught with danger and it is little surprise that many are now experiencing critical issues to their Vietnamese presence [9]. A good example of this is the case of Melior Business School from Singapore. The Minister of Labor and Ministry of Planning and Investment jointly issued the license for operating while the War Invalids and Social Affairs department and The Ministry of Education are both in charge of professional activities and personnel of institutions that have foreign investment. There are therefore four different governance models in effect each with its own nuances and requirements, some of which overlap and some are divergent on the same topic. It is unclear when and who will be checking professional activities and personnel in the institutions. When problems occurred, the slow mobilization and cooperation of these four agencies facilitated the school's escape before any legal punishment was effected. The enrolled students at the time were left with an incomplete transcript, little academic evidence to present to a continuing provider, significant out of pocket expenses and a natural distrust of TNE as a result. In a strong group based culture such as Vietnam this can have serious long term impacts for the TNE sector.

Some institutions have confused students by using reputed educational brands to attract students and not committing to proper investment for infrastructure and faculty and hence not delivering on promises. Many institutions entering the market rented modern places at the beginning to fulfill the infrastructure requirement and to attract students but then moved to cheaper premises to reduce cost [13]. The Ministry of Education and Training admitted for the lack of synchronization of legal documents, obsolete and slow innovation of management and procedures leading to these infringements. Whilst the organization has to commit to a 3 year term there is no requirements to maintain the initial branding or quality presentation. The weakness in task and responsibility assignment between state management agencies at the central and local authorities in the evaluation, establishment for operation and management of education providers should be a focus for future reform. This would help to prevent a repeat of past issues that could deter further investment in the Vietnamese higher education sector. The apparent lack of coordination between state management agencies in monitoring activities, inspecting and evaluating educational institutions and assisting them to grasp the requirements, solve problems and handle errors, creates an environment where foreign institutions can break the rules easily either intentionally or inadvertently. The operational problems are further exacerbated when a provider changes their location and no longer understand which jurisdiction will be in charge of monitoring and managing future changes.

In order to overcome these legal flaws, the Ministry of Education and Training issued Decree 73/2012/ND-CP regulating cooperation and foreign investment in the field of education for educational institutions in 2012 to tighten regulations and ensure the quality of educational investment and cooperation over the life of the operation. The decree defined several types of foreign-invested educational institutions that were permitted to establish including Vocational training institutions and Universities with specified investment conditions.

Vocational training, investment must have the capacity to invest at least 60 million VND/ trainee (excluding the cost of land use). Total minimum investment capital is calculated on the basis of the number of equivalent full-time trainees at the time of highest expected training scale. (Put values in USD also.)

Professional institutions (excluding vocational training centers) must have the capacity to invest at least 100 million VND/ student (excluding the cost of land use). Total minimum investment capital is calculated on the time of highest expected-training scale, but not less than 100 billion VND.

Universities (excluding vocational training centers) must have the capacity to invest at least 100 million VND/ student (excluding the cost of land use). Total minimum investment capital is calculated on the time of highest expected-training scale, but not less than 300 billion VND.

Opening educational branch with foreign investment capital in Vietnam must have minimum investment capacity and capital equivalent to specified rate to establish educational institutions under the provisions of this Decree.

Foreign-invested educational institutions which do not build new facilities, only lease or have available facility contribution of Vietnamese partners to implement activities, the minimum investment rate must reach 70 % of the specified levels of this Decree.

Whilst this regulated the financial operational capacity for the incoming provider it does not guarantee that it will maintain initial standards and does not clarify the jurisdictional ambiguities that existed. The institution may have long term financial stability but would not have operational stability or capacity to comply with all regulations within the policy hierarchy sustainability and as such it does not address the key issues leading to failure identified in this paper.

Vietnamese regulation of TNE is currently moving towards a moderately liberal model and is actively involved in licensing and accrediting transnational providers at a number of levels but further definition through a control framework is required for this to become operationally effective. This will enable a sustainable, stable and implementable regulatory environment in which foreign education providers can successfully operate. Without this, Vietnamese students will continue to be the victims of poor practice and will not be able to realize the significant benefits that TNE can provide. The lack of sustainable governance also creates a negative trading environment that will over time lead potential investors to seek easier trading partners further reducing the potential for education maturity and increased options for the Vietnamese population.

71.3   Conclusion

Vietnamese regulations covering TNE are complex, ambiguous, opaque and poorly implemented and monitored. Many overseas providers drown within the layers of regulation and the government hierarchy and find it difficult to comply with all requirements as a result. This leaves Vietnamese students in jeopardy and potentially

sends millions of dollars of investment in education to other locations. The regulatory framework within Vietnam is the main reason for many foreign institutions and collaborations experiencing critical difficulties with the implementation, control and monitoring of those regulations by their organizations. The unclear and overlapping roles of Governmental agencies created holes in TNE regulations that enable some unscrupulous foreign institutions to bypass requirements and did not ensure service quality for Vietnamese students. It is the Vietnamese people that stand to lose the most and hence this should continue to be a priority for the Vietnamese government. Even though the new decree in 2012 had some changes but the clarity of responsibilities is still debatable. This paper calls for significant reform of current regulations and governance models to provide clarity for all stakeholders and to ensure longevity for education reform in the country.

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