

Entrepreneurship and Development in South Asia:
Longitudinal Narratives

Mathew J. Manimala
Kishinchand Poornima Wasdani
Abhishek Vijaygopal *Editors*

Transnational Entrepreneurship

Issues of SME Internationalization in
the Indian Context

 Springer

Entrepreneurship and Development in South Asia: Longitudinal Narratives

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in the Indian Context

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Preface

Transnational Entrepreneurs (TEs) operating in a host country and expanding their ventures to their home country as well as Returnee Entrepreneurs (REs) who carry business and technological knowledge from a host country to their home country and set up ventures in the home country (and use their social networks in either countries for business growth and expansion) are indeed major instruments of SME internationalization in emerging economies. Ironically, this is part of the long-term beneficial impact of the much-maligned ‘brain drain’ phenomenon that used to haunt developing countries during the major part of the twentieth century, when educated young people from these countries started moving to developed countries seeking further education and/or employment opportunities. Some of these immigrants or their descendants have started business ventures in their host countries and used their connections in their home country to expand their businesses. There are also cases of Returnee Entrepreneurs who went back to their home country and started business ventures using the knowledge acquired in the host country and the networks and connections available in both the countries. This process is often characterized as ‘reverse brain drain’ or ‘brain gain’ and has given a major impetus for the internationalization of businesses not only because of the ventures created by transnationals and returnees but also because of their business and social connections with other ventures, big and small.

Additional impetus for the internationalization of businesses came from the opening up of many regulated economies (including the USSR in 1989 and India in 1991), especially in the developing world, and the revolutionary developments in the information and communication technologies that facilitated faster (almost instantaneous) and cheaper communication with large numbers of stakeholders. The knowledge economy, where the main resource is information and ideas, has a ‘born-global’ character, as it is not easy, at the current state of technological developments, to restrict information within the boundaries of particular countries. Moreover, many countries in the developing world have started wooing transnationals and potential returnees back to their home countries with attractive tax incentives to start new ventures using their connections abroad.

It was against this background of increasing internationalization of SMEs, especially through the Transnational and Returnee Entrepreneurs, that Indian Institute of Management Bangalore (IIMB), India, in collaboration with San José State University (SJSU), California, USA, has taken the initiative of organizing an International Conference on ‘*Transnational Entrepreneurs and International SMEs in Emerging Economies: Drivers and Strategies*’ during May 20–22, 2015, at IIMB. (The details of this conference and of the research project that preceded it, along with those of its international partners, are given under the next section on Acknowledgements.) Suffice it here to say that the present edited volume (*Transnational Entrepreneurship: Issues of SME Internationalization in the Indian Context*) is a compilation of the best papers selected from those presented in the above conference.

While the TE research project has helped in developing a better understanding of the use of social networks by TEs for entering their home country and managing their businesses at home, it has also raised several questions about the nature of SME internationalization and the strategies adopted for it by SMEs in general and TEs in particular, especially in emerging economies. That was why we broadened the conference theme so as to provide a platform for academics, entrepreneurs, and policy-makers to deliberate on the issues of SME internationalization in emerging economies, with special reference to the role of Transnational and Returnee Entrepreneurs in facilitating the internationalization of their ventures as well as those of others. The papers received for the conference, therefore, related to the two main themes of (1) Transnational Entrepreneurship and (2) Internationalization of SMEs.

From among the 120-odd abstracts submitted for the conference, 70 were accepted (after a rigorous review process) for presentation. Based on further reviews and revisions, 18 papers were selected for inclusion in this edited volume. Eight of these papers were also published in a special issue (on TE) of *South Asian Journal of Management (SAJM)*, which are republished in this volume with the permission of the journal. A total of 19 chapters (i.e., 18 research papers and an introductory chapter) are organized in four parts in this book. Part I: *Introduction* contains the introductory chapter that provides a comprehensive view of the research in the fields of TE, RE, and SME Internationalization, with a special focus on the theories as well as the best practices in the fields. The subsequent three parts have papers dealing with three subthemes of the subject, namely (1) the internal (individual and firm-level) factors (Part II: *Individual and Firm-level Resources for Internationalization*, with 9 papers), (2) the external (ecosystem) factors (Part III: *Ecosystem for Internationalization*, with 6 papers), and (3) the process of organizational transformation (Part IV: *Evolution and Organizational Change for Internationalization*, with 3 papers), respectively, which contribute to the internationalization of SMEs.

The papers submitted were predominantly from India. The other countries represented are the USA, the UK, China, and Sri Lanka. For the sake of thematic unity, the papers included in this volume are selected in such a way that all of them are from the context of the emerging economies, with a large majority of them from

India. In short, one could state that this volume deals mainly with the internationalization of Indian SMEs.

We do hope that this volume will be useful for academics, researchers, entrepreneurs, and policy-makers in emerging economies. This book is inspired by the enterprising spirit and works of the TEs and REs of the South Asian region, to whom we dedicate it.

Bengaluru, India
Victoria, Canada
Bengaluru, India

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Acknowledgements

This edited volume is a compendium of 18 selected papers (organized as chapters under three sub-themes) and an introductory chapter on the subject of *Transnational Entrepreneurship*. The 18 selected papers are from among those presented at the International Conference on *Transnational Entrepreneurs and International SMEs in Emerging Economies: Drivers and Strategies*, organized by Indian Institute of Management Bangalore (IIMB), India, in collaboration with Lucas College and Graduate School of Business, San José State University (SJSU), California, USA, and held at IIMB during May 20–22, 2015.

This conference was organized as a dissemination event of a research project on *Transnational Entrepreneurship*, carried out by IIMB in collaboration with two prestigious institutions in the UK, King’s College and Imperial College, both located in London, with funding support from the RAKE Fund (Research And Knowledge Exchange Fund) operated jointly by ISBE (Institute for Small Business and Entrepreneurship) and ESRC (Economic and Social Research Council), UK. This research was conducted under the leadership of Dr. Sarika Pruthi (then at King’s College, London) in partnership with Prof. Mike Wright at the Enterprise Research Centre (ERC), Imperial College London, UK, and Prof. Mathew J. Manimala at the Indian Institute of Management Bangalore (IIMB), India, with research assistance from Dr. Kishinchand Poornima Wasdani of Indian Institute of Science, Bengaluru. After having completed the TE research project, Dr. Sarika Pruthi moved from King’s College to San José State University (SJSU), and so the conference was organized in collaboration with SJSU. We are grateful to all our collaborators for the smooth conduct of the research project as well as the conference.

We were privileged to have as our keynote speakers Prof. Elizabeth Gatewood (Wake Forest University, USA), Dr. Sarika Pruthi (San José State University, USA), Prof. Jay Mitra (University of Essex, UK), Prof. Anuradha Basu (San José State University, USA), and Prof. M. H. Bala Subrahmanya (Indian institute of Science, Bengaluru, India), whose scholarship and expertise added great value to the conference deliberations. The practitioners’ perspectives were brought in

through the two panel discussions by SME entrepreneurs and corporate leaders, which were organized by FICCI Karnataka State Council, Bengaluru, and TiE, Bangalore Chapter. Our keynote speakers and panelists were the principal sources of enrichment for the conference, whose contributions we gratefully acknowledge.

It was a great honor for us to have had Mr. St. John Gould (Director—Trade, Economics and Prosperity, British High Commission in India, New Delhi) as Chief Guest for the Inaugural Function and Prof. R. S. Deshpande [National Fellow, Indian Council of Social Science Research (ICSSR) and former Director of Institute for Social and Economic Change (ISEC)] as the Chief Guest for the Valedictory Function of the conference. Both their addresses were sources of inspiration for the delegates. While the inaugural address set the tone for the conference, the valedictory address paved the way forward to implementing the deliberations of the conference in both research and practice. We are immensely thankful to these two dignitaries.

In organizing this conference, we have received the support and assistance from several institutional partners, whom we gratefully acknowledge. Notable among these supporters are as follows: (1) N. S. Raghavan Centre for Entrepreneurial Learning (NSRCEL), IIM Bangalore, India; (2) International Consortium for Innovation and Entrepreneurship Research (ICIIE); (3) European Foundation for Management Development (EFMD); (4) Council for Small Business and Entrepreneurship (CSBE), India; (5) Federation of Indian Chambers of Commerce and Industry (FICCI), Karnataka State Council, Bengaluru, India; and (6) The Indus Entrepreneurs (TiE), Bangalore Chapter, India. We are especially thankful to FICCI and TiE for bringing in the much-needed practitioners' perspectives to this conference by organizing two panel discussions.

We are happy that this conference attracted the attention of researchers from different parts of the world. We received about 120 abstracts for initial review and accepted about 70 full papers for presentation after a rigorous review process. We thank all the paper presenters and appreciate their valuable contributions to the conference.

Among the 70 papers that were presented at the conference, 21 short-listed papers were sent for a double-blind review. Based on the review comments of the experts, 18 papers were finally selected for publication in this volume. We express our sincere thanks to each one of our expert reviewers for contributing their time and commitment toward providing critical review comments on the short-listed papers, which has helped in enhancing the research-rigour of this volume.

Academic and administrative support for the conference was provided by Dr. Princy Thomas, Mr. P. K. Thomas, and Ms. Vishnupriya Hymavathi. Secretarial and other related support was provided by Mrs. R. Gowri and Mr. N. Ravi, all from IIMB. The general academic and administrative support received from various departments of IIMB (including the infrastructure facilities) added great value to the conference. Faculty colleagues helped us with the review of papers for their final selection into the edited volume. We extend our heartfelt thanks to all of them. Last

but not least, we thank the publication team from Springer Nature's India office, particularly Ms. Sagarika Ghosh and Ms. Nupoor Singh, who worked with us in bringing out a well-vetted and high-quality publication.

Mathew J. Manimala
Kishinchand Poornima Wasdani
Abhishek Vijaygopal

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Part I
Introduction

Chapter 1

Transnational, Ethnic and Returnee Entrepreneurship: Perspectives on SME Internationalization



**Mathew J. Manimala, Kishinchand Poornima Wasdani
and Abhishek Vijaygopal**

1.1 Introduction

Globalization is here to stay, in spite of the recent happenings in global politics (like Brexit, Trump’s policies, Qatar issue, etc). One reason for the globalization imperative is that the revolutionary changes that have taken place in the information and communication technologies (ICT) are not easy to reverse. The channels of information flow have multiplied in unimaginably large numbers so that they reach every nook and corner of the world. The evolution and accessibility of the Internet has proved to be a key enabler for e-commerce, which in turn has helped businesses to become more proximate even to their distant customers. Undoubtedly, the Internet has helped the otherwise local businesses to at least think global, thus giving rise to a new term “glocal”, which denotes a process of thinking globally while acting locally. Globalization of the thought process alone would be a major reason to believe that globalization would continue to have an impact on all spheres of human activity.

One of the inevitable consequences of the ICT revolution is the emergence of the knowledge economy, which has now grown much larger in value than the

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traditional economy, especially in developed countries (Powell & Snellman, 2004). Unlike in the traditional economy where the source of value is the physical resources, the knowledge economy creates value from information and knowledge. One of the implications of this is that the traditional economy operates on the principles of economics of scarcity (as the physical resources are scarce and exhaustible), whereas the knowledge economy operates on the principles of economics of abundance (as, conceptually speaking, there is no limit to the generation of new information, knowledge and ideas). It should also be noted that for many of these new technology-based businesses, the physical location may be irrelevant, and hence, there is a possibility of their being “global” even in spite of certain political restrictions. Considering the pace of developments in ICT, it would become increasingly difficult to restrict information and knowledge to specific locations, and hence, knowledge-based businesses are likely to get increasingly globalized.

In spite of India’s ICT competencies, the country is ranked 100 among 140 countries in terms of the Knowledge Index (KI) and Knowledge Economic Index (KEI) developed by the World Bank Institute (WBI, 1999) using the Knowledge Assessment Methodology (KAM), which is based on four main parameters, namely (i) an economic and institutional regime to support knowledge entrepreneurship; (ii) educated and skilled manpower who can create, share and use knowledge resources; (iii) an efficient innovation system of firms and other institutions for generating new knowledge and/or borrowing and adapting them to local conditions; (iv) ICT capabilities for processing and disseminating information and knowledge (Chen & Dahlman, 2006). Obviously, India has to do a lot in order to catch up with the rest of the world in strengthening its knowledge sector. This is especially important, as the knowledge sector is particularly amenable to growth by internationalization, which will be facilitated by the presence of transnational and returnee entrepreneurs. Such entrepreneurs have the advantage of having imbibed the enterprising culture (Dimitratos, Buck, Fletcher, & Li 2016) and educational inputs (Krishna & Bala Subrahmanya, 2015) from their host countries and developed contacts in both their home and host countries. It is this process of “reverse brain drain” or “brain circulation” (Saxenian, 2005) that facilitates the emergence of transnational/returnee entrepreneurs, who are “born-global” (Rennie, 1993) by definition and would emerge as the principal agents of internationalization in their home countries.

Modern history is replete with examples of periodic closing and opening of economies. While the open economies like the USA and the UK are showing signs of withdrawing into their shells, the once closed economies like the USSR and the Eastern Bloc are becoming more and more open and are seeking international partnerships. The latest news in the sphere of business partnership between Russia and India is the signing of an MoU between the Russian state development institution Vnesheconombank and the Indian private sector investment company, Srei Infrastructure Finance, to create a USD 200 million IT and Innovation Fund, which will promote investment opportunities in technology companies in Russia, India

and other selected regions (PTI, 2017). It seems that the globe is vast enough to be open and active at some places despite the trends to the contrary in other parts.

India too had been a closed economy till 1991. It was during the historic budget presented in June 1991 that the Government of India announced its policy of economic liberalization. In effect, the new policy was a triple-helix policy of Liberalization, Privatization and Globalization (LPG), facilitated by the revolutionary changes taking place in ICT. While the economic liberalization has facilitated the cross-border movement of people and goods, it is the technological changes that made services move across borders. A customer can now choose to buy an international edition of a book through the Internet, decide on the channels he/she wishes to watch on cable television through Direct-to-Home (DTH) technology and choose the most economical mobile network service provider. In other words, the new technologies have a tendency to militate against economic isolationism and thereby give a greater push to transnational and returnee entrepreneurship as well as SME internationalization.

The expansion in trade and commerce across borders has had its benefits and provided impetus to a new class of risk-taking and entrepreneurial individuals, who have chosen to establish enterprises that offer their products and services to a global clientele. Any business expansion foray cannot be bereft of an understanding and appreciation of the local tastes of individuals in the countries the business intends to serve, and also needs to take into account local business regulations and principles to secure greater advantage over its competitors. Similarly, global businesses that serve local interests would need to be ahead of the locally established, and sometimes, traditionally robust, businesses that operate within the same geography and offer better products and services to the same customer base, for which they may utilize the knowledge resources from another country. The dual role of knowledge, namely that of local knowledge about customer preferences and the regulatory environment of the country of operation and the global knowledge about the technology and resources available in other parts of the world, is therefore critical for the internationalization of businesses. It is in this context of “glocalized” business operations that transnational and returnee entrepreneurs have a special advantage, as they have the knowledge of the culture and regulatory environment as well as access to the resources and networks of at least two countries. Such advantages are highlighted in several studies of transnational and returnee entrepreneurs (Tan, 2008; Chen & Tan, 2009; Patel & Conklin, 2009; Fuller, 2010; Lan & Zhu, 2014; Clark & Li, 2015; Rana & Elo, 2017).

1.2 Transnational Entrepreneurship

A transnational entrepreneur (TE), in the strict sense of the term, is an entrepreneur who starts the business in the “host” country (country of migration) and expands it to the “home” country (country of origin). Such businesses, therefore, are a subset of international entrepreneurship (IE), which would involve two or more countries

without any specific reference to migration or host countries (McDougall & Oviatt, 2000; Yeung, 2000). In other words, TE is a specific case of IE involving only two countries, preceded by a process of migration and, as mentioned above, supported by a process of “reverse brain drain” or “brain circulation” as it was characterized by Saxenian (2005). In fact, TE is often seen as a fitting antidote for brain drain (Varma, 2011).

Although it is quite intuitive to assume that TE is a branch of, or has evolved from international business (IB) or IE, Drori, Honig, and Wright (2009) point out a critical difference. Studying IB/IE involves examining a firm as the unit of study, while studying TE usually places an emphasis on the dual nature of the TE. They have defined TEs as “social actors who enact networks, ideas, information, and practices for the purpose of seeking business opportunities or maintaining businesses within dual social fields, which in turn force them to engage in varied strategies of action to promote their entrepreneurial activities” (Drori et al., 2009, p. 1001). There have also been arguments that entrepreneurship by immigrants focuses only on their “causes, strategies and economic impact on the host society”, while studying TE also focuses on these aspects in the home country (Baltar & Icart, 2013). The key here is to note that TEs engage “simultaneously in two or more socially embedded environments” (Drori et al., 2009, p. 1001) and can use their resources from both contexts creatively. TE has also therefore been stated as “a challenge to conventional ethnic entrepreneurship and ethnic economy studies that have overwhelmingly focused on immigrants’ entrepreneurial activities within the host country” (Chen & Tan, 2009, p. 1079).

The process of reverse brain drain indirectly suggests a difference in the nature of the TEs’ migration. While “migration” often implies the movement of poor unemployed people including refugees and asylum seekers from one country to another in search of employment, income and security, the migration that precedes TE is likely to be of a different kind; it is mostly about the movement of the educated class (often from a developing country to a developed one—and hence called “brain drain”) in pursuit of further education as well as high-profile jobs. Such a process would obviously have implications for the quality of businesses they would be starting later, which is why TEs (and returnee entrepreneurs, as discussed in the next section) would often be the vehicles for bringing new technology-based businesses to their home countries. It should, therefore, be clarified that TEs are part of IE, on the one hand, and migration on the other, but with significant differences (Leavitt, 2001), as is also explained with reference to the “traditional” versus “transnational” views on immigration by Lima (2010). A major difference is that migration is conceived as a uni-directional process, whereas transnationalism is a bidirectional one. TEs, unlike the perceptions traditionally held on immigrants, do have acceptable levels of social status and therefore are able to maintain/develop their own networks in at least two different economic and social contexts. They use these networks along with the associated channels of information for the purpose of furthering their business interests (Glick-Schiller, Basch, & Blanc-Szanton, 1992; Portes, 1996; Portes, Guarnizo, & Haller, 2002). Their dual geographical locations help them develop a “dual habitus” mindset, which enables the TEs to identify

unique opportunities and exploit them especially by using their network resources to the advantage of their business initiatives (Drori et al., 2009). While it is a logically tenable proposition that TEs would be more successful because of their “dual habitus” status, it is rather surprising that some studies (e.g. Yavuz, Sapienza, & Zaheer, 2012) have found TEs to be relatively less successful in comparison with other IEs, which may be due to “over-confidence” on the part of the TEs, according to Yavuz et al. (2012).

Notwithstanding such occasional findings to the contrary, the general consensus is that immigrants are more likely to be successful entrepreneurs, especially of the TE variety. The reasons identified for the greater entrepreneurial proclivity among migrants are as follows: (i) poverty, unemployment and discrimination experienced by them in the host countries (Aldrich, Cater, Jones, & McEvoy, 1983; Aldrich & Waldinger, 1990), which incidentally represents the view of the pre-globalization, pre-ICT period that regarded migrants as refugees who had to start necessity-based ventures for their survival; (ii) the feeling of being uprooted, which creates an intense desire to get reconnected and thereby leading to the development of “globalized” networks (Handlin, 1973; Portes, 1996; Chen & Tan, 2009); (iii) induction into a new culture while retaining the old one, whereby developing a “dual habitus” mindset and the orientation/facilitation of dealing with new cultures (Portes, 1996; Portes et al., 2002; Dana, Etemad, & Wright, 1999; Drori et al., 2009; Pavlov et al., 2014); (iv) revolutionary changes in information and communication technologies (ICT) and the emergence of the knowledge economy with increasing possibilities of doing business online (Lima, 2010; Vertovec, 2004); (v) declining population in the developed countries and the need felt for migrant workers (IOM, 2010; Glick-Schiller, 1999); (vi) changing geopolitical situations including the shifting policies on globalization (Crick, Chaudhry, & Batstone, 2001; Crick & Chaudhry, 2013; Newland & Tanaka, 2010).

1.3 Ethnic Entrepreneurship

The phenomenon of ethnic entrepreneurship (EE) offers a plausible link between the immigrant diasporas and TEs. Diaspora networks in host countries have been known to provide both business and personal support to members of their communities who have migrated to that host country. Chaganti and Greene (2002) note that ethnic entrepreneurs have often been identified in terms of “self-identification as belonging to a particular ethnic group or assignment to a group according to an ethnically identified surname” (p. 127). An ethnic economy is one that “consists of co-ethnic self-employed and employers and their co-ethnic employees” (Light & Gold, 1990, p. 4). From their sociological perspective, Light and Gold (1990) also highlighted the concept of the “middleman minorities” (p. 6), defined by Becker (1956) and Blalock (1967), and later explained by Bonacich (1973), and the “ethnic enclave economies” (p. 11). The concept of an “immigrant enclave” proposed by Wilson and Portes (1980) was a precursor to understanding the ethnic enclave economy.

The enclave economy consisted of immigrant workers who were employed by co-ethnics (Light & Gold, 1990). The “middleman minorities” were represented by those entrepreneurs who bridged the market gap between the elites and the masses, and the ethnic enclave entrepreneurs were those who ran enterprises in localities that were dominated by their co-ethnics (Zhou, 2004). TEs have also been discussed in their roles as “middleman minorities” by Terjesen and Elam (2009), who observed that as TEs spoke both their native language and the language of the host country, this significant linguistic advantage allowed them to exploit entrepreneurial opportunities. Bonacich (1973) also highlighted the role of the Asian immigrants in Africa, who acted as middlemen between the white settlers and the native Africans. However, with shifts in the cultural, economic and technological contexts, Terjesen and Elam (2009) reject the viewpoints proposed by Light and Gold (1990) of TEs being “bound by class, location and ethnic enclaves” (p. 1096). Light (2008) has also cited the distinction made between middleman minorities and immigrants by Bonacich (1973), who clarified that while immigrants assimilated fully into the host country, the middlemen minorities continued to remain in mono- or bi-cultural civilizations (Light, 2008, as cited by Terjesen & Elam, 2009).

Aldrich and Waldinger (1990) also note that EEs are governed by “opportunity structures”, which have been built up over the years through historical access to resources that communities can access in an environment, especially of fluctuating market conditions. They also note that EEs have an advantage as far as the production and sales of ethnic products are concerned, as they have intimate knowledge about the specific needs of ethnic customers from their diasporas. Diaspora connections may also lead to transnational linkages comprising a person’s knowledge of “culture, language and market” in both the home and host countries (Baltar & Icart, 2013, p. 201). Diaspora connections have often been a matter of significance among immigrant communities, and especially so in case of those from South Asia (Henn, 2012, 2013).

Saxenian (2000) observes that both the Indian and Chinese engineers working in Silicon Valley relied on their own ethnic strategies to enhance their entrepreneurial opportunities. The immigrant communities created local social networks that helped them to leverage the information, skills and technical know-how to start technology firms, leading to the establishment of ethnic associations. In due course, the older and more successful Indian and Chinese engineers began to mentor the younger generation of co-ethnic entrepreneurs (Saxenian, 2000).

TEs would therefore be likely to rely on and obtain benefits from their networks both in the host and the home countries. Geographical advantage, transnational networks and information flows are thus the major advantages that a TE can exploit to establish and maintain a transnational business. Drori, Honig, and Ginsberg (2006) defined the concept of “dual habitus”, meaning that the TE has perceptions that provide a reference for action in dual contexts. The TE needs to be aware of the nature of the business climate in which his/her firm operates across different geographies and should be aware of the policies and restrictions involved in these contexts. In comparison with other entrepreneurs, TEs have to deal with and learn to adapt to at least two or more institutional structures. These include the prevalent

cultural and organizational practices that operate in the home and the host countries (Yeung, 2002). As TEs maintain business and cultural ties with contacts in two different countries, it would be impossible to conceive of their establishing and maintaining a base in two geopolitical spheres without the support offered by their networks, both business and ethnic.

The phenomenon of transnationalism can be understood as a precursor to the emergence of the phenomenon of transnational entrepreneurship (TE). This is because only after understanding the shift in perceptions of migration in recent times, one can also understand how specialized forms of entrepreneurship such as ethnic entrepreneurship (EE) and TE have become part of current discussions. TE, therefore, can be understood to have stemmed from the emergence of transnationalism, or from engendering transnationalism. Glick-Schiller et al. (1992) studied transnationalism as a different method of analysis to understand migration. They argued against the contemporary view of that time that migration itself meant uprooting oneself from a society and currently held beliefs and adjusting oneself to another society with new beliefs. As TE is distinguished from international entrepreneurship (IE) in the literature, a parallel may exist in understanding transnationalism as a different form of migration. Being rooted in a “host” country did not necessarily mean severing ties with one’s “home” country. Instead, one could maintain multiple relationships—economic, familial, organizational, political, religious, and social—across borders (Glick-Schiller et al., 1992). Vertovec (1999, p. 447) attempted a definition for the phenomenon when he stated that transnationalism “broadly refers to multiple ties and interactions linking people or institutions across the borders or nation states”. The narrative about transnationalism, however, is incomplete without a discussion on how transnational identities within individuals have evolved over time.

Mavrommatis (2015) studied ethnic entrepreneurs who have settled down in Brick Lane, an inner-city area in East London, which is now famous for its migrant businesses such as “curry houses”. Although the initial settlers were of Irish and Jewish origins, the diaspora that has settled down in the area from the 1950s has primarily been from South Asia. The area is today dominated by a strong presence of Bangladeshi immigrants, although there are Indians and Pakistanis as well. Different types of businesses—Internet cafes, money transfer, mobile phone stores, halal butchers, leather businesses, etc.—dot the area, but the dominant business from the mid-1990s has been that of the “curry houses”, which is the nickname in the UK for Indian restaurants. The native East Enders left the neighbourhood for other areas in the city, in the aftermath of the influx of South Asians. Initially, it was rare for the immigrants to mix with the locals, but over time, they adapted themselves to the new country in terms of language and business culture to integrate themselves with the local populace. Migration had produced a spatialized dimension in their thinking that was categorized into “where I was” and “where I am now”. With the passage of time and progressive adaptation, there has been a shift in paradigm from the earlier post-colonial and post-war period to the modern day, which is characterized by the emergence of a “negotiated transnational identity” (Mavrommatis, 2015, p. 98). This case could be viewed as one that provides a good

example of how transnationalism, as a system of “ties, interactions, exchange and mobility, functions intensively and in real time while being spread throughout the world” (Vertovec, 1999, p. 447). This evolution has also enabled the actor (either a migrant entrepreneur or employee) to learn how to effectively manage two identities. In the business context, this would mean one identity within the enterprise and another outside of it, i.e. within one’s restaurant and outside on the street. In a personal context, this would imply one’s identity within kinship or ethnic networks and one’s identity outside of it, or in external networks that involve the locals of the “host” country.

TEs would invariably scout for production lines and markets to source from and sell to, and obviously, the knowledge differential gained in the process in terms of both technology and markets would be crucial for the success of their ventures. In the case of TEs, such knowledge flows could take place over ethnic networks involving people who belong to a certain community or come from a particular place. Henn (2013) has documented how kinship and family networks have played a major role in the case of the diamond-cutting cluster in Gujarat. Vertovec (1999, p. 449) has described networks as the “structures of systems of relationships” that are “central to the analysis of transnational social formations”. He also makes two important observations in the context of transnationalism: (a) technology by itself cannot create networks (which are to be viewed as a social pattern), but can reinforce existing patterns; and (b) networks that are “dense and active” are spanning across vast spaces, and are transforming social, cultural, economic and political relationships (Vertovec, 1999). Further explanation of why transnationalism is an integral part of the modern capitalist society is provided by Castells (2010), who makes a few observations on the paradoxical situation in the global economy. He states that “Yet, not everything is global in the economy: in fact, most production, employment, and firms are, and will remain, local and regional”, but he also adds in the same breath that the economies world wide would depend on the globalized core, which includes “financial markets, international trade, transnational production, and, to some extent, science and technology, and specialty labour” (Castells, 2010, p. 101). Similar is the observation made by Glick-Schiller et al. (1992) that transnationalism was a product of world capitalism, and migration needed to be studied from an economic lens, with due consideration to the economic forces that prompted flows of international migration and the way migrants responded to them in terms of cultural practices and identities and survival strategies. Both of these observations came at a time when the world was near-completely transitioning into a capitalist model of economy, supported by the policies of economic liberalization.

Transnationalism in the Indian entrepreneurial context is seen illustrated in the development of a few industrial clusters in Indian cities, such as the ICT industrial cluster of Bengaluru (Manimala, 2017) and the diamond-cutting and polishing industry of Surat (Henn, 2013). In a detailed study of the Surat diamond cluster, Henn (2013) specially highlights the role of strong family networks in promoting transnational enterprises among the “Palanpuris”, a community of jewellery traders who came from the city of *Palanpur* located in the State of Gujarat in Western India. The strong family networks among the “Palanpuris” were created and

operated on the basis of two types of trust: (a) reciprocity-based and (b) enforceable contract-based. The close-knit information networks also helped in transferring technical and market knowledge from the well-established and better-developed centres in Europe (primarily Antwerp in Belgium) and Gujarat (mainly in and around Surat) in India. The networks also helped in sorting out problems among the community and kept any community dissent at bay from the external world (Henn, 2013). Ironically, it was the ban on the import of polished diamonds in post-war/post-Independence India that led to the development of “transnational production” of polished diamonds. Since there were only a few remnants of the diamond-cutting industry in the region coupled with some primitive knowledge about mining, it is rather surprising that this region has emerged as a hub for diamond cutting and polishing today, which can be attributed primarily to the strong family and community networks of these people in different countries (Henn, 2012, 2013).

As noted above, a special feature of the Palanpuris’ transnationalism was the strategy of transnational production. They exploited the constraint of high labour costs being faced by the foreign operators and sourced the rejected pieces of stone from Antwerp to be cut and polished and thereby created economically viable products that could be sold from India (Henn, 2013). Peers from their community and family residing in Antwerp provided the local Palanpuris with external help regarding technological expertise by connecting them to technical advisers from Belgium who helped them learn the latest production techniques of the time (Henn, 2013). Such instances of transfer of competence allowed for the expansion of the industry in India by the Palanpuris. This transfer of knowledge provides an interesting example of the ability to create a “glocal” industry through the phenomenon of transnational entrepreneurship, as it led to the establishment of a local industry in the developing world, which, over time, developed global competencies and techniques required to handle and mould a half-processed product sourced from the developed world. Such examples would also do well to alter deep-rooted notions of migration itself, which has been viewed as “uprooting” (Glick-Schiller et al., 1992) and as developing countries’ offerings of cheap labour to the developed countries in the context of a globalizing world (Varma, 2011). The idea of a “glocal” business means that one needs to manufacture or reprocess locally, but would need to do so to acceptable global standards for a globally competitive market.

Transnational migration offers an interesting foil to the erstwhile phenomenon of “brain drain” and can help in offsetting this phenomenon (Varma, 2011). This can also be mutually beneficial to the “host” country, as immigrants would interact in “fluid social spaces” that are also inhabited with non-migrants and rework on a constant basis to enable the flow of “people, money, and social remittances (ideas, norms, practices and identities)” in a dense manner within fluid social spaces (Levitt & Jaworsky, 2007, p. 132). With reference to the process of “brain drain”, Varma and Varma (2009) identified the five key reasons (apparently acting in stages), explaining the Indian entrepreneurialism in the USA in a progressive manner, which are as follows: (i) permissible immigration policies which allowed Indian migration; (ii) high standard of educational attainment that trained the Indian migrants to work in the American system; (iii) possessing a combination of

technical abilities and managerial skills required to manage a company in the technical sector; (iv) networking with Indians and others; and (v) participating in transnational activities and going beyond creating new products to extend their business activities across borders. Varma (2011, p. 275) adds that these factors can also explain the ascendancy among “different generations of Indian migrants” and not just Indian immigrant entrepreneurs. With the rapid pace of globalization and the correspondingly rapid growth in technology, the growth of technology entrepreneurship offers a possible explanation to the evolution and growth of TE as a significant phenomenon in the entrepreneurial field. In short, it can be stated that immigration policies, global education standards, acquiring technical and managerial skills and participating in networks may be viewed as the facilitators for the creation of a transnational enterprise.

Hence, in addition to the socio-economic perspective, there is also the technology perspective that has to be considered when explaining the TE phenomenon. TE has no doubt been facilitated by the transfer of knowledge across borders becoming easier with time. The role played by the emergence of the knowledge economy and the revolutionary developments in information and communication technologies (ICT) in this regard must be acknowledged. ICT is today prevalent in almost all fields, be it health care, logistics, manufacturing, trading or banking. Data and numbers have become an inseparable part of daily life in the ICT-enabled world. The role played by ICT in the evolution of TE is discussed in a later section of this chapter.

1.4 Returnee Entrepreneurship

The phenomenon of returnee entrepreneurship has gained interest in emerging economies, including China and India in recent times (Pruthi, 2014). The exposure of an individual to global standards of business and to high-quality business education in the developed economies no doubt increases the human capital and the social capital inherent in him/her. This poses an advantage of the individual being acutely aware of the strengths and the limitations of the business policies, institutional support and availability of markets in the “host” country for the products and services that could be offered by the “home” country (De Silva, 2015).

The returnee invariably possesses a reasonable degree of familiarity with the latest in technology, knowledge of the different markets for products and services, and globally acceptable quality standards and business practices. The returnee is in a unique position, wherein he/she can participate in the knowledge transfer of the best practices in business and help in competency building in the home country through knowledge spillovers.

Such an individual, who could choose to become a returnee entrepreneur (RE) by making this link, would be better positioned to understand the interplay between the institutions, policies and markets of the two geographical entities and their

business environments. The RE has the advantage of being able to tap into both the diaspora and domestic networks that he/she is a part of and can contribute to the economic development of his/her country by setting up international ventures.

Most of the studies in the context of REs have been in the domain of high-technology industries. This has possibly been the case because immigrants from developing countries now have greater access to the enhanced standards of graduate education (including programs taught in English) in line with the worldwide standards and to technical knowledge across learning platforms. Globalization has also brought with it global standards of product manufacturing and service delivery. The availability of cheaper and well-trained personnel in the developing countries provides REs the opportunity to set up business ventures that export services and products to clients in the developed ones. When viewed in the context of the developing economies in Asia, which offer exciting opportunities to those willing to return to their home countries, the erstwhile “brain drain” can be understood to have given way to a new phenomenon of circular migration called the “brain circulation” (Saxenian, 2000).

Even in cases where REs may not choose to maintain business links with their erstwhile “host” countries, they would still be better off with the business exposure and knowledge gained in their “host” countries during their stint there, as this would provide an impetus for them to promote and maintain global standards, while combining the inherent advantages offered by their previous knowledge of ethnic and business network in their “home” countries. Such REs have been called “clean break” returnees (Wright, Liu, Buck, & Filatotchev, 2008). In general, REs, particularly in the context of emerging markets in developing countries, have been acknowledged for their different contributions in the technical and economic fields.

A TE venturing into a new sphere of activity (or habitus) would often face the liability of foreignness, as would someone who has returned to their home country. While those in foreign countries would naturally be perceived as outsiders, the returnee entrepreneurs (REs) would be likely to face this issue when they return home to establish or renew business ties after having spent some time in a host country. In such cases, they may be perceived to be lesser attractive to “resource-controlling” actors like investors, and this would imply that they face more challenges in mobilizing resources in their home countries (Obukhova, Wang, & Li, 2012). This “returnee liability” could take place due to their having been away from their “home” countries for several years. This could be characterized by feelings such as a lack of fit, a lesser degree of legitimacy, deficiency in local social networks and difficulty in mobilizing resources. Such liabilities could be overcome by using local networks (Obukhova et al., 2012).

Unlike the TEs who have been well-established in their host countries for a period of time and have network connections in their home countries, the REs could face issues in adjusting to the business culture, and may experience some lack of institutional support when they try to begin their new ventures in their home country, although this could be, to some extent, buffered by virtue of their ethnic identity and their being identifiable with their local comrades. In the context of the research on REs, it can be observed that most of the research, particularly in the

subcontinent and the South Asian region, is focused on technology-intensive industries. This is probably due to the possibility of the RE having gained a foreign education in a developed country in engineering or related sciences and having worked there prior to their return. Besides, during the past few decades, governments in the region have increasingly been receptive and encouraging of establishments that operated in the technology sector.

Returnee entrepreneurs may use their diaspora connections while setting up a business venture in their home countries. As the developing countries do not always possess the required institutional framework for supporting the business aspirations of REs (Manimala & Wasdani, 2015; Nanda & Khanna, 2010), or may possess differential levels of institutional support based on the city and the sector in which the RE's enterprise operates, this could be a critical issue. REs (though they are operating from their own native countries, unlike TEs) may still feel that they operate in a different institutional and ethnic environment in their home countries when compared to those of the more developed host countries (Bruton, Ahlstrom, & Obloj, 2008).

Patel and Conklin (2009) highlighted the differential strategies that would help TEs and REs in managing access to different types of knowledge and resources in the bifocal contexts in which they operate. In the absence of institutional support, the natural choice for them would be to access the resources they require through their ethnic or diasporic networks. Besides, they do maintain a dual habitus mindset that enables them to have bifocal interactions and deal with institutions or available institutional mechanisms in both the countries (De Silva, 2015).

In their study on the Indian software industry, Nanda and Khanna (2010) found some interesting results that could support the bifocal orientation of TEs and REs. The ICT sector was chosen for the study for three reasons: (i) the major business being conducted for foreign clients, which would also imply a lack of enforceability of formal contracts in all cases; (ii) the location of software firms across the country in cities with varying levels of institutional support; and (iii) a significantly varied presence of the Indian diaspora, then estimated to be 18 million people across 130 countries. The findings of this study showed that entrepreneurs based in hubs having a strong institutional environment did not rely more on the diaspora networks, while those operating in smaller cities without the required institutional support available to them did so (Nanda & Khanna, 2010). Of course, they were able to tap into their diaspora connections by virtue of having worked abroad in the developed world.

De Silva's (2015) study on how Sri Lankan REs were dealing with institutional voids also brings forth many interesting points. The REs (some of whom were educated in the host country and had honed their soft skills there) were acutely aware of the differences in the business environment and the challenges they would face in their homeland while dealing with corruption in government agencies, lack of specialized institutions (or institutional voids) and the restrictions imposed by the regulatory framework in Sri Lanka. In spite of this, the REs adopted strategies such as using their own funds earned abroad or those from family to set up local businesses or act as angel investors in view of the lack of funding or promotion for new business through government support. The other major issues that they mentioned

are the lack of support for protecting innovation, especially for patents registered outside the country and issues with mobility due to suspension of the dual citizenship (De Silva, 2015).

Finally, a comparative study on returnee entrepreneurs in high-tech industries (ICT and ITES) in India, Taiwan and China highlights the critical difference that government support can make for the RE and their ventures. The Taiwanese government actively supported the development of the electronics and hardware industries. In China too, there was support for the establishment of industries by the government, but the main “returnees” in China were not those who returned to the country for good but those who initially returned to the country to join the multinational companies (MNCs) that were operating there in view of the liberalization policies followed by the government. In contrast, in the case of India, there was no particular evidence to show that the growth of high-tech firms was due to the “returnee” phenomenon supported by government policies (Kenney, Breznitz, & Murphree, 2013). The relative performance of the electronics industries in the three countries provides ample testimony to the critical role played by the government policies in promoting RE/TE ventures.

1.5 SME Internationalization: Role of TEs, REs, Diaspora and Government

As we have noted above and illustrated through the findings of several studies, TEs, REs and ethnic entrepreneurs have a natural tendency to grow international on account of their “dual habitus” mindset and connections with the diaspora and ethnic roots, especially when supported by the conducive policies of the concerned governments. In the ensuing sections, we will review the theories on internationalization of business as well as provide a brief outline of the factors that support internationalization, as identified by various research studies on the issue.

1.5.1 Internationalization Theories

Internationalization of business has been variously defined as was shown in the discussions above. One of the simplest definitions is that it is the “the process of increasing involvement in international operations” (Welch & Luostarinen, 1988), which is obviously in line with the stage theory of internationalization. However, this may not hold true in all cases, and so there are many more definitions now and a few theories to accommodate these definitions. There are three prominent theories on the internationalization phenomenon—the Uppsala Model, the Born-Global Model and the Global Value Chain (GVC) Model, which are briefly discussed below, followed by a discussion on the factors influencing internationalization.

1.5.1.1 The Uppsala Model: A Stage Theory

The Uppsala model of internationalization was proposed by Johanson and Vahlne (1977). This in turn followed from the findings of a set of case studies about firm internationalization in Sweden by Johanson and Wiedershiem-Paul (1975), in which they noted that expansion of a firm's operations into hitherto unknown markets would take place in a sequential manner, i.e. in a scalable fashion, progressing from no international involvement to establishment of production operations in newer geographies. The four stages they proposed are as follows: (i) no regular exports; (ii) exporting through independent representatives or agents; (iii) establishment of sales subsidiaries; and (iv) setting up of production/manufacturing facilities in the foreign country. This sequence was called the "establishment chain". The stages in the chain were defined in such a way as to reflect the differences in the degree of involvement of the firm in the new market, and to accommodate the well-recognized and accepted stages/terms in the business world at that point of time. These four stages signified "successively larger resource commitments" and led to "different market experiences and information for the firm" (p. 307).

It is but natural that the foray of a firm into newer geographies would mean tiding over some obstacles, which may have to be done in stages. However, all the stages may not be relevant for all cases. For example, in some cases, the market may not be large enough to justify the setting up of a production or manufacturing facility. Moreover, a firm that has already had previous experience of entering into newer geographies would not necessarily need to go through all stages in the establishment chain (Johanson & Wiedershiem-Paul, 1975). To conceptualize the reach of operations needed for internationalization, the authors proposed the concept of "psychic distance", which was defined as "factors preventing or disturbing the flows of information between the firm and market". Some examples of such hindrances included differences in "language, culture, political systems, level of education and level of industrial development" (Johanson & Wiedershiem-Paul, 1975, p. 308).

Bridging the gap between countries meant that in addition to the physical barriers, these psychological barriers also had to be overcome. In case of transnational entrepreneurs (TEs), they would most likely encounter this phenomenon when they experience a liability of foreignness in the "host" country, assuming that they are already aware of the ways and means of doing business in their "home" country. Psychic distance has to be dealt with by both the founders and the employees of the firm.

Psychic distance is not necessarily related to the physical distance. One of the examples in which the distinction stands out is in the case of the former British colonies, which are now part of the Commonwealth. Though they are far apart physically, there are very few barriers separating them in terms of language and possibly business culture, both of which are crucial factors that a TE needs to encounter and learn to handle.

In trying to generalize their observations and create a model for the process of internationalization, Johanson and Wiedershiem-Paul (1975) and Johanson and Vahlne (1990) argued that the process of internationalization involved a gradual commitment of resources towards securing markets, once these markets had been identified. Internationalization of the firm involved policies and strategies related to two aspects—those of state and those of change. The state aspects are the market commitment and market knowledge, while the change aspects are the current business activities and the commitment decisions. The final outcome will depend on the interplay between market knowledge and commitment decisions, which are the two key drivers for the firm's decision to internationalize (Johanson & Vahlne, 1977).

1.5.1.2 Theory of Born-Global Firms

In contrast to the stepwise and the incremental process proposed by Johanson and Vahlne (1977, 1990) is the concept of a “born-global” firm. This concept was first proposed by McKinsey and Co. in a survey for the Australian Manufacturing Council (McKinsey & Co., 1993; Rennie, 1993). The concept of international new ventures (INVs) was defined by Oviatt and McDougall (1994, p. 49) as “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries”. In the Australian context, Cavusgil (1994, p. 18) made note of two new developments about exporting firms that “small was beautiful” and that “gradual internationalization was dead”. The born-global firm concept may seem akin to the concept of radical innovation, while the Uppsala model is to incremental innovation. Knight and Cavusgil (2004, p. 124) have defined born-globals to be “business organizations that, from or near their founding, seek superior international business performance from the application of knowledge-based resources to the sale of outputs in multiple countries”.

The internationalization pattern for these firms may not necessarily follow the norms of physical closeness or psychic distance (Knight, Bell, & McNaughton, 2001). Such firms enter distant markets or multiple countries and form joint ventures right away (Rasmussen & Madsen, 2002). A special feature of these born-global firms is that they can be relatively small even while operating internationally. They may have annual sales values of less than \$100 million and have less than 500 employees. They are likely to begin exporting within two years of establishment and export at least 25% of their total production (Knight & Cavusgil, 1996). However, Persinger, Civi, and Vostina (2011) have argued that this definition may not be suitable for born-global firms in emerging economies, in which case the figures would need to be revised to annual sales of about \$50 million, a strength of less than 500 employees and a 25% export rate being achieved in about three to four years after the establishment of the firm.

This sense of urgency for hastening the process of internationalization came during the 1980s, which was characterized by the decline and fall of many communist and socialist regimes around the world and the emergence of capitalism in

those and many other regulated economies, with its promises of free market competition and meritocratic rewards for economic activities. Around this time, there was also a revolution in communication technologies, with the result that the increased reach of the Internet made communications easier, faster and less expensive. Though there is better access to information now, that alone is not sufficient to explain the emergence of born-global firms; the political climate has also to be conducive.

Oviatt and McDougall (1994) argued that INVs are start-ups having international origins and resource commitments in more than one country, and hence the stage theory of evolution that applied to multinational enterprises (MNEs) did not apply to them. Though the large firms had their own advantages for internationalization, their decision-making processes can be slow and therefore may move only in stages. The small firms are more agile, and the changing dynamics in the business environment has enabled them to internationalize. Factors like improved communication infrastructure, increased homogenization in foreign markets and mobility of human capital could promote internationalization of firms at a faster rate, and not necessarily in stages. These developments also allowed for markets to link up to one another across geographical boundaries, which did not necessarily imply an advantage for the large-sized firms (Oviatt & McDougall, 1994).

Instead of a market commitment and knowledge-based approach, Oviatt and McDougall (1994) proposed an alternative model which would be more relevant to the changes experienced in the business world. This model relied on transactions defined by four elements: (i) internalization of some transactions; (ii) alternative governance structures; (iii) foreign location advantage; and (iv) unique resources (Oviatt & McDougall, 1994).

In the more recent literature, there have been references to a tendency to localize the expansion of the firm at the initial stages (which means that the firm would expand up to certain areas or regions around its primary area of operation depending upon protection of its assets, mitigation of transaction costs, valuation of its innovations and costs of agency). Such firms may choose to carry out either a direct or an intermediated mode of internationalization, but would give priority to the local conditions, and hence these ventures deserve to be called “born-local” due to the norms of choices they make (Acs & Terjesen, 2013).

1.5.1.3 The Global Value Chain (GVC) Model

Gereffi, Humphrey, and Kaplinsky (2001) identified and discussed a new phenomenon in manufacturing that emerged during the late twentieth century (which they called the “global value chains”), wherein different sourcing-contracting mechanisms were used through systems of governance to put together goods and services, which often took place across national borders. In these arrangements, the provider and the consumer were not necessarily located at arm’s length. A global value chain (GVC) does not necessarily restrict itself based on the size of the firm. The value chain could comprise firms of different sizes that have attained capabilities in delivering specialized goods and services which span national borders

and come together through the GVC. Such GVCs were particularly prevalent in the sectors of garments, electronics and agricultural commodities. Gereffi et al. (2001, p. 1) also clarify that the lead firm (or the final firm that delivers the goods or services under its umbrella) could be a multinational or a large firm, which “plays a significant role in specifying what is to be produced, how and by whom”. The GVC enables entrepreneurs to cater to specified markets through their niche competencies while being a part of the big picture. Consistent with the above definition of internationalization, they redefine globalization in the productive sphere and state that it “implies functional integration between internationally dispersed activities, and (that) the value chain perspective is an effective means of conceptualizing the forms that this integration takes” (Gereffi et al., 2001, p. 2).

A few interesting observations about the GVCs include the following: (i) they can take the form of inter-firm networks and quasi-hierarchical relationships; (ii) lead firms derive their power from two attributes, market power and positioning; (iii) the ability of one firm in the chain to govern the activities of the chain is defined by supplier-monitoring and specification of standards; and (iv) the creation of governance structures is mainly to ensure coordination through supplier specification and involvement as well as to address and manage any market risks that may arise due to supplier failures (Gereffi et al., 2001).

1.5.2 Factors Influencing Internationalization

1.5.2.1 The Role of Market Conditions

It is important to note that the mere intention of internationalizing the operations of the firm at a faster pace would not be enough to implement such intentions. There is a need for the supporting factors that could facilitate this process. Bell, McNaughton, Young, and Crick (2003) have observed that born-global firms operate in knowledge-intensive environments. However, it was pointed out by Persinger et al. (2011) that although the pace of accessing information in an emerging economy could be similar to that in a developed economy, there are different roadblocks that an entrepreneur might encounter in the emerging market environment. Aldrich and Waldinger (1990) in their study on ethnic entrepreneurship (EE) suggested that market conditions play an important role: they may either create opportunities for businesses that serve the needs of a community, or may be favourable to smaller enterprises that could cater to the needs of non-ethnic populations. For example, immigrant entrepreneurs may exploit opportunities in markets having low economies of scale or those markets which arise out of demand for exotic goods among the native population (Aldrich & Waldinger, 1990).

1.5.2.2 The Role of Networks

The role played by networks in enterprise development is well-known. Networks—social or economic—are almost synonymous with entrepreneurship and new venture creation (Johanson & Mattson, 1988; Singh, 2000; Ozgen & Baron, 2007). An entrepreneur can derive either the social, economic or human capital through his/her contacts. In the context of TE and internationalization, the role played by two types of networks, namely the network of acquaintances (social network) and the physical network for production and transportation of goods and information (production networks) are prominent.

Social Networks

Transnational entrepreneurs (TEs) who usually have a bifocal orientation have the advantage of deriving benefits from their network associations in both their host and home countries. Social networks play a vital role in propagating the intent and value propositions of entrepreneurs. TEs utilize the comparative advantage that is generated by the value they derive from their networks in both the contexts they operate.

There are many benefits that networks offer to the TEs. For one, they could help the TEs in identifying newer opportunities in foreign or hitherto alien markets (Ellis & Pecotich, 2001). Social ties with varying degrees of antecedent familiarity have been found to influence the exporting decisions by Small and Medium Enterprises (SMEs) in a study on Australian SMEs. These ties have also been used as proxies for market scanning and research and to minimize risks (Ellis & Pecotich, 2001). The conventional image of a TE would most likely be of an individual who is educated (possibly having earned a foreign academic degree) and has work experience in the host country, making him/her familiar with the institutional advantages that exist in the host country. Many immigrants from South Asia have travelled to western countries such as the UK, the USA or Canada to study and have stayed on there while working on a job. They possess the required international experience and qualifications, along with knowledge of the market and the kind of services and products that are in demand. TEs' exposure in the host country settings would, no doubt, have helped them expand their professional and personal networks, and the host country's citizens interacting with them would probably perceive them to be less foreign and feel more comfortable to deal with them. TEs' networks would thus offer them the benefit of access to resources, especially in the early stages of setting up their enterprises (Chetty & Campbell-Hunt, 2004), and they would have a head start when compared to entrepreneurs who are just beginning to internationalize their business from their respective home countries.

In their endeavour to migrate to another country and set up business in a foreign country, TEs would no doubt face challenges, but they may often feel that the conditions are better in the host country than the home country, as the migration is generally from a developing nation to a developed one. There may be several institutional deficiencies in their home countries, because of which they may feel

more comfortable to start and operate businesses from the host countries. In a comprehensive review of the relevant literature, Manimala and Wasdani (2015) identified the major deficiencies of the entrepreneurial ecosystem of emerging economies, which are: (i) underdeveloped institutions; (ii) unclear and inconsistent policies; (iii) inadequate governance; (iv) disjointed infrastructure; (v) limited funding options; (vi) inhibiting culture; (vii) personal rather than professional networks; (viii) ill-funded and ambivalent system of education; and reluctant and restricted outlook for internationalization.

Stronger ties in a large network of the TE could provide a larger market base for foreign operations. An increased frequency of interaction would enable effective knowledge transfer. Networks also offer the benefits of providing access to knowledge for the TEs, for whom the more relevant types of knowledge are about: foreign competitors; foreign culture; foreign political and legal environment; foreign business opportunities and customers; and advancements in technology (Musteen, Francis, & Datta, 2010).

In a study in the Chinese context, Wang, Wang, Huang, and Deng (2012) found that behavioral commitment signified by the willingness to deliver value to each other was more important than perceived trustworthiness of the member, for the success of international business, especially in heterogeneous networks that contained more structural holes and weak ties. In an earlier study, it was observed by Burt (1997) that heterogeneous networks have more structural holes or weak ties.

As TEs can benefit from network affiliations in two different countries, they can potentially benefit from both personal and professional networks in both their home and host countries, which may have a positive impact on the degree of internationalization. According to Nahapiet and Ghoshal (1998), three types of embeddedness influence the speed of internationalization, which are as follows: relational embeddedness (signified by personal ties), cognitive embeddedness (signified by language commonality) and structural embeddedness (signified by a lower degree of geographic diversity). In a later study, Rusinovic (2008) proposed the concept of “transnational embeddedness”, which is based on the concept of “transnational capital” that can be of help to TEs in transnationalizing their ventures. In other words, in order for a migrant to be able to do business with his/her country of origin, it is necessary for him/her to possess transnational capital, which is a combination of three types of capital, namely economic capital (money to invest and travel), cultural capital (language, knowledge and international experience) and social capital.

In a similar vein, Etamad (2004) defined the pull and the push factors that supported or curtailed internationalization. The push factors identified were internal to the firm, such as the founder, operations, competition and strategy, investments in Research & Development (R&D), innovation and technological change, products and markets and international operations. The pull factors (which are external to the firm) included liberalization of international markets, advances in information technology, communication and transportation and the presence of market gaps.

TEs have to deal with challenges on various fronts. As they have business ties in both the home and the host countries, they need to adopt a bifocal approach rather than a uni-focal one. By virtue of their position, TEs need to leverage upon the

comparative differences among the various types of capital available to them, primarily because such capital is not valued identically in different countries. This means that they must take advantage of the differences in valuation in different types of capital—economic, social and cultural—across the different types of contexts they operate in (Patel & Conklin, 2009).

According to Wahba and Zenou (2012), returnee entrepreneurs (REs) face limitations in starting a business back home due to their weak social capital. However, their financial and experiential capital gained during their stay in the host country helps them in overcoming this limitation. First of all, their business could be in a niche area with advanced technology, which could be new to the local markets. Secondly, they may use their human capital to develop the relevant social capital needed for their business. Prashantham and Dhanaraj (2010) noted the role of networks possessed by REs in the growth of their ventures. As the REs had more international networks by virtue of their international experience, the ebb and flow of interactions, which followed a punctuated rhythm due to the social distances, resulted both in the decay and replenishment of the social capital, where the overall impact was positive on the growth of their businesses in international markets.

In this context, it should be noted that the development of the social capital is a function of the human capital of the entrepreneur, as observed by Goxe (2010), who states that human capital interplays with social capital in order to further strengthen it and to derive benefits from the network members and vice versa. Social capital feeds into the development of human capital traits such as international orientation, international skills, management knowledge, sectoral connections and environmental perception (Goxe, 2010). A higher degree of embeddedness in the social network helps in deriving higher gains and in overcoming the challenges of newness and foreignness.

Entrepreneurs who have low human capital benefit from strong ties among members of the same identity when compared to foreigners. Due to low human capital, their networks are built by virtue of their inheritance, religion and other associations. In the Chinese context, tie-based practices are more successful than market-based ones. SMEs that try to internationalize in the country would therefore want to develop ethnic and cultural ties with the locals, which will help them in dealing with information and resource scarcity. The absence of human capital could be overcome by creating more ties and utilizing them for business needs. The interaction between the two types of capitals could define the role played by social capital in internationalization (Goxe, 2010).

Regional and Production Networks

Networks are useful in understanding the different complexities in today's global economies. A production network explains the "structural and relational nature of how production, distribution and consumption of goods and services are organized" (Coe, Dicken, & Hess, 2008, p. 272). Gereffi (1994) was among the earliest to propose that there existed a "production system", which linked firms' economic

activities with organizational and technological networks that helped in the development, manufacturing and distribution of specific commodities, while explaining the concept of a global commodity chain (GCC). Producer-driven commodity chains are those in which large integrated enterprises played a central role (sector examples included automobiles, aircraft and computing), while the buyer-driven commodity chains are those in which there is more decentralization, with large retailers playing the pivotal role (Gereffi, 1994). However, there is a perception that the large firm had to remain the dominant actor, even in a producer-driven sector such as computing.

Saxenian (1991) studied production networks in Silicon Valley in the IT hardware and electronics industry and found that relationships between firms were based on the need to ensure the success of a final product. The need for high-grade, accurate and faster computing in the IT industry had drawn many firms together in a producer-consumer web. The new value chains that were formed exuded both trust and reciprocity. Relationships between lead firms and their suppliers were not dependent on sending out some specifications for products and examining them upon delivery alone. There was a shift towards a more long-term relationship in which sales forecast and cost information were also shared, albeit confidentially. There was also a mutually beneficial relationship in terms of reciprocity, in that the consumer firms looked beyond the mere 'Just in Time (JIT)' with their suppliers and did not take advantage of their suppliers in adverse market conditions but instead supported them by supplying manpower or technical assistance or extending lines of credit (Saxenian, 1991).

While Silicon Valley is well-acknowledged as the hub of electronic systems and IT, the collaborative relationships had given rise to "regional networks", as Saxenian (1996, p. 45) pointed out. Regional development has been seen as an outcome of interactions between relational networks and production networks in a globalized world (Coe, Hess, Yeung, Dicken, & Henderson, 2004). The regional network-based industrial system meant that there existed porous boundaries between firms, and that the social networks and open labour markets encouraged both entrepreneurship and experimentation. This system was a network of relationships rather than a cluster of atomistic producers (Saxenian, 1996).

The case of Silicon Valley assumes significance also for appreciating the impact of immigration on entrepreneurship in the region. Due to increased demand for skilled labour, there was a corresponding increase in immigration in the region. During 1975-90, technology companies in the area created over 150,000 jobs and the population of foreign-born individuals in the region rose to 350,000, more than double its earlier number (Saxenian, 1994). There was a greater likelihood of a foreign-born engineer or computer scientist in the USA to be from either India, China or Taiwan. In the technology sphere, their educational attainments too were more prominent. 55% of Indian and 40% of Chinese technology workers possessed graduate degrees in comparison with 18% of whites (Saxenian, 2000).

Transnational entrepreneurs (TEs) would likely benefit first from their contacts within the diaspora population of the nationality they belong to, who reside in the "host" country. These ethnic networks are important in that they can help the TE gain

knowledge of the capabilities he/she possesses vis-à-vis the demand requirements of the markets. The other key element in understanding this phenomenon lies in the presence of technology as a leveller, and the meritocratic attitude of the local authorities towards someone foreign-born who is proficient in any technology, although there seems to have been an undercurrent of belief regarding the perception of a glass ceiling by Indians and Chinese, which is inhibiting their professional growth in Silicon Valley. However, both Indians and Chinese, who were leading 13% of Silicon Valley's technology companies between 1980 and 1984, rose to lead 29% of the high-technology companies in the region during 1995–98 (Saxenian, 2000).

Shifts in government policies could also have brought about an increased awareness of what might constitute a “production network”. Gereffi and Wyman (1990) observed that the replacement of the former import substitution industrialization (ISI) policy with an export-oriented industrialization (EOI) policy, especially in the developing world, was one of the key factors that created awareness about the GVC concept. While the former was producer-driven, the latter was buyer-driven. The adoption of such policies meant that the role of transnational corporations became prominent, as they possessed the required vertically integrated chains with access to natural resources and manufacturing facilities through their subsidiaries located in different geographies (Gereffi & Wyman, 1990). However, imports in the developed countries had been growing steadily, indicating that there was a paradigm shift in the manufacturing arena, with the phase having moved towards the developing world. This meant that the relationship between core corporations and their peripheral associates underwent a phase shift, with core corporations moving towards value-based production rather than volume-based production (Gereffi, 2001).

As born-global firms did not necessarily have to wait to enter into newer geographies, or began exporting their products or services sometime after establishment, the founders of such firms needed to have a high degree of international entrepreneurial orientation (Knight & Cavusgil, 1996).

1.5.3 The Role of Technology

The proliferation of technological innovations across the world has caused the national boundaries to blur. This is especially true in case of the Information Technology (IT) industry. Advances in digital communication and media today allow for an airport in Germany to run its operations smoothly thanks to software written by Chinese engineers. Managing a retail outlet in the UK is easier because of the specialized software prepared in India. IT has certainly made the world “flatter” and has perceptibly shortened the communication divide between the developing and the developed countries.

Saxenian (2002, p. 184) has noted that “advances in communication and transportation technologies and changes in the structure of technology markets and competition” have acted as facilitators for transnational technical communities.

Knight and Cavusgil (2004, p. 124), in their definition of born-global firms, have highlighted the application of “knowledge-based resources”, thereby implying that technology had a role to play in the internationalization process.

Data have today become a building block of enterprises in many ways. With the increased availability of data, there has been an increased demand by customers to place real-time data at their fingertips on demand. The very nature of this phenomenon can be understood through bits and bytes, which could determine the length of a queue of aircraft waiting for take-off at an airport, or confirm the receipt of payment for the services of a food caterer through a wire transfer by his customer. The proliferation of Internet technology and e-commerce has been a sort of equalizer for both Multinational Enterprises (MNEs) and Small and Medium Enterprises (SMEs) due to its accessibility and affordability (Jaw, Chang, & Chen, 2006).

When viewed from the lens of the lowest common denominator, this phenomenon, coupled with the increase in demand for innovative and faster services and products from across the world, has certainly paved the way for “flat enterprises”. These flat enterprises employ skill and labour from one part of the world (usually in the developing world) to deliver services and products which serve the requirements of people in another (usually in the developed world).

Among the South Asian economies, India is well-known for the recent IT boom. Software engineers working out of offices in Bengaluru and Gurugram are today creating smart card systems and award-winning animation movies for customers from the developed world. It is in this context that an aspiring entrepreneur who has a “dual habitus” could have an advantage over the others. The knowledge and experience of having worked in or having run an enterprise in a country away from one’s home could be a significant advantage. This human capital would enable identification of the correct target market and the associated risks.

Saxenian (2002) asserted that the transnational entrepreneurs were going to be an important community in the future, as they straddled many assets including “technical information, trust and contacts”, which, at that time, had not been accorded due importance in the debate on globalization. Transnational communities had the potential to become agents for the growth of technology entrepreneurship as they had the potential for the evolution of global production networks by facilitating the “international diffusion of knowledge and upgrading of local capabilities” (p. 183). The erstwhile “brain drain” had given way to “brain circulation”, as there was quicker diffusion of knowledge through networks of engineers and scientists between distant regional economies. These technical communities could come into existence following the advances in information and communication, and transportation technologies, which had brought about changes in the technology markets and competition structures. There were more independent enterprises which catered to the needs of the technology value chain in a decentralized manner (Saxenian, 2002).

Global production networks could now be in place mainly because of the emergence of transnational technical communities, whose reach spanned across national borders. While technical communities previously existed within corporations, the emergence of transnational communities offered an alternative which implied that the multinational corporation was no longer the only method of

transferring knowledge across national boundaries. Transnational and returnee entrepreneurs from India, China and Taiwan were influential in identifying opportunities and in either setting up firms to address those or to outsource them to outfits located in their “home” countries. A considerable number of immigrants from these three countries first came to the USA to pursue higher or advanced degrees. While there has been institutionalization of social networks through professional associations, fewer Indians have returned home to become TEs or REs when compared to the Taiwanese (Saxenian, 2002).

1.5.4 The Role of Human Capital

Returnee entrepreneurs (REs) in particular are expected to possess business skills which would give them a competitive advantage in assessing and acting in consonance with the global business environment. These skills are crucial, when combined with other attributes such as foreign education, and the experience of operating or working in a business enterprise in a developed economy, in aiding the internationalization of an SME. It is more likely that an RE would like a newly founded SME to operate on born-global principles than to adopt the gradual model of internationalization. This process would naturally be aided by the recruitment of employees having a similar degree of international experience and exposure as that of the founder/entrepreneur or manager. Human capital would play an important role in deciding the internationalization pattern of the firm not only for REs but also for TEs.

In their study on nascent entrepreneurs, Kim, Aldrich, and Keister (2006) found that human capital played a significant role in the decision to transition to entrepreneurship. Ruzzier, Antoncic, Hisrich, and Konecnik (2007) studied the influence of an entrepreneur’s human capital (measured through the dimensions of international orientation, management know-how, environmental perception and international business skills) on the internationalization of SMEs. Two dimensions of the human capital, international orientation and environmental perception, had a significant relationship with SME internationalization, while the other two dimensions did not.

Knowledge is an important asset for internationalization of SMEs. Knowledge gained by previous experience of operating in foreign markets would be a major advantage for an entrepreneur aspiring to take his/her firm international. The tacit knowledge possessed by the entrepreneur would be important for the entrepreneur to decide upon the target markets into which they would like their SMEs to enter. A higher degree of international exposure, such as the experiences of having lived and worked in a particular country other than one’s own, embeds a prospective entrepreneur with a considerable degree of human capital, which could prove to be a significant advantage in making the decision to internationalize the firm (Ruzzier et al., 2007).

The discussion on the role of human capital has been examined further at a different level of granularity in the literature. There have been suggestions that not only the human capital of the founder or the entrepreneur, but also that of the employees of the

SME would influence its strategy for internationalization. Looking at the human capital of the founder alone would mean having a top-down approach, but this would probably mean taking a one-sided view of things. Human capital available at the employee level, when viewed in the aggregate, represents a tremendous knowledge differential. Therefore, it is necessary to have a high degree of discernment when human capital is allocated at the organizational level during the process of internationalization. This process must accommodate for handling both the external and the internal issues related to internationalization, namely the exigencies that the firm may perceive in an international environment and the specialized work knowledge available within the firm (Onkelinx, Manolova, & Edelman, 2015).

SMEs are leaner organizations when compared to their larger counterparts. The obvious assertion is that this combination of specialized product and process knowledge, which forms important components of the human capital that the SME possesses, would be vital in helping to determine the internationalization strategy that it would like to follow. The predominant choices of internationalization strategies are the gradual strategies (Johanson & Vahlne, 1977), and the born-global model (Oviatt & McDougall, 1994).

Onkelinx et al. (2015), in the Belgian context, found that while following the gradual method of internationalization, the SMEs tended to maintain their level of human capital and focused more on experiential learning, which was more in line with Johanson and Vahlne's (1977) gradual model of internationalization. However, SMEs focusing on a more rapid mode of internationalization are subject to many pressures, and this may not allow them the time to develop organizational capabilities. This leads them to a situation in which they choose to invest in employees possessing the necessary human capital required to take the firm international. While these investments do pay off in the initial stages, any further investment in human capital beyond a point (after which an optimum level has been accumulated) in such firms tends to be counterproductive. This is because such SMEs cannot invest the time required to develop their organizational capabilities, including the creation of proper systems to manage employee talent effectively (Onkelinx et al., 2015).

These and similar other findings open up the debate about the exact nature of measuring human capital that could influence decision-making about the internationalization of SMEs in future.

1.6 Conclusion

Developments in Information and Communication Technologies (ICT) in today's Internet-enabled era have made products and services accessible at the click of a button through different types of devices—computers, mobile phones and tablets. These developments have also led to the proliferation of electronic or mobile commerce, thereby making it more convenient for consumers, who seem to have a preference for dealing with flatter and boundary-less organizations.

Transnational entrepreneurship has been distinguished from international entrepreneurship in the research literature. However, the blurring of physical boundaries due to technological advancements has blurred national boundaries in the eyes of the consumer. It is therefore not clear how the phenomena like transnational, ethnic or returnee entrepreneurship would metamorphose over time in the wake of such developments, especially because of their common orientation of dual habitus mindset that provides them the potential, inclination and capabilities to internationalize.

Most of the scholarship in the South Asian context in the area of transnational and returnee entrepreneurship is about the high-technology industries. This has probably been supported by the favourable policies of immigration and the immigrants' access to superior quality of academic training and business practices in the developed world. More research is needed to explain how human capital and technological resources are helping in the setting up of other types of transnational enterprises.

Immigrants and diaspora communities in host countries have experienced different types of changes over time while adapting to the culture of their host country and at the same time trying to preserve their cultural, ethnic and business identities. The interaction among the different identities of the migrant diaspora and the manner in which they could influence the TE and RE phenomena under the fast-changing technological and business environment are not fully predictable, which indeed is in the nature of things and could be a rich source of hypotheses for future researchers.

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Part II
Individual and Firm-Level Resources
for Internationalization

Chapter 2

Internationalization of SMEs in Emerging Economies: Critical Role of Firm-Level Resources



C. Santhosh and M. H. Bala Subrahmanya

2.1 Introduction

Small and medium enterprises (SMEs) occupy an important place in most of the economies. This is mainly because they contribute significantly to output, employment, and exports in various economies (Westhead, Wright, & Ucbasaran 2002). An important characteristic of SME growth in the post-globalization era is to achieve the objective of growth through its intense expansion in the global market (Lu & Beamish, 2001).

Internationalization can be viewed as a multidimensional event that includes inward, outward, and cooperative operations (Ruzzier, Antoncic, & Konecnik, 2006). Internationalization of business facilitates SMEs to adopt better management practices, knowledge, and technology and subsequently can enhance their competitiveness in the global market (Pangarkar, 2008; Santhosh & Bala Subrahmanya, 2016). Wolf and Pett (2000) state internationalization as an engine for the development of SMEs, their prosperity, and for the nation's economic development. Further, the literature on international entrepreneurship emphasizes that internationalization is an entrepreneurial act, strongly affected by the characteristics of the individuals involved (Oviatt & McDougall, 1995). Subsequently, the literature has also documented the importance of entrepreneurs and their characteristics as a predictor of their performance (McDougall & Oviatt, 2000).

Although the importance of internationalization has been emphasized in the academic literature, most researchers on SMEs do not consider the firm strategy (in terms of

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modes of entry). As such, the literature has not addressed how SMEs strategize their market entry to improve their pace and performance.

Based on the identified gaps in the literature, an effort is made to investigate and study:

1. What firm-level resources determine the speed at which SMEs entered the international market?
2. Does the speed of entry into the international market along with the firm-level resources facilitate SMEs to achieve a higher degree of internationalization?

Consequently, an effort has been made to probe the research questions based on primary survey covering 70 SMEs of machinery industry located in and around the Bengaluru City.

This paper contains six sections. The second section analyzes the relevant literature that forms the conceptual framework for the further analysis and discusses the conceptual model concerning the key variables used for the analysis. The third section illustrates the sample, data, and statistical tool used for the analysis. The data analysis and results are discussed in the fourth section. The fifth section contains conclusions and implications. Finally, the important concepts and definitions are explained in the Appendix section.

2.2 Firm-Level Resources, Speed, and Degree of Internationalization: A Literature Review

To explain the phenomenon of the internationalization process, scholars have developed various internationalization models/ theories. Among all, the first and the foremost approach in explaining the pattern of internationalization is the Uppsala model. Uppsala model has conceptualized the internationalization pattern as a linear and stepwise approach, through which enterprises follow stage process by increasing the commitment of resources over a period of time (Johanson & Valhne, 1977, 1990) But, subsequent research studies have revealed the drawbacks of the stage model (Johanson & Valhne, 1977, 1990) and have challenged the incremental pattern (Bell, McNaughton, Young, & Crick, 2003). However, the drawbacks of stage model have inspired the development of rapid internationalization models which provided the evidence that many smaller firms became involved in international business by avoiding the incremental procedures (Bell, 1995).

In the recent decades, the resource-based approach has received much interest among the researchers to explain the process of internationalization. The resource-based approach stands on two important principles, (i) resources are heterogeneous and (ii) not easily transferred across the firms (Barney, 1991). Barney (1991, p. 101) define firm's resources as "all assets, capabilities, organization process, firm attributes, information knowledge, etc. Controlled by a firm that enables to conceive and implement strategies that improve its efficiency and effectiveness." Further, resources generate profits and also develop an advantage over the competitors (Barney, 1991). A study by Bloodgood, Sapienza, and

Almeida (1995) highlighted that firms' orientation toward internationalization depends on their unique resources. Correspondingly, studies have highlighted that to be successful in the international market, firms should possess unique and appropriate resources (Ruzzier et al., 2006).

Basically, the resource-based approach considers the resources within the firm as the major determinant of export behavior. It is argued that firm with higher commitment allocates more resources to conduct the foreign activities (Stoian, Rialp, & Rialp, 2011). Further, Johanson and Valhne (1977) consider commitment in terms of size and the specialization of resources that are employed to conduct the foreign activities. Accordingly, firm with larger size will have an advantage to incorporate more human, financial resources, and production capacity (Stoian et al., 2011; Katsikeas & Piercy, 1993). Further, Ruzzier et al. (2006) observed that internationalized SMEs were largely driven by the greater amount of organizational resources (in terms of human and financial resources). For example, Wolf and Pett (2000), Suárez-Ortega and Álamo-Vera (2005), studies found a positive influence of firm size on the export intensity. However, certain studies have reported no influence of firm size on the export performance (Leonidou & Katsikeas, 1996). Correspondingly, studies have considered being continuously visiting the foreign markets and having a separate export division as a firm-level commitment toward internationalization (Papadopoulos & Martin, 2010). More precisely, studies have highlighted both positive as well as negative associations between firm commitment and the export performance (Johanson & Valhne, 1990). However, the relationship between commitment and export performance is still a controversial matter in the internationalization literature (Stoian et al., 2011).

Apart from the firm-level commitment, entrepreneur characteristics have also been highlighted as a major firm-level resource that influences the internationalization (Crick & Chaudhry, 1997). Similarly, studies have highlighted certain common characteristics of entrepreneurs like their education background, international work experience, foreign language proficiency, and their experience in an export department determine the rapidity and export performance of SMEs (Nakos, Brouthers, & Brouthers, 1998; Suarez-Ortega & Alamo-Vera, 2005; Zucchella, Palamara, & Denicolai, 2007; Federico, Kantis, Rialp, & Rialp, 2009; Stoian et al., 2011). The empirical evidence revealed that educated entrepreneurs are more fascinated in the international affairs and are able to manage the risk associated with the foreign market (McDougall, Shane, & Oviatt, 1994; Cooper, Gimeno-Gascon, & Woo, 1994; Suarez-Ortega & Alamo-Vera, 2005). Previous international experience, foreign language skills, and specific experience in an export department and particularly in a MNC are highly related toward internationalization (Mc Dougall & Oviatt, 2000; Johanson & Valhne, 1990; Filatotchev, Liu, Buck, & Wright, 2009; Stoain et al., 2011; Ciravegna, Majano, & Ge Zhan, 2014). Studies by Oviatt and Mc Dougall (1995), Madsen and Servais (1997), Ciravegna et al. (2014) have confirmed that the experiential knowledge and education acquired through the entrepreneur's experience influenced the pace of internationalization (Johanson & Valhne, 1990; Reuber & Fischer, 1997). Although there are many empirical studies on firm-level resources and the export performance, the effects are quite debatable

in terms of relationship (Stoian et al., 2011). Therefore, it is highly essential to analyze the kind of relationship that exists between firm-level resources, speed, and degree of internationalization in the Indian context.

Generally, SMEs are characterized as inexperienced, limited resource base, lack of technical skills and knowledge about the international market (Oviatt & McDougall, 1994), which could lead to severe financial losses and might lose the control over foreign market. Burgel and Murray (2000) stated that firms strategize their mode of entry based on the commitment of resources, risks, returns expected, level of firm's experience, and market awareness. Therefore, to overcome the problem of resource constraints, SMEs should make strategic decisions while entering the international market and to achieve higher performance (Achtenhagen, 2011). Indeed, a well-chosen mode can enable a firm to add advantage over its competitors and to sustain in the foreign market (Burgel & Murray, 2000).

Empirical studies enumerate that few SMEs depend on a local market-based MNC to reach the international market at a faster speed (Acs, Morck, Shaver, & Young, 1997). On the other hand, Chetty and Campbell-Hunt (2004) observed that some SMEs depend on their distributors and customers to seek the knowledge and to accelerate their entry into the international market. Furthermore, international trade exhibitions are quite cost-effective, facilitate to acquire information on foreign markets, and build good relationship with the overseas customers (Evers & Knight, 2008). Evers and Knight (2008) argue that the international trade exhibitions act as an effective mode of entry for the firms to grow and expand internationally. Previous research indicates that those firms that used international trade exhibitions as a strategy to enter international market positively influenced the firm performance (Nakos et al., 1998). Subsequently, e-commerce has also been highlighted as an effective marketing tool to enter and to achieve higher sales (Moini & Tesar, 2005). However, to the best of our knowledge, none of the research studies have thrown light on the various modes of exports (in terms of firm strategy) and its impact on the pace and the degree of internationalization.

On the other hand, entering the international market at an early age is highly imperative for SMEs, as it facilitates to gain more advantages compared to their competitors (Autio, Sapienza, & Almeida, 2000). Autio et al. (2000) argued that those enterprises that enter international market at a faster pace (early entry) are able to perform better in terms of export sales. A study by Mc Dougall and Oviatt (1996) found that ventures that had an intense worldwide activity showed a better performance. Kuivalainen, Sundqvist, and Servais (2007) found rapidly internationalized Finnish smaller firms exhibited better export performance. As a result, SMEs that enter early into the international market might achieve higher degree of internationalization. However, not much research has been focused on the impact of early internationalization on the degree of internationalization in the context of emerging economies.

The review of the literature clearly highlights a number of possibly important firm-level resources that affect the speed and degree of internationalization (DOI). However, gaps identified based on the review of the literature justify the need for further exploration, particularly in an emerging economy like India, especially from a policy perspective. In particular, what firm-level resources determine the speed at

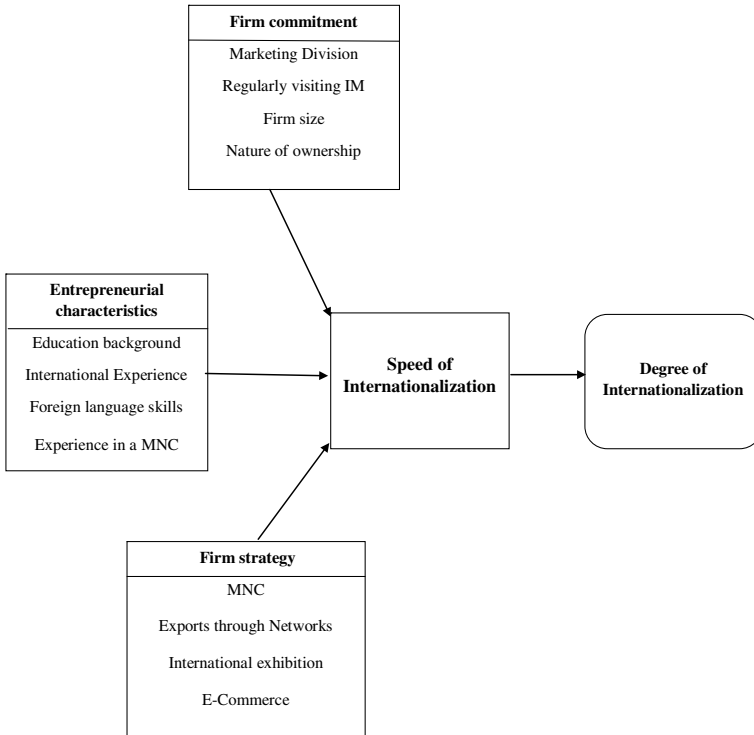


Fig. 2.1 Conceptual framework linking firm-level resources, speed, and degree of internationalization of SMEs

which SMEs entered the international market and whether the speed of entry into the international market along with the firm resources facilitates SMEs to achieve a higher degree of internationalization? The main ideas and the relationships between them, which need to be analyzed, are exhibited in Fig. 2.1.

The important firm-level resources that may influence on internationalization include: (i) firm size, (ii) entrepreneurs’ education background, (iii) entrepreneurs’ international experience, (iv) entrepreneurs’ foreign language proficiency, (v) entrepreneurs’ experience in a MNC or local enterprise, (vii) nature of ownership, (viii) marketing division, (ix) regular or intermittent, and (x) mode of exports. Among these internal factors, some might accelerate the internationalization process of SMEs to enter rapidly into the international market whereas some others might decelerate the process. Further, internationalization speed along with firm-level factors might have an impact on the degree of internationalization attained by the SMEs.

2.3 Methodology and Data Analysis

At the outset¹, we considered some of the major organizations like VITC, MSMEDI, and FKCCI for the database of SMEs that are engaged in international activities. Further, we combined all the three databases and prepared the district-wise and industry-wise distribution of exporting SMEs in Karnataka, since it is one of the most industrially developed states in India (Directorate of Industries and Commerce, 2014). Further, the database was arranged district-wise, and it found that Bengaluru district accounted for 75% of the total SME exporters in Karnataka. Finally, the research study was confined to Bengaluru district. Later, the study prepared an industry-wise list of internationalized SME according to National Industrial Classification (NIC) 2008, and found that machinery industry accounted for a maximum share (182 out of 958) of the total internationalized SME in Bengaluru district. Therefore, the research study was confined to the machinery manufacturing industry SMEs in Bengaluru district.

To decide the appropriate sample size of the machinery manufacturing industry for a population of 182 machinery exporting SMEs, with a confidence level of 10 at 95% level, the requisite sample size is 62 exporting SMEs. Therefore, we tried to gather data from a minimum of 65 exporting SMEs in the machinery manufacturing industry of Bengaluru district. Finally, we gathered primary data from about 70 exporting SMEs. Thus, the current study is based on primary data collected from about 70 SMEs in Bengaluru during the period November 2013 to July 2014. We used a semi-structured questionnaire and had face-to-face interviews for primary data collection from the entrepreneurs of these SMEs.

The research analysis done to study the two research objectives is confined to binary logistic regression and multiple regression analysis. The two dependent variables used for the analysis are as follows:

1. The speed of Internationalization (IS) has been defined as the time taken (in terms of years) from the firm inception to the beginning of the export sales (Madsen & Servis, 1997). Following Madsen and Servis (1997), early entry has been defined as firms which started exporting in the first three years. We coded a dummy dependent variable equal to 1 if a firm has internationalized within the first three years after founding, otherwise 0. Further, speed of internationalization has also been used as an independent variable along with firm-level factors to analyze its influence on the degree of internationalization.

¹Small portions of this study were also published by the authors in their works – (a) “Internationalization of SMEs from Bengaluru: How do barriers affect the export entrepreneurship?”, 2016 *IEEE International Conference on Management of Innovation and Technology (ICMIT)*, DOI: <https://doi.org/10.1109/ICMIT.2016.7605039>, published in 2016; (b) “Degree of Internationalization and Economic Performance of SMEs in Bengaluru: Influential Factors and Outcomes”, in Chinmay Pattnaik, Vikas Kumar (ed.) *Emerging Market Firms in the Global Economy* (International Finance Review, Volume 15) Emerald Group Publishing Limited, pp. 35–71.

2. Degree of Internationalization (DOI) has been defined as export sales as a percentage to total sales (FSTS) for the first year of exports.

The various independent variables used for the analyses are as follows:

I. CEOs' characteristics:

- (i) CEOs' education background (CEE): The educational qualifications of entrepreneurs' have been ranked from 1 to 6. [(1) Up to X standard, (2) 12th standard, (3) graduates in engineering, and (4) postgraduates in engineering, (5) diploma holders in engineering, (6) nontechnical graduates].
- (ii) CEOs' international experience (CIE): Total number of years spent in the international market.
- (iii) CEOs' foreign language proficiency (CFK): Number of foreign languages spoken.
- (iv) CEOs' experience in MNC/LE (ML): A dummy variable was used for the CEOs experience in MNC/LE, equal to 1 if the entrepreneur had previous work experience in an MNC, and 0 otherwise.

II. Firm commitment:

- (i) Firm size (FZ): Number of full-time employees at the time of firm's inception.
- (ii) Exclusive marketing division (MD): Used as a dummy variable (1 for SMEs which have a marketing division and 0 for others).
- (iii) Nature of ownership (NOW): We have ranked the firm ownership from 1 to 3 [(1) proprietorship, (2) partnership, (3) private limited company)].
- (iv) Regular/Intermittent (REG): Used as a dummy variable (1 for SMEs which are regular and 0 for others).

III. Modes of entry for exports:

- (i) Exports through a multinational company (EMNC): Used as a dummy variable (1 for SMEs which used MNC help for entering the export market and 0 for others).
- (ii) E-commerce (EC): Used as a dummy variable (1 for SMEs which used e-commerce for entering the export market and 0 for others).
- (iii) Exports through a network (DE): Used as a dummy variable (1 for SMEs which directly entered the export market and 0 for others).
- (iv) Participation in international exhibitions (IE): Used a dummy variable (1 for SMEs which entered the export market and sold their products through participation in the international exhibition/s and 0 for others).

2.4 Influence of Firm-Level Resources on Internationalization Speed and Degree of Internationalization: Result of Analysis

In the first place, it is appropriate to explain the important features of internationalized SMEs in Bengaluru. Table 2.1 highlights the descriptive statistics of the variables concerned in this study. The degree of internationalization (DOI) varied from 1 to 100%, average being 29%. About 25% of the SMEs have taken less than 3 years to enter the international market. The age of entrepreneurs' (CAG) varied from 31 to 78 years, at the time of entering the international market. The educational qualifications of entrepreneurs (CEE) varied from a mere X standard to Master of Engineering (ME). On an average, these entrepreneurs have a higher educational qualification, with majority accounting for engineering graduates. International experience of entrepreneurs (CIE) varied from 0 to 39 years at the time of entering the international market. The foreign languages known (EFK) varied from 0 to 7, the average being two international languages

The nature of firm ownership (NOW) varied from proprietorship to private limited companies, on an average largely comprising partnership and private limited companies. Around 2% of the SMEs have an experienced entrepreneur with a multinational company. There are four important modes of exports adopted by the SMEs to enter the international market. While 41% SMEs have resorted to exports through multinational companies (EMNC), 28% depended on network to export (ED), 24% exported through international exhibitions (IE), whereas 11% SMEs adopted e-commerce (EC) to enter the international market. The firm size

Table 2.1 Descriptive statistics

Variables	N	Min	Max	Mean	Std. D
Degree of internationalization (DOI)		1.00	100.00	29.1143	26.12486
Speed of internationalization (SI) ^a		0.00	1.00	0.2571	0.44021
CEOs education qualification (CEE)		1.00	6.00	4.5000	1.17646
CEOs international experience (CIE)		0.00	39.00	9.0857	7.17027
Foreign language known (EFK)		0.00	7.00	2.2429	1.38769
MNC or local enterprises (ML) ^a	70	0.00	3.00	2.4143	1.06992
Nature of ownership (NOW)		1.00	3.00	2.1857	0.92145
Exclusive marketing division (MD) ^a		0.00	1.00	0.1571	0.36656
Export through a MNC (EMNC) ^a		0.00	1.00	0.4143	0.49615
Exports through exhibitions (EIE) ^a		0.00	1.00	0.2429	0.43191
Exports through network (EN) ^a		0.00	1.00	0.2857	0.45502
Internet commerce(IC) ^a		0.00	1.00	0.1143	0.32046
Regular/Int (REG) ^a		0.00	1.00	0.6714	0.47309
Firm size (FS)		2.00	175.00	29.0000	29.31142

^aDummy variables

(FZ) varied from two employees to 175 employees, the average being about 29 employees.

Table 2.2 examines the correlations between the variables. All those which are statistically significant at 0.05 and 0.01 level are marked in bold. However, none of the variables appear to be highly correlated with their corresponding variables to establish the problem of multicollinearity (Hair, Black, Babin, Anderson, & Tatham, 2006)

Table 2.3 exhibits the estimation results of binary logistic regression analysis to ascertain the effect of firm-level resources on the speed of internationalization in terms of early and late entry. The model has shown a better predictive accuracy as a model was 85% correctly classified (Table 2.3) indicating that the explanatory variables are better predictors of internationalization speed.

It is appropriate to describe the role of three explanatory variables in influencing the internationalization speed. Among the different firm-level resources, marketing division (MD) and regular visits (REG) to international markets have positively influenced the internationalization speed, implying that firms that are highly committed in their initial entry are more successful to reach international markets sooner than other firms. Further, multinational company as a mode of entry (EMNC) positively influenced the speed of internationalization, which implies that firms that adopted multinational company as a mode of entry in their early years would rapidly enter international market than the firms that adopted exports through a network.

With an understanding of firm-level resources and its influence on the internationalization speed, it is important to examine how internationalization speed along with firm-level resources influenced the degree of internationalization. Therefore, we performed a multiple linear regression analysis to ascertain the influence of firm-level factors and internationalization speed on the degree of internationalization. The results of the multiple linear regression analysis along with the collinearity values of predictor variables are shown in Table 2.4. The overall model is significant as explained by the F value and as indicated in the R^2 value (31%). Further, none of the independent variables appear to be highly collinear as revealed by the variance inflated factor (VIF) (Hair et al., 2006).

It is pertinent to explain the role of each of the five explanatory variables in influencing the degree of internationalization. Firstly, CEOs' education background (CEE) had a significant positive effect on the degree of internationalization implying that firms with more qualified CEOs' could achieve a higher degree compared to the lesser qualified ones. Further, the nature of ownership (NOW) is positively related to the degree of internationalization implying that those firms with more number of owners are able to achieve a higher degree of internationalization compared to those firms with proprietorship. In addition, firms that depend on e-commerce (EC) as a mode of entry in their first year of exports are likely to achieve a higher degree than the firms that adopted exports through a network. Although exports through international exhibitions (EIE) are significant has a negative relationship on export performance, implying that those firms that adopted international exhibitions as a mode of entry have achieved negative performance in their first year of exports.

Table 2.2 Correlation between variables

VAR	DOI	SI	CEE	CIE	EFK	ML	NOW	MD	REG	EMNC	EIE	EC	FZ
DOI	1												
SI	0.358**												
CEE	0.074	0.112											
CIE	-0.095	-0.025	0.052										
EFK	0.115	0.323**	-0.004	0.09									
ML	0.09	-0.137	-0.121	0.122	-0.235								
NOW	0.047	0.095	0.074	-0.257*	0.123	0.053							
EMD	-0.128	0.195	-0.017	-0.187	0.152	0.052	0.384**						
REG	-0.095	0.203	-0.039	-0.043	0.322**	0.071	0.142	0.135					
EMNC	0.018	0.102	-0.062	0.067	-0.001	-0.005	-0.107	-0.044					
EIE	0.051	0.048	0.157	-0.035	-0.027	0.116	0.104	0.122	-0.476**				
EN	-0.178	-0.083	-0.054	-0.034	0.026	-0.045	0.148	-0.012	-0.532**	-0.358**			
EC	0.12	-0.006	-0.269*	0.078	0.132	-0.169	-0.269*	-0.032	-0.211	-0.099	-0.028		
FZ	0.142	0.335**	0.234	-0.019	0.127	0.02	0.347**	0.548**	-0.028	0.11	-0.005	-0.13	1

*Correlation is significant at 0.05 level, **correlation is significant at 0.01 level (two-tailed)

Table 2.3 Influence of firm-level resources on the internationalization speed: binary logistic regression analysis

Variables	B	S.E.	Wald	Sig.
CEE	0.263	0.347	0.575	0.448
CIE	0.021	0.050	0.175	0.676
EFK	0.340	0.294	1.336	0.248
ML	-0.132	0.405	0.106	0.745
NOW	0.446	0.512	0.759	0.384
MD	2.778	1.342	4.285	0.038*
MNC	3.893	1.326	8.622	0.003*
INE	-0.626	0.830	0.570	0.450
EC	-1.063	1.200	0.786	0.375
REG	1.793	0.929	3.726	0.054*
FZ	-0.012	0.023	0.262	0.609
Constant	-7.572	2.894	6.847	0.009

Chi-square = 26.532, -2 Log likelihood = 53.275, % correctly classified = 85%

*Significant 0.05% level

Table 2.4 Influence of firm-level resources and internationalization speed on the degree of internationalization: multiple regression analysis

	Unstandardized coefficients		Standardized coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
(Constant)	-13.702	17.572		-0.780	0.439		
CIE	0.097	0.362	0.032	0.267	0.790	0.862	1.160
EFK	-1.927	2.035	-0.124	-0.947	0.348	0.727	1.375
MNC	-1.156	2.601	-0.057	-0.445	0.658	0.749	1.335
NOW	6.339	3.439	0.270	1.843	0.071**	0.578	1.731
EIE	-12.448	6.391	-0.249	-1.948	0.057*	0.761	1.313
EMNC	9.558	6.822	0.223	1.401	0.167	0.492	2.033
EC	20.167	8.444	0.299	2.388	0.020*	0.792	1.262
CEE	4.604	2.267	0.251	2.031	0.047*	0.816	1.226
MD	-7.919	9.330	-0.134	-0.849	0.400	0.496	2.016
REG	4.459	6.000	0.098	0.743	0.461	0.720	1.389
SI	12.640	6.915	0.258	1.828	0.073**	0.626	1.597
FZ	0.044	0.158	0.034	0.276	0.784	0.824	1.213

F 1.812 (Sig 0.060), R^2 0.315, * significant at 5%, ** significant at 10%

Another significant factor which made a difference to the export performance is the internationalization speed. Internationalization speed (SI) positively influenced the degree of internationalization indicating that those SMEs that have entered the international market at an early age are able to accomplish a higher level of degree of internationalization than those who have taken more time to enter.

2.5 Theoretical Contributions

Although the issue of internationalization has attracted many empirical researchers, least attempt has been made to analyze the influence of firm-level resources on the speed and degree of internationalization, particularly SMEs in emerging economies. The present research study is designed to consider the importance of different modes of exports along with the firm-level resources to analyze the influence on speed and performance. As a result, this research study contributes to the existing literature on internationalization, by examining two important research questions in the context of an emerging economy:

1. What firm-level resources determine the internationalization speed of SMEs?
2. How does the speed of internationalization, along with the firm-level resources, influence the degree of internationalization of SMEs?

These objectives are studied with respect to the machinery industry SMEs of Bengaluru. The research objectives are studied based on primary data collected from 70 internationalized SMEs of Bengaluru and were confined to export activities. The present findings demonstrate that firms that are highly committed, competent, and directed by an appropriate strategy would be able to accelerate both their speed and the degree of internationalization. Therefore, the present research is therefore intended to make contributions to the literature on firm-level resources, speed, and performance.

2.6 Conclusions and Implications

Entering a global market is viewed as a noteworthy for SMEs because of its lack of resources. However, studies have highlighted that an appropriate strategy through effective utilization of limited resources facilitates SMEs to enter international market at a faster pace and can achieve higher export performance. Based on this understanding we have analyzed the research objectives of this study.

Our results, for the first research question, revealed that among the different firm-level factors, it is the firm commitment (in terms of marketing division and regular visit to international market) which has positively influenced the internationalization speed. Firm commitment at the early stage is extremely an important strategy for a firm to internationalize (Papadopoulos & Martin, 2010). Further, Johanson and Valhne (1977) underline the importance of firm commitment in terms of specialization of resources that are deployed to speed up the internationalization process. As also indicated previously, firms with higher international commitments allocate more resources and create a concrete platform for their global activities, which results in increased intensity of internationalization (Papadopoulos & Martin, 2010). Furthermore, firm strategy (in terms of MNC mode of entry) used by SMEs

also determines their international efforts (Leonidou & Katsikeas, 1996). Typically, barriers to internationalization are higher for SMEs than the larger firms. SMEs that lack resource hardly dare to internationalize (Acs et al., 1997). Therefore, to overcome the barriers at the initial year of exports, firms would have depended on multinational companies as a mode of entry for international expansion (Acs et al., 1997). Acs et al. (1997) advocate that MNCs act as facilitator for SMEs to expand globally and an efficient means to access the foreign markets. Further, firms can acquire relevant information that is required for early internationalization through following the larger firms as subcontractors (Westhead et al., 2002). Therefore, one could argue that firms that are “highly committed” and adopt “appropriate export strategy” (in terms of mode of entry) are able to rapidly internationalize.

Ultimately, we probed whether the speed along with the firm-level resources had any influence on the degree of internationalization. The results reveal that it is the “human capital” and “appropriate firm strategy” which significantly determined the degree of internationalization achieved by the SMEs. The “human capital” is reflected in its CEOs’ educational qualification. Therefore, firms with CEOs who are more qualified would have acquired the capability in the form of knowledge, skills, and problem-solving ability through education (Cooper et al., 1994). Further, the knowledge and skills facilitate entrepreneurs to assess the pros and cons of internationalization from an unbiased perspective (Stoian et al., 2011). Therefore, the higher the education level is associated with, higher the degree of internationalization.

Finally, “appropriate firm strategy” is reflected in whether a firm is large in terms of ownership, mode of entry, and time taken to enter the international market. A firm which is a private limited, adopted e-commerce as a mode of entry, and entered the international market at an early age has achieved a higher degree of internationalization. Owners of the SMEs generally adopt strategies for their business survival rather pursuing the risky strategies for their business growth. Subsequently, firms with proprietorship may not have the desire, the expertise, or the resource to grow their business through internationalization relatively (Reuber & Fischer, 1997). A firm with more no of owners may have the business skills and enables to be aware of export market opportunities. Moreover, the financial constraints faced by SMEs can be deliberately overcome through utilizing the external funding through widening the ownership base to export (Westhead, 1997). In the recent time, e-commerce has been widely adopted to enter international market as it is easier for SMEs to compete and quite cost-effective in reaching the global customers (Moini & Tesar, 2005) and enhances their competitive position in the world market and performance (Moini & Tesar, 2005). Subsequently, early the entry into international market facilitates firms to recognize the new knowledge and opportunities (Kuivalainen et al., 2007). Further, firms can exploit the opportunities to gain higher advantages than their competitors by early internationalization (Autio et al., 2000). Therefore, an entry into international market would call for “human capital” and “appropriate strategy” on the part of SMEs to achieve a higher degree of internationalization. Therefore, an appropriate strategy developed by a highly

qualified entrepreneur would provide a platform for the SMEs to “seize the opportunities” and to perform better in the international market.

Several implications can be offered based on the research findings. Firstly, this study contributes to the existing literature by simultaneously studying the effects of firm-level resource on the speed and the degree of internationalization, which is still missing in the context of an emerging economy like India. The results point toward firm commitment, capability, and an appropriate firm strategy to accelerate the internationalization speed and degree of internationalization of SMEs. More importantly entrepreneurs of SMEs, especially who have the aspirations of rapid internationalization, will benefit from identifying the key factors that influence the early internationalization. However, firms should consider becoming more committed by recognizing the importance of international sales. The mere fact of firm commitment does not necessarily lead to early internationalization. Firm strategy enables to commit appropriate resources to improve the pace of internationalization.

On the other hand, decision makers should be aware of the role played by their educational qualification in influencing the export performance. Equally, firms should also focus on low-cost entry mode and particularly on e-commerce, as it facilitates to maximize their international exposure in their early years of exports. Therefore, efforts should be directed toward acquiring capabilities and strategizing their export operations in a planned manner at their initial stages of internationalization.

Appendix: Definitions of Concepts

SMEs

In this study, we adopt the definition of SMEs as described in the MSMED Act, 2006 and described as firms having original investment in plant and machinery not more than Rs. 100 million. (Ministry of MSMEs 2014).

Internationalization

Given the various channels of internationalization, this study primarily focuses on exports by SMEs to represent the mode of entry into the international market. Therefore, in this study, we define internationalization as an expansion of firm’s products or activities into foreign markets through exports.

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Chapter 3

Returnee Entrepreneurs (REs): A Comparison Between Direct and Indirect REs on the Use of Social Ties for New Firm Creation



Maris Farquharson and Sarika Pruthi

3.1 Introduction

Historically and geographically, migration and movements of people across borders from resource poor to richer climes is well documented (Gmelch, 1980). Population shifts have generally been viewed as one-way traffic, but more recently we have experienced a ‘calling home’ of migrants, away from their adopted host country. China offers an interesting example, especially with respect to returnee talented people and entrepreneurs (Wang, Zweig, & Lin, 2011; Zweig & Wang, 2013). The call has been influenced by improved market opportunities within the home country and by government-led policies encouraging talent to return to help boost the economic standing of the returnees’ home country (Zweig, Chung, & Vanhonacker, 2006). In this paper, we explore ‘how’ Returnee Entrepreneurs (REs) leverage their social ties for new firm formation after a period of absence from their home country, probe what kinds of network relations they report (i.e., strong or weak ties) and identify ‘why’ and ‘what’ they are important for.

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Following the previous studies, we define REs as those who have lived in a developed OECD country, received education outside their home country, and/or have working experience from the host country, and/or may have opened a business in their host country prior to returning to their own home country (Guo, Porschitz, & Alves, 2013; Liu, Lu, & Choi, 2014; Pruthi, 2014; Saxenian, 2006; Wright, Liu, Buck, & Filatotchev, 2008). Our study specifically looks at Returnee High-tech Entrepreneurs (Wright et al., 2008) who form new firms in a second-tier city in China, Zhejiang Province, called Ningbo. We see the entrepreneurship process as one embedded in context and where the behavior of individuals is embedded in networks of relations. An individual entrepreneur's network might, therefore, be varied in order to access different types of resources for new firm formation and have to include tangible and intangible resources, knowledge, advice, and guidance gained from weak or strong ties (Granovetter, 1973; Li, Zhang, Li, Zhou, & Zhang, 2012).

On strength of ties it has been concluded that weak ties are much more important at the firm formation phase (Batjargal, 2007) because the structural holes (i.e., the disconnections between non-redundant contacts in a network) facilitate access to information and opportunities from brokering opportunities between disperse ties (Burt, 1992; Nahapiet & Ghoshal, 1998) (i.e., they have a bridging effect to knowledge acquisition) (Guo & Miller, 2010). Weak ties, therefore, are portrayed through infrequency and short duration of contact and no socioemotional attachment. Contact with weak ties is generally established through existing strong tie links (i.e., friends, suppliers, customers) (Hoang & Antoncic, 2003). Strong ties (i.e., binding connections or cohesive ties between contacts in long-term relationships), on the other hand, associated with family, friends, former colleagues, industrial contacts, etc. (i.e., direct, personal contact and frequent), might be deemed fundamentally important on the entrepreneur's return, after a period of absence (Drori, Honig, & Wright, 2009). Strong ties are associated with the evaluation of opportunities, the acquisition of resources, and gaining legitimacy. They are also associated with frequency and quality of contact. Notwithstanding, strong tie networks have also been negatively associated with collusion, corruption, and the risk of 'overembeddedness' (Sun, Mellahi, & Wright, 2012; Peng & Zhou, 2005).

Using network theory, we study and investigate the social ties in new firm formation used by REs in an economy in transition (Batjargal, 2007), where the barriers of an immature infrastructure supporting new firm formation (Peng & Zhou, 2005; Peng & Heath, 1996) are exacerbated by a lack of personal knowledge about access to resources due to extended overseas exposure. Social ties, after all, are known to help overcome barriers to finding suppliers, clients, investors, regulators, etc., through personal networks (Jack, 2005; Liu et al., 2012). REs, however, must compensate for and/or create networks, because of their absence, in a country where the concept of *guanxi* (relationships and connections) is fundamental to all aspects of life and business (Guo & Miller, 2010; Tsui, Farh, & Xin, 2000).

Network theory is considered appropriate because it has been influential toward the identification of antecedents of individual entrepreneur's interpersonal ties for access to resources and because China is a relationship-intense context (Gold, Guthrie, & Wank, 2002). Guided by past literature, we look at different types of networks associated with family ties, business ties, community ties, and government ties but remain open to

discovering new relationships (Chen, Chen, & Huang, 2013). Ties are dynamic, and weak ties may be established from existing strong ties that might reveal potential partners, suppliers, or customers once trust has been established (Hoang & Antoncic, 2003; Luo, Huang, & Wang, 2012). We recognize also the usefulness and constraints of not enough strong ties and a network dominated by strong redundant ties, both of which are as equally detrimental for access to resources supporting development of new firm formation (Arregle et al., 2013).

Since our unit of analysis is the individual RE, our attention will focus on interpersonal level ties and resources embedded in network relationships. Relationships, after all, are developed by individuals not firms. RE's political ties to governmental officials giving rise to dichotomous network connections are also explored (Hoskisson, Eden, Lau, & Wright, 2000; Li, Meng, Wang, & Zhou, 2008; Sun et al., 2012) because the call and support from the Chinese government to REs is a specific factor in this context. The relationship between entrepreneurs and government is more prominent in Asian countries, such as China, because of historical heritage and an evolving (yet weak) infrastructure supporting entrepreneurship (Peng & Zhou, 2005). In China, the government is the key stakeholder because the country is a party state which has the authority to approve projects, allocate resources, provide funding, delegate logistical support, implement legislative change, own vital resources such as land and banks, and control the media (Luo et al., 2012). Policy and control exerted by central government are filtered down to provincial and municipal level for dissemination to ambitious REs. This influence is political and ideological and can sometimes lead to a volatile market structure (i.e., over subsidization). The value of the entrepreneur's political ties (EPT) is recognized in extant literature and might involve individual ties but also interdependencies on different types of ties (Batjargal & Liu, 2004; Li et al., 2008; Luo et al., 2012). In the context of China, having good relations or *guanxi* with local government officials is considered 'the lifeblood of private business' (Bian, 2005, p. 314; Gold et al., 2002) and in past research has been shown to have a positive effect on high-tech entrepreneurs' resource availability in an emerging market (Wang & Lestari, 2013).

This paper is structured as follows: First, an overview of Returnee Entrepreneurs to China is presented. Second, justification for using a network-based approach for analysis and extending understanding within the specific context in which the research is conducted is outlined. Third, our methodological approach and reliance on a comparative case study method is justified. Finally, we offer discussion of findings, make recommendations for practitioners and academics for future study, and suggest some policy considerations. We end with concluding remarks about the overall study.

3.2 Returnee Entrepreneurs to China

Returnees who return as employees are not as new a phenomenon as the RE. Kenney, Breznitz, and Murphree (2013) state that from an historical perspective (especially within the ICT industry), multinational companies arriving in China in the 1990s played a leading role in the transfer of knowledge and skills often through

the employment of returnees while the role of the RE became a later influence. It was only during the 2000s that REs seriously considered returning when they estimated that there was a sufficient indigenous skills and potential market base for them to exploit their overseas experiences. Returnee Entrepreneur research in China has generally centered on Beijing and Zhongcunguan Science Park which has good relations with elite universities and governmental encouragement (Dai & Liu, 2009; Filatotchev, Liu, Lu, & Wright, 2011; Saxenian, 2006).

Sending people overseas for further education from China has been recorded since 1849 when migrants generally returned to implement new ideas learned overseas (Wang, Duan, & Hou, 2013). Prior to the Cultural Revolution, students were regularly sent overseas for further education and, although closed during 1966–1976, reopened when Deng Xiaoping restarted sending students out especially to the USA. However, although the economy in China began to open, of those who were educated abroad, few were enticed to return in the early days of ‘opening up.’ A recent analysis of returnees to China indicates that those with working experience did not start to return until the late 1990s, once openness and political stability had taken root. The rate has been increasing in response to favorable domestic conditions, domestic market potential, and attractive returnee packages for emigrants resulting in just over a third of the 1.9 million Chinese studying abroad from 1978 returning to China (Kenney et al., 2013). REs, from SE Asia as well as China, have, by a consequence of history, economic development, capabilities building, and ‘home’ opportunities, been increasing in numbers and have attracted attention from researchers both domestically and internationally (Liu et al., 2014; Pruthi, 2014). A reversal of the ‘brain drain’ (i.e., where talent is enticed from their home country to a more developed economy) or ‘brain gain’, for the host country, is now becoming ‘brain circulation’ (i.e., emigrants are returning with their experiences to their home of origin) (Dahles, 2012; Li et al., 2012; Liu, Lu, Filatotchev, Buck, & Wright, 2010; Saxenian 2006; Zweig et al., 2006).

3.3 Theoretical Perspective

Authors have claimed that social capital, embedded in networks, can become a means of compensation when barriers are met (Bourdieu, 1986; Peng & Zhou, 2005; Peng & Heath, 1996; Wellman, Chen, & Weizhen, 2002; Zhou & Li, 2007). When entrepreneurs face barriers of an immature infrastructure supporting new firm formation (i.e., the evolving infrastructure in China), they can use networks. Networks allow access to information, resources, and opportunities (Granovetter, 1973). Network relationships, based on trust, assist entrepreneurs in accessing resources, information, funding opportunities, skilled labor, etc., to overcome infrastructure barriers (Batjargal, 2006; Pruthi, 2014; Uzzi, 1997). Those familiar with their local context are likely to navigate the network system to their own competitive advantage (Child & Rodriguez, 2005; Luo et al., 2012) because past research indicates that those embedded in the context understand the social norms and sanctions that facilitate trust and cooperative behavior (Granovetter, 1985;

Coleman, 1988). Those who have been absent (i.e., REs due to overseas exposure) must compensate for their absence and gain entry into social network frameworks through brokers (Anderson, Park, & Jack, 2007) to link the focal person to new sources of information or new social capital (Coleman, 1988; Burt, 1992).

We speculate that REs will have both strong and weak ties in their networks. Strong links may be based on embedded, personal links grounded in trust, which are lasting and deep, supported by a high frequency of contact, while weak ties may be based on loose relationships with unrelated individuals who have less contact (Elfring & Hulsink, 2003). Differentiating between weak and strong ties allows us to study the influence of the links on the function of the REs' networks during new firm formation. The diversity, homogeneity (associated with strong ties), and heterogeneity (associated with weak ties) of these ties has an impact on the actions of individuals and outcomes (Granovetter, 1973). Being associated with like-mindedness (i.e., strong ties) during new firm formation may be a disadvantage because, although safe, it might not open up new avenues for new information, knowledge, or resources. Weak ties might therefore open up more connections or social circles (Burt, 1992).

We further justify the use of network theory because of the influence of *guanxi* within Chinese society. *Guanxi* has been viewed as a version of social network theory because it is governed by strong ties (i.e., frequent interaction, emotional involvement) and weak ties (i.e., access to diverse information) and is closely related (if not fundamental) to relations in China (Tsui et al., 2000; Wellman et al., 2002). *Guanxi* has also been defined as networks consisting of dichotomous ties which is reinforced through frequent interactions, intimacy, emotional attachment, and ongoing resource exchanges (Bian, 2005), where the contextual feature of *guanxi* indicates a 'rule of the game' which is referred to as 'face' (*mianzi*) within the China context (Bian, 2005, p. 313). *Guanxi* is thus a special social capital in Chinese society shared by dyadic individuals in kinship, friendship, acquaintanceship, native origin, and surname (Guo & Miller, 2010).

The four main ties to be probed in this research are family, business, community, and governmental which have been identified as important at the firm formation stage (Guo & Miller, 2010) for the accumulation of financial resources, access to funding promoted through governmental policy initiatives, and access to professional resources and knowledge within specific business communities (Davidsson & Honig, 2003). According to Davidsson and Honig, family ties provide basic information and support; business ties provide links with distributors, suppliers, competitors, and customers; community ties offer ties with industrial specific associations for the transfer of specific knowledge (Chen et al., 2013); and government ties provide the vehicle to access knowledge about existing and future policies, and access to funding and benefits and has been viewed as both positive and negative in China (i.e., perhaps more important at firm formation stage but subsequently identified as stifling or interfering) (Sun et al., 2012). For example, Fuller reports that firms with a strong Entrepreneurial Orientation (EO) (i.e., high-risk projects) are constrained by governmental *guanxi* because this entrepreneurial approach conflicts with the main governmental system (i.e., bureaucratic)

(Fuller, 2010). The effects of *guanxi* within professional networks (i.e., suppliers, customers), however, may be dependent on the quality of people within that network and the institutional system within which the industrial sector operates, as opposed to being a traditional, reciprocal relationship based on kinship and trust. Quality (and value) of *guanxi* is emphasized by Hsu and Saxenian (2000) studying ethnic Chinese communities involved in the technology sector. Networks were founded upon theoretical knowledge and technical expertise rather than just knowing or having a reciprocal relationship with ethnically similar people and as such have been instrumental in transferring knowledge from one destination to another (i.e., the development of venture capital support in Taiwan linked to US relations) (Hsu & Saxenian, 2000). Networks may therefore be contingent on the content of the ties and the nature of exchanges between the people. For the purpose of this paper, we rely on a definition of social tie offered by Batjargal ‘as interpersonal relationships that facilitate or constrain social exchange’ (Batjargal, 2007, p. 610).

3.4 Methodology

The concept of Returnee Entrepreneurs is fairly new to China, and there is relatively little literature covering the individual RE, their process of firm formation, or subsequent performance. A qualitative approach is, therefore, deemed reasonable to explore the relationships between the individual entrepreneur and their network of contacts during the process of firm formation because our understanding is limited. We will look at ‘how and why’ things come about (Gartner & Birley, 2002). To explore these questions, our interview guide evolved from network theory literature. We thus hope to expand existing theory to conceptualize a potential new network approach.

3.5 Research Site

Unlike Beijing, Hangzhou, or Shanghai, Ningbo does not have an already established high-technology sector. It is an historical, port city with a strong and successful identity with international trading (Zhen & Yang, 2009). Change, however, is inevitable, and as dictated by the central government, the Ningbo local government is working toward attracting a high-tech sector to its newly developing science and technology and incubation infrastructure locations. RE research has been conducted in first-tier cities like Beijing (Filatochev, Liu, Buck, & Wright, 2009; Filatotchev, Liu, Lu, & Wright, 2011; Sutherland, 2005), but none can be found for second-tier cities like Ningbo.

3.6 Sampling Process

Access to high-tech REs proved challenging and often contacts recommended that we go to Shanghai, Hangzhou, or Suzhou which are sites with established histories of high-tech development, but we recognize the future research benefits of starting research in Ningbo in 2014 for potential longitudinal inquiry. Ethical protocol for interviewing REs was approved through university channels, and our university Research Office contacted for official letters of introduction to incubator managers. Substantial time was taken to make the purpose of the research known to the managers who subsequently e-mailed their tenants requesting them to consider taking part in an interview. Research Assistants also built a database of contacts through the participants' LinkedIn accounts. Once interviews commenced, participants recommended other REs to interview (who were not necessarily in incubator units). A Returnee Association was also identified which had a strong connection to our university and subsequently sparked a positive response from participants, but not all were from the high-tech sector. Notwithstanding, all data were collected. Our sample was thus based on a snowball process and 10 cases identified which is the maximum Eisenhardt considered as manageable for a case study approach (Eisenhardt, 1989; Yin, 1989). In total, we collected 20 interviews but used only 10 from high-tech REs. The sample size is small, but we do not concern ourselves with the generalizability of our results since the research is exploratory of a new phenomenon (Flyvbjerg, 2006). Eisenhardt (1989), we considered, offered opportunity to build on theory through case study analysis. We strived to capture an understanding from the participants' perspective which is in keeping with a qualitative methodological approach (Gephart, 2004). Because of the size and unequal development in China, it is impossible to offer a homogeneous conclusion to this research. We assign any results and conclusion to the theoretical sample and the context of Ningbo.

3.7 Data Collection

An explorative case study and qualitative approach, relying on an open-ended interview guide, were used with our selected participants (Eisenhardt, 1989; Stake, 1998). The interview guide consisted of introductory, broad-based questions about REs' experiences overseas, the amount of time spent overseas, the purpose of their overseas tour, and reasons for their return (Table 3.1). These were followed with open-ended questions, loosely structured to allow the participant to answer freely about their experience of returning to China, Ningbo, to form a new firm. Questions explored motives for return; the influence of their social networks; information about networks in China and networks in their host country, and finally challenges faced during new firm formation. The structure was such that the interviewer was able to explore further their responses. REs were asked for 45 min of their time, but

Table 3.1 Returnee Entrepreneur profiles

Returnee Entrepreneur	Age	Highest degree	Host country	Period of stay abroad (years)	Purpose of stay abroad	Length of international work experience	Mode of return to China (direct or indirect)	Year of return to China	Year of founder start-up	Industry or venture
(SHOU)	38	Master	Finland	2005–2010	Study and work	6	Direct (founder of start-up)	2010	2010	New energy and printed electronics (has 2 companies)
(TING)	38	Ph.D.	USA	1998–2012	Study and work	15	Direct (founder of start-up)	2012	2012	Medical devices and gene testing
(CHENG)	35	Ph.D.	Sweden	2007–2009	Work	3	Direct (founder of start-up)	2009	2010	New material industry for medical treatment (dentistry)
(JUN)	28	Bachelor	Italy	2008–2009	Study	1	Direct (founder of start-up)	2009	2010	Mobile phone APP for student internships and temporary jobs
(LI)	50	Ph.D.	Scotland	1988–2006	Study and work	17	Indirect (employee of another company)	2006	2009	Digital TV software for behavioral data collection
(REN)	30	Master	UK	2002–2009	Study and work	6	Indirect (employee of another company)	2009	2012	Information sharing platforms for SMEs (port authorities, etc.). Big data and cloud technology
(TONG)	35	Master	Sweden	2008–2009	Study	1	Indirect (employee of another company)	2009	2009	Data mining and analysis for marketing and decision making systems (i.e., fast food chains)

(continued)

Table 3.1 (continued)

Returnee Entrepreneur	Age	Highest degree	Host country	Period of stay abroad (years)	Purpose of stay abroad	Length of international work experience	Mode of return to China (direct or indirect)	Year of return to China	Year of founder start-up	Industry or venture
(YANG)	33	Master	Sweden	2004–2006	Study and work	3	Indirect (employee of another company)	2006	2011	Development and servicing of ultrasonic imaging software
(SHI)	32	Master	Sweden	2006	Study	2	Indirect (employee of another company)	2006	2010	Software applications for online
(KONG)	44	Ph.D.	Canada	1996–2003	Study and work	7	Indirect (employee of other companies)	2003	2010	Information analytical data

often the interview extended to over an hour. Most interviews were conducted face to face, but one participant asked that the interview be conducted using Skype because of a busy business agenda. All interviews were captured between March and August 2014, and all participants signed consent forms, agreeing to be interviewed and recorded.

Interview administration, capture, transcription, and translation were shared among three Research Assistants (RAs), trained in qualitative interviewing techniques. After piloting the guide, one RA was revered as a 'good listener' and as a result became our primary interviewer. He conducted all interviews in Mandarin. One RA, from Ningbo, made contact with the entrepreneurs and organized the time and place for the capture. Our 'good listener' conducted and taped the interview. The 'organizing' RA then transcribed the tapes and gave the third RA the written transcripts and the tapes to translate into English. The transcripts and translation were checked by the RA conducting the interviews and confirmation of meaning and intent confirmed (Temple & Young, 2004; Nurjannah, Mills, Park, & Usher, 2014). This process was repeated when the lead author read through the scripts and asked for confirmation from the RA conducting the interviews about original meaning to try to arrive at a plausible interpretation of the data. Once joint theming of data started, the consultative process continued involving all three RAs and the researcher (Nurjannah et al., 2014). The analysis process continued dipping in and out of the original scripts because the primary researcher's language was English, not Mandarin. Throughout the process, we put emphasis on meaning rather than 'objective' translation where the 'good listener' RA's role became primary translation moderator and analyzer.

3.8 Data Analysis

Data were read and re-read, and an initial round of categorization concluded for within-case analysis, relying on the identification of ties and networks as associated with and evolved from existing theory and literature, and those which were perhaps unique to the context (Eisenhardt & Graebner, 2007). These categories, which were broad and messy, were then refined into defined network ties. This was done on a case-to-case basis, and each case looked at as a stand-alone response. A third round of data exploration involved a cross-case themed analysis and comparison between cases to enhance data analysis and the identification of ties and networks common (or not) to all cases extracted (Yin, 1989). This process suggests that data were lost, but drawing together important material is advised in data analysis by Eisenhardt (1989). Direct quotations were captured in tables under identified network headings and REs divided between those who had directly formed a new firm on return and those who had not directly formed a new firm on return. The network headings were reflective of our research purpose (i.e., to capture data exploring strength of network ties in a society which is relationship centered and bound). Direct quotes, however, are descriptive, and a fourth round of comparative analysis conducted to

extract strength of ties. A cross-case comparison determined patterns of activity where explanatory themes were identified (i.e., tie strength between the REs to family, friends, classmates, school friends, community, industry, education, and government). Progress was made to analytical categorization in a comparative process akin to grounded theory (i.e., an interactive process involving induction and deduction) (Glaser & Strauss, 1967; Miller & Glassner, 2011).

3.9 Findings

We concluded our analysis with the construction of a typology (Table 3.2) which captured different categories of RE (i.e., direct entrants with a clear/no clear idea about forming their own new firms on return or indirect entrants with a clear/no clear idea about forming new firms after a time of employment in their home country). We identified 4 direct and 6 indirect REs. Following from this analysis, we present our findings in accordance with the logic of the typology (Table 3.2). The following subsections present detailed findings based on the empirical evidence.

Table 3.2 Typology of social ties in new firm formation by REs in China

	Direct entrant	Indirect entrant
Clear idea	<p><i>Quadrant 1</i> While abroad: exploited strong ties (at home) which substituted for access to weak ties to government (at home) for new firm formation While at home: validated idea through strong ties (abroad for confirmation of high-tech idea and knowledge acquisition) (Ting invited back by government) <i>Shou, Ting and Jun</i></p>	<p><i>Quadrant 2</i> While abroad: exploited strong ties for validation of idea from industry, school mates and education and gained managerial exposure (abroad) While at home: strong industry and classmates ties (at home) substituted weak ties with government where family ties available but not always supportive (Yang sought out by government to be given support) <i>Yang</i></p>
No clear idea	<p><i>Quadrant 4</i> While abroad: strong friends, educational and industry ties (abroad) lead to creation of a management team and substituted for lack of clear idea (identified only at home) While at home: strong family ties not exploited and weak government ties at home brokered through strong friends ties (at home) (One friend invited back by government) <i>Cheng</i></p>	<p><i>Quadrant 3</i> While abroad: exploited strong industry, educational and friends' ties (abroad) for validation of technology While at home: strong family ties (constrained social exchange) and weak governmental ties (at home) substituted through strong industrial ties (at home) (Kong had no intention to form a new firm) <i>Ren, Shi, Tong, Li and Kong</i></p>

3.10 Direct Entrants with a Clear Idea for New Firm Formation

In total, three REs were identified as direct entrants (Quadrant 1, Table 3.2). Cases Shou, Ting, and Jun demonstrated a clear idea to form a new firm prior to their return to China and had cultivated strong university ties with their educational institutes and strong industry ties with the companies they had chosen to work for in their host countries to extend and confirm their technical and managerial knowledge. Strong ties were exploited while abroad (i.e., through family and friend ties, who were often also REs) (at home) which leveraged access to weak governmental ties. Shou studied related topics for his business idea at undergraduate level and later worked in a state-owned enterprise (SOE), where he learned paper printing. During this experience, he absorbed essential knowledge about printing techniques, machinery, and maintenance and knowledge which was invaluable for his business which will potentially print paper batteries. Subsequently, at PG level in Finland, he worked in a related company where he conducted R&D and filed 3 patents, and then became friends with an immigrant from China who had been a prominent academic in China. This immigrant created a company in Finland in a related field, and during the building of their relationship, Shou was invited to consider using his technological knowledge to form a new firm in China with the support of the immigrant who became his partner (i.e., strong tie). One of his partner's 'uncles' assisted setting up office space and contacting regulatory bodies when Shou returned to Ningbo. Good relations were continually cultivated to include weak ties to governmental-level officials, gained through strong ties to the uncle and his partner, which led to the accumulation of government awards, honors, and media coverage (Appendix 1). Being accepted to a national level incubator unit was set as a target as outlined below:

We won an award in Gaoxin (Hi-Tech Park) District. We needed National Level support, so it couldn't be Yinzhou District. Speaking of National Level, one is Gaoxin District, another is Beilun District. If we are in Gaoxin District, we can apply as National projects directly and do not have to go through the Provincial (governmental) level. So it was more convenient (SHOU, direct entrant).

Similarly, Ting built on her doctoral education in the USA by supplementing it with experience at a leading consultancy agency and at an R&D science institute, thus building strong ties within these two sectors (i.e., accumulation of industry trends and scientific knowledge). Her status was such that she was asked to consider returning to Ningbo to form a new firm by the local Ningbo government demonstrating ties which were influenced and supplemented by strong family ties (prior to return). Her company is now in an incubator unit, researching medical equipment, and she attends governmental networking events which she finds useful (Appendix 1). She is thus supplementing her network through new weak industry ties established at events which might help her in the early development of her business as indicated in the following quotation:

Actually in China there are lots of events to which you are invited to attend, including some from government officials. For example, in the Ningbo Municipal Party Committee has organized a class of CEOs and there are all kinds of entrepreneurs and business people in the class. So we are familiar with around 30-40 of them (TING, direct entrant).

The other direct entrant, Jun identified an important gap and need in the market place (i.e., employment and work experience placements for students) while abroad which attracted attention from the government through his strong family ties (Appendix 1). The mobile phone application technology is imported. His family financially sponsored the forming of his firm and consequently, through their strong ties with the government, opened considerable funding opportunities and networking opportunities with potential clients as illustrated as follows:

We connected with the 15 universities in Ningbo through the government connections. It makes the connections much smoother (JUN, direct entrant).

Strong family ties were cited as a strong motivation for REs to return to China. Since these REs were educated overseas, we can presume that their education was paid for by their parents. Some families were already in business, but not all families were supportive of their children becoming entrepreneurs. Shou reported resistance from his parents to his decision to form a new firm as outlined below:

First, let's talk about my parents. They do not have high education. They both are ordinary workers. They have the most impact for me.... They once looked down upon those business people as 'old concept' (negatively) but they changed their minds to adapt to the new society... (SHOU, direct entrant).

Following from the findings we offer two propositions for future exploration.

Proposition 3.1 *Compared to Indirect Entrants, REs who are Direct Entrants with Clear Ideas are more likely to exploit strong ties at home, whilst in their host country, to substitute weak governmental ties at home for new firm formation.*

Proposition 3.2 *Compared to Direct Entrants with no Clear Idea, REs who are Direct Entrants with Clear Ideas are more likely to exploit strong ties in their host country, whilst in their home country, to validate their idea.*

3.11 Indirect Entrant with a Clear Idea for New Firm Formation Prior to Return

The one indirect entrant in this category, Yang, reported confusion from his parents about his decision to become an entrepreneur and to further work in a small company in China prior to the formation of his own firm, when, in their eyes, he had the capability to command good conditions in a large company in Shanghai (Quadrant 2, Table 3.2). Although some families were often against the concept of their siblings embarking on an entrepreneurial career, they nevertheless provided

emotional support which confirms previous studies (Arregle et al., 2013) as outlined in the following quote:

In principle they (the family) disagreed (with me setting up a business) because my life abroad was pretty good. My family believed that it would be ok if I became a manager in a big Shanghai Company since the salary is more or less the same as that abroad. However, I decided to go back to Ningbo and they didn't understand. The company I joined was pretty small. But I persisted. In action, they supported me. The first investment I had was from my family... It shows that they do support me in action even though they don't in their minds (YANG, indirect entrant).

Yang was sought out by government officials as 'special talent' to apply for governmental funding and was offered a sponsored location (i.e., an incubator unit). One quotation reveals his lack of experience highlighting the reason why he became an employee first:

They (the government) mainly helped me gather information through different channels. The Director of the Park gave me some very clear entrepreneurial advice which was very important to me because I didn't know much when I returned to China (YANG, indirect entrant).

Like his direct entrant counterparts, he also had cultivated strong industry and university ties by working in companies in his host country and in China prior to forming his new firm, thus establishing strong industry and university ties at home. All experience was relevant to his new firm promoting imaging software. He enhanced his technical capabilities through paid employment (abroad) and during this period established international networks with relevant academics (abroad). Yang was asked to join an R&D institute in China by the Swedish company he was working for indicating his strong industry ties (Appendix 1). The network of contacts established overseas, either through work or research collaboration (i.e., strong ties), was reported as sometimes resulting in both foreigners and overseas Chinese residents becoming potential clients of his new company as outlined in this quotation below:

When I studied abroad I met a German who is my company's client now. I had some communication about technology issues with him and one of his employees. We are kind of friends now. I was researching ultrasonic imaging software and his company focuses on the area of heart ultrasonic research. Later when I moved to this field, they gave me some business support like friends (YANG, indirect entrant).

He then validated his idea through strong friends' ties (at home) which substituted for weak governmental ties, but there was strong governmental interest in the quality and local application of his software products as illustrated in the following quote:

Some of my classmates became officials in the Ningbo government and we have always maintained good relationships. By communicating through these networks I can get first-hand information about technology. Also I get to know the trend of industry policies and government plans for the future. That's why I chose to start up in Ningbo and why I want to do high-tech. It is partly because of the advice from the leaders of Ningbo government (YANG, indirect entrant).

Insights into indirect entrants with no clear ideas prior to return prompted the following propositions:

Proposition 3.3 *Compared to Direct Entrants with Clear Ideas, REs who are Indirect Entrants with Clear Ideas are more likely to exploit strong ties in their host country, whilst in their host country, to validate their idea.*

Proposition 3.4 *Compared to Direct Entrants, REs who are Indirect Entrants with Clear Ideas are more likely to exploit strong ties at home, whilst in their home country, to substitute weak governmental ties at home.*

3.12 Indirect Entrants with No Clear Idea Prior to Return

The indirect entrants with no clear idea about new firm formation, of which there were five (Quadrant 3, Table 3.2), reported that they worked as employees in different companies mostly to garner experience, access resources, and access information about governmental support or simply serendipitously meeting potential partners as illustrated in this quote:

In 2006, one of my father's students asked for my help in one research institution and I went to help them. I met my present partner of my company there whilst helping at the institution (KONG, indirect entrant).

All REs with no clear ideas for new firm formation chose to work as employees in other companies in China prior to embarking on entrepreneurship. Cases Ren, Shi, Tong, Kong, and Li worked in companies to boost their skills and to acclimatize to the culture in China. Participant Li, whose company collected behavioral data, had been absent from China for the longest period (17 years) and was one of the first batches of students to be sent overseas for further education after the Cultural Revolution (and therefore identified as extremely talented). He found it difficult to settle and acclimatize to China. Li had strong ties to friends at home and overseas and strong industry ties but weak ties with the government (Appendix 1) as stated here:

There is some (governmental) relationship in my background. My father and mother were within the University sector, and the relationship with the government was a bit weak. My parents were academics (LI, indirect entrant).

Tong keeps in contact with his teachers at his university in Sweden and appreciated the Western approach to education indicating strong educational ties. Through his strong ties with friends at home, he was identified as having appropriate skills for data analysis and was asked to join a project by a friend. During the completion of the project, the two friends stumbled upon a business opportunity involving data mining and analysis and applied for governmental funding which they won. From this success came publicity and exposure within their industrial sector. Being seen as having won government support increased his reputation and

kudos. His strong ties with friends, winning government funding, and strong ties working at universities in China (Appendix 1) not only funded his start-up but also allowed access to market information as outlined here:

First, we three friends are co-financing ourselves. Second, the government gave us some funding when entrepreneurial start-up capital was introduced specifically for REs (TONG, indirect entrant).

Shi still exploits his strong ties with his academic supervisor in Sweden for technical advice and used his strong industrial ties and experience in Sweden to hone his managerial and technical skills, especially when conducting industrial consultancies. He gathered further skills in a major computer company in Shanghai when he returned to China where a senior mentor encouraged him to form a new firm exploiting software applications for the real estate sector. His government tie, however, was quite exploitative (Appendix 1), and he used his connections to gather real estate information and future policy decisions as outlined in the quotation below. His company has subsequently gone into liquidation (2014).

In terms of the industry trend in real estate, a real estate company needs to move ahead before government policy is published, if they want to make a lot of money. The company should have some connections with officials who are in government who are knowledgeable about real estate policy. Some experienced real estate brokers try to get the latest, useful information from them. Based on this information, the real estate company can predict the trend in the future by taking actions beforehand. The network is the main competitive advantage (SHI, indirect entrant).

Ren also worked in other companies in the UK, traveled extensively in Europe, and worked at a research institute in China on his return where he was also mentored to consider entrepreneurship as a career option by a senior figure in the institute in which he worked. His firm promotes information sharing platforms for SMEs. His strong ties with the research institute (i.e., strong industry ties at home) brokered access to government officials (i.e., weak ties) who supported not only the RE but also the research institute (Appendix 1) as illustrated below. Ultimately, the government became a customer and recommended clients to use Ren's service:

Ningbo City initiated the Smart City project. The construction of the Smart City initiative requires the support of some advanced top-level design and high intelligence. So, they talked to us 2 years ago and they thought our team was good. Moreover, they want to send some advanced technicians to work on the R&D of some underlying core technologies. So, we then established the information technology research institute with 45,000,000 RMB investments (REN, indirect entrant).

REN also relies on his strong ties to friends, all educated overseas, and returned home to join their family businesses. They are simply open for consultation about any business matter as outlined here:

I am from Ningbo and I have my family business. I am in this business environment and I know people in the industry and some team members. Originally I prepared to stay abroad for a longer time, but at that time my Dad's health went down so I came back to take care of him. And I didn't stay at home all the time in that period. I wanted to find a place to try

something out and see whether there is any place suitable for me. Since people were making electronic chips here I thought that could fit me (REN, indirect entrant).

Case Kong actually did not intend to form a new firm and is of interest because he is passionate about his product based in pure mathematics and smart algorithms for Business Intelligence. He had a successful career developing distribution software systems for different companies in North America and therefore developed strong industrial ties overseas, prior to being invited back to China by friends (i.e., strong ties) to develop and build a software system for a shipping company. This ambitious and expensive project was closed by the government because it was seen as being potentially problematic. Subsequently, he worked for other companies (and in multiple sectors) in tandem with two major research institutes in China but gained little personal success. His father, an academic, has pushed him to consider forming his own firm but has no useful ties for new firm formation. Describing himself as a ruffian, he admits that he is motivated by challenges (which no one else can handle) and as such is still employed in a research institute while also developing his firm with the help of one of his father's students, who brought the business idea to him (i.e., big data analysis). His strong ties with the research institute act as leverage to contact companies, but he realizes that he needs to build further relationships with entrepreneurs in Zhejiang (Appendix 1). He also uses the strong ties with the research institute to access funding for new firm formation but states that contracts with companies are gained because of the quality of his product not because of network alliances.

Findings led to the formulation of two propositions for future research:

Proposition 3.5 *Compared to Direct Entrants with Clear Ideas, REs who are Indirect Entrants with No Clear Ideas exploit strong ties to industry in their home country, whilst in their home country, to substitute weak government ties.*

Proposition 3.6 *Compared to Direct Entrants with Clear Ideas, REs who are Indirect Entrants with No Clear Ideas exploit strong industry, educational and friend ties in their host country, whilst in their host country, to validate their idea.*

3.13 Direct Entrant and No Clear Idea Prior to Return

The one RE in Quadrant 4 (Table 3.2), Cheng, accumulated a very experienced management team for his new firm while abroad relying on strong ties to friends and professors from his host university and industry. His management team had no clear idea for a new firm prior to return to China. He refused to exploit his strong family ties because of the perceived risk involved, and in addition, his family was opposed to his idea of becoming an entrepreneur. He compensated for this through an extension of his international network built during his time overseas, which is confirmed by the previous literature (i.e., global networks) (Chen & Tan, 2009; Pruthi, 2014). He relied on his strong friends' network for financial assistance

insisting this was high risk but through which he has penetrated governmental networks for funding (Appendix 1). Although potentially interesting (new materials for dentistry) his approach is chaotic and he admits to not writing business plans or understanding the market completely as outlined in this quotation:

There is another weakness, as we don't really have a business plan; it is all step by step reaction to the market, not planned. This is something that we need to do, and this is the weakness of technicians, who rarely do any business planning.... To say it in a bad way, we didn't do any preparation, nor did we research the market; it was kind of an impulsive decision. Once we entered this market, we started to slowly understand this market, but only when we started doing it we realized different business opportunities were available (CHENG, direct entrant).

Data patterns clearly indicated that strong friend ties both in the host and in the home countries benefitted REs' network access to resources, technology know-how, governmental connections, etc... Often, the RE reported establishing connections with friends, normally, but not always from China, when they were studying abroad, who had superior technical knowledge or had working experience in overseas companies. Through discussion groups with friends, who included classmates, often involving social media networking, they identified their diverse array of resources and capabilities (i.e., human capital in relation to specific technical knowledge and working experience) and saw synergy in their talents so followed each other home to directly establish a new firm as outlined in this quotation:

The person (from China) who has many skills was an Assistant Professor at the University of Mexico, and as he slowly started working in this area, he received an established plan from the government in China, so he came back to do this. There is another person (from China) in England, who has finished his Masters. Whilst studying for his Masters, he also got involved with some real business in UK: For me, I don't have any (work experience); I did some research work abroad and got to know them and was able to communicate well with them, so we came back to do some things (CHENG, direct entrant).

The exploitive combinations of weak and strong ties at home and in host countries allow for the creation of propositions for future quantitative research

Proposition 3.7 *Compared to Indirect Entrants, REs who are Direct Entrants with No Clear Idea are more likely to exploit strong ties in their host country, whilst in their host country, to form managerial social capital.*

Proposition 3.8 *Compared to Direct Entrants with Clear Ideas, REs who are Direct Entrants with No Clear Idea are more likely to exploit strong ties with friends in their home country, whilst in their home countries, to substitute weak ties to the government.*

3.14 Discussion

Data indicate that direct entrant REs who validated their idea exploiting their strong ties through industrial and educational exposure abroad generally returned to China to exploit their strong ties with family and friends to form their new firms quickly. Exploiting strong family ties was more likely to be reported by direct entrants than indirect, who met with either parental resistance to entrepreneurship, parental wishes for the REs to join the family business or parents with constraining and restrictive social capital irrelevant to new firm formation (i.e., parents who were academics). Validation of firm formation through family ties while abroad may have helped the REs form a firm directly on return. Part of this reasoning is that some of these families were already connected through business dealing with governmental officials, relationships which could subsequently also be exploited by their children quickly (i.e., substituting weak ties with strong).

Indirect REs, who had not validated their ideas sufficiently in terms of resource needs or opportunity when abroad, returned to rely on local ties. However, their reliance on strong family ties at home was redundant for start-up and gave them little or no leverage to resource providers, like the government, and as a result, they were generally less successful in attracting government assistance. Since all the indirect returnees first took up employment, it might be speculated that those with weak ties to government networks gained access to governmental resources, not because of the strength of their ties, but on the quality of their idea, indicating that, in 2014, quality of idea is perhaps more important than the strength of social tie within a network.

Quality or value of idea is of interest because the infrastructural development of the city of Ningbo is planned, rapid, and effective, but the local government is aware that it needs to be made more efficient. In relation to urbanization, the modernization of this international trading city is emphasizing high technology to monitor industrial production processes (Kong, indirect entrant), to control real estate (Shi, indirect entrant), to conduct big data analysis for decision making within companies (Li and Tong, indirect entrant), and to design information sharing platforms for governmental departments including port authorities (Ren, indirect entrant). In two of the cases, where government had sought out indirect entrants Ren and Yang, the government not only supplied funding but also subsequently became their customers. Some ideas and products thus dovetailed with the needs of a growing Smart City.

Considering the context of this research (i.e., in a party state), we have added upon previous research by enhancing our understanding of the importance of government ties. In order to follow central governmental objectives related to promoting high technology at national, provincial, and municipal level and to encourage highly skilled REs to form new businesses, government is proactively seeking out REs (i.e., head hunting) and inviting them to return by offering resources associated with location (i.e., incubator units), access to funding, and access to other talented people through associations and research institutes. Probing

REs' social ties provided a unique understanding of the role of the government. Although our sample is small a pattern emerged between the two groups, availability of funding opportunities, and the location benefits and consequences thereafter of being placed either in a location eligible for provincial funding or national funding because they substituted their weak government ties through their strong family ties. Indirect entrants, on the other hand, reported that they first had to build their knowledge about forming a new high-tech firm and substitute other strong ties to act as brokers to government connections (i.e., through strong friends ties). From Table 3.1, we estimated that indirect entrants waited an average of two years prior to new firm formation and we suggest this waiting period as a future research topic.

Strong family ties substituting weak governmental ties were indispensable for direct entrant REs at the firm formation stage, but we speculate that REs' international ties might be of more benefit when developing their firms, an observation supported by Sullivan and Ford (2014). In addition, the local government was endeavoring to establish formal institutions to support future entrepreneurship activity (i.e., CEO networking events). These events may well stimulate the accumulation of weak ties which may provide the REs with additional networks not yet currently part of their repertoire. Such an observation is in tune with previous literature (Granovetter, 1973; Burt, 1992; Elfring & Hulsink, 2003). Exploring weak ties may open routes to needed future resources if not expand the size of the REs' network and facilitate access to social capital (Sullivan & Ford, 2014).

All REs had spent time in their host countries studying and/or working, and all had built strong ties with their educational institutes, teachers, supervisors, and, in some cases, to managers in the companies in which they worked abroad. This is not uncommon in a society where respect for the teacher or the boss is revered as in Confucian thinking. Normally, REs reported that their strong ties with educational networks abroad were specifically exploited for technical knowledge procurement and confirmation, while strong industrial ties were seen as offering an opening for identifying potential, future customers. This is already known from the literature where strong ties provide network partners access to similar others (Burt, 1992; Granovetter, 1973). These reported strong ties abroad, however, were actually not as important for new firm formation as the local ties. The strength and value of their local ties influenced ease of firm formation, timing of formation, and the process of idea validation.

A future study might reveal if the REs are putting themselves at a disadvantage by relying so heavily on strong ties at the new firm formation stage, but we concede that the substitution of strong ties gave access to weak ties. It has been suggested that highly embedded strong ties may restrain access to new resources, new partners, new opportunities; lower economic performance; reduce access to information; lower efficiency; stifle innovation; and contribute to corruption (Uzzi, 1997; Jack, 2005; Sun et al., 2012). At the new firm formation stage, we did not record such events. We concluded findings similar to Jack (2005) who studied a rural

community with a strong moral obligation to the community centered almost exclusively on strong ties. We also found a great reliance on strong ties for access to knowledge and think that the Chinese concept of *guanxi* may also set some hidden controlling parameters beyond the scope of this paper (i.e., degrees of obligation). We concede, however, that indirect entrants experienced a waiting time of about two years from entry to their home country to the formation of their new firm, a length of time attributable to substituting weak ties from strong ties to establish accountability with the government (Table 3.1). A future study might probe these categories. In addition, network centrality, a concept we did not measure, might be of interest for further study to identify the dominant agents during new firm formation, covering both REs' home and host networks.

Strong ties, nevertheless, dominated this study. We know from our data that strong ties with friends also increased social circles for access to employees, recruitment of board members, including foreigners, but generally this came after the firm formation stage. Unlike a similar study in India, REs in China relied only on strong ties with family and friends and weak ties with the government for funding new firm formation and did not seek institutional funding (Pruthi, 2014). Access to bank loans, venture capitalists, or business angels is, as yet, early stage, especially in a second-tier city, and is to date highly controlled by the government. Reliance on strong bonds is contrary to the literature which states that strong ties limit resources and information providers in the network (Granovetter, 1973). We also speculate, and contradict existing literature, that frequency of contact in maintaining strong ties may not need to be restricted to face-to-face contact but can be substituted using social media networking applications such as We Chat, QQ, Wei Bo. In this respect, we suggest that strong ties in this study were supplemented by the quality and value of knowledge or information offered particularly between the focal actor and resource providers.

The results of this study also indicate that entrepreneurs mobilize strong ties associated with the providers of their 'prior knowledge' gained from both educational and industrial experience in their host countries (Shane, 2000). Prior knowledge directly influenced REs choice of industrial sector and supports research which indicates that prior knowledge positively reinforces and builds on entrepreneur's human capital for the development of social capital (Davidsson & Honig, 2003). However, contrary to the previous understanding about the ownership of global networks and prior international experience positively effecting REs' propensity to export, this study indicated that RE firms were formed to feed the domestic market (Filatochev et al., 2009).

For policy recommendations in the high-tech sector we noted that the quality and value of the ties sometimes outweighed the strength of the tie. This observation is likely to be repeated in the future as more REs enter the market with new technology.

Policy makers should be aware of the difficulties in acclimatization to a system dominated by relationship for talent that has been trained and lived overseas for a

number of years. The pool of REs is a heterogeneous group, and those with weak ties should be evaluated on their potential contribution for access to governmental resources (rather than on the strength of tie). Employing REs in appropriate companies to help acclimatization may further stimulate and influence further entrepreneurial behavior. Formal networking activities, already undertaken, might be sponsored by multinational companies to assist newly formed firms access domestic talent and future markets. Internationally, social media networking sites dominated communication patterns were often free, mobile, accessible, and vital for maintaining communication. REs, who have been overseas for long periods, need to be made aware of the high penetration and use of mobile devices in China and how they are used to build and maintain ties.

Future research might attempt to explore the effect of length of stay overseas on new firm formation and explore the effect of the generation in which the RE was born. A comparative study between high-tech and non-high-tech REs on leveraging resources might indicate differences in network structures and throw up differences in the function and utility of network ties dependent on the value of their idea. It may also be worth investigating the firm formation process from a longitudinal perspective to gauge changes in network structure, value of and strength of relations to explore further the strong industrial and educational ties reported in this study. Although most REs wanted to harness the domestic market their propensity to internationalize could also be studied. Nascent, habitual, or serial REs might also be explored to expand the understanding of prior knowledge, prior experience, and human capital on firm formation (Westhead & Wright, 1998). This is qualitative, exploratory research and, in future, specifically using the constructed propositions, there is ample room to conduct a large-scale quantitative study. Finally, a research team dedicated to a *guanxi* led study may introduce an indigenous theory of networking which would be more fitting to the RE environment (Luo et al., 2012).

3.15 Conclusion

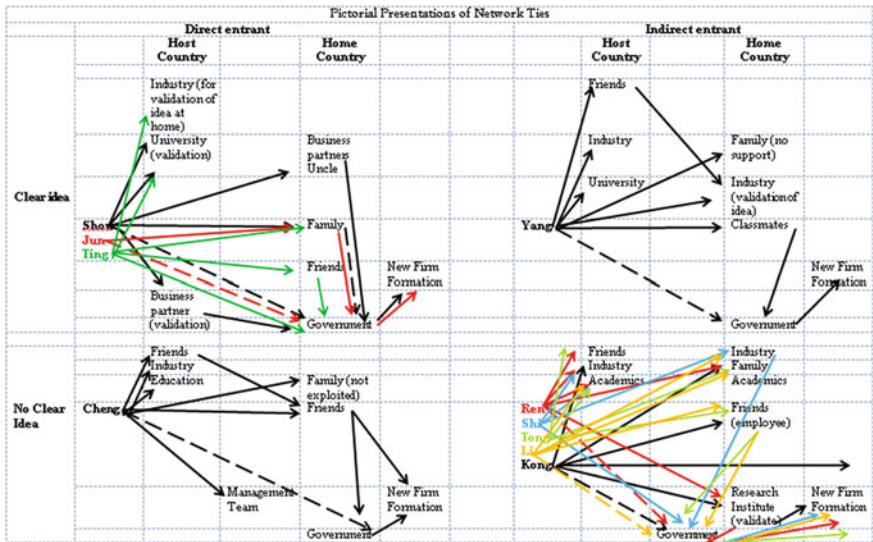
Little literature appreciates returnees who, after being exposed to an overseas education, return to eventually set up a new firm either directly or indirectly (i.e., after working in another company) (Chen 2008; Liu et al., 2010; for an historical insight see, Zweig et al., 2006; Wang et al., 2011, 2013). Through this study, we have revealed how access to resources, for new firm formation, is attributable to tie strength, weak being substituted through strong. However, not all strong family ties facilitated benefits. Technologies introduced by the REs were new to China which would explain why REs relied on their strong ties with educational and industry networks abroad. Indeed, it has been stated that some new technologies in China are

not world leading and unique but simply new to China (Zweig et al., 2006). One explanation for not introducing innovation which causes ‘creative destruction’ might be that it is too expensive and time-consuming for a country which needs to keep its GDP growth up at 7%. We note that the concept of innovation from a ‘creative destruction’ position relies heavily on opening a new market for already existing technology products (Schumpeter, 1934). A knock-on effect for potential high-tech entrepreneurs might, therefore, be a reluctance to experiment with the latest technology and develop a new commodity.

Besides potential restriction on technological exploration, REs in this study exploited different types of social networks (business advice, business resource, friendship ties, and emotional support) to achieve different objectives during firm formation. At times, the relationship was important, at others the value of their idea important, and at others their access to human capital validated their ideas. The predominance of strong ties at this firm formation junction goes against the tide of literature calling for the maintenance of a network harnessing both strong and weak ties to increase the social context (Granovetter, 1973). What we observed was a reciprocal utility of the function of the REs’ idea and value of the relationship rather than action or support being offered solely on the strength of the tie. The value associated with the tie was important. Strong ties, however, remained a mechanism through which REs generated knowledge and resources. One negative speculation associated with strong ties for high-tech REs is that they target local needs rather than experiment with new technologies. We therefore speculate that strong ties might restrict creativity. Notwithstanding, strong governmental ties exploited during the REs parents’ generation, based on trust, opened social contexts offering REs access to weak ties for business development, for marketing, for internationalization, etc... We see from this research that different social networks and their contexts affect different parts of firm formation and that a longitudinal study may well reveal that networks are dynamic (and that *guanxi* is fluid to appreciate the changes in relationships or circumstance) and that REs be aware of the responsibility of developing and maintaining ties within the context of Ningbo.

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Appendix 1: Pictorial Presentations of Network Ties



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Chapter 4

Survival of Indian High-Tech Start-Ups: A Comparison Between Transnational and Local Entrepreneurs



H. S. Krishna and M. H. Bala Subrahmanya

4.1 Introduction

High-tech start-ups have been recognized as the key contributors to job creation, innovation, and economic growth of countries (Kirchhoff & Spencer, 2008). For example, high-tech start-ups emerged as the key drivers for economic growth in the USA, post the recession of decade of 1970s. Rapid pace of technological change during the two decades of 1970 and 1980 opened up new opportunities for high-tech entrepreneurship in developed economies. Globalization and internet becoming a general purpose technology enabled the creation and growth of high-tech start-ups in the emerging economies as well (Start-up Genome Report, 2012).

India has emerged as the third largest base for high-tech start-ups in the world, with approximately 3100 start-ups operating in the country. The start-up ecosystem in India attracted 300 venture capital/private equity and 225 angel investment deals worth over \$2.3 billion since 2010 and over 20 mergers and acquisitions worth \$1 billion in the last 3 years. Over the last 12 months alone, 805 technology product/digital start-ups were set up across the country, which is projected to grow fourfold to hit 2,000 by 2020 (NASSCOM, 2014).

An earlier version of this chapter titled *Transnational Entrepreneurship and Indian High-tech Start-up Survival: An Empirical Investigation* was published in a Special Issue of the South Asian Journal of Management (SAJM), Volume 22, Issue No. 2, dated April–June 2015, on the theme of *Entrepreneurship in a Globalizing World*.

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While the above data paints an impressive picture, it must be noted that across the world, the above contributions are made from a very small percentage of high-tech start-ups, which have successfully managed to overcome the challenges during initial stages of the firm life cycle. It has been well established that high-tech start-ups suffer a very heavy failure rate (Stinchcombe, 1965; Certo, 2003). These start-ups face many unique constraints during their initial stages of operation that makes them highly amenable to failure. Therefore, a start-up would be able to survive and sustain only if it can successfully overcome the liability of newness, fighting against the uncertainty of value it promises to its stakeholders and dealing with underdeveloped markets (Bala Subrahmanya, 2015).

From an entrepreneur perspective, two key abilities of the entrepreneurs have been identified as pivotal to tide over the challenges during their start-up's initial years and to survive. These are the abilities to recognize and act on entrepreneurial activities (Shane and Venkataraman 2000) and coping with liabilities of newness (Stinchcombe, 1965; Shepherd, Douglas, & Shanley, 2000). Prior research has suggested that transnational entrepreneurs and their communities enable diffusion of knowledge and creation or upgrading of local capabilities. Saxenian and Li (2003) noted that transnational entrepreneurs built specialization and innovation by simultaneously maintaining connections with their host country and country of origin. They observed that this mechanism helped them to monitor and respond to changes in markets and technology.

Given the above background, this paper investigates whether transnational entrepreneurs who create and operate high-tech start-ups in India are more likely to survive and sustain in comparison with local entrepreneurs.

4.2 Literature Review

In order to provide context and to understand the influence of transnational entrepreneurship on survival of high-tech start-ups, a brief review of literature is presented in this section. We first examine the key contributions related to the survival of high-tech start-ups and then present a review of literature on transnational entrepreneurship.

Cader and Leatherman (2011) indicated that survival of a firm can be studied under primarily four contexts and a combination of one or more of them. They noted that literature focused on survival of start-up could be studied on the basis of the firm-related factors (e.g., size, type), or entrepreneur-related factors such as age, education, or by studying industry- and geography-specific factors such as high-tech/low-tech or metro/non-metro, or by study of the combination of these factors. Similarly, Drori, Honig, and Wright (2009) reviewed transnational entrepreneurship from different theoretical perspectives.

In this paper, to synergize the theoretical perspectives of transnational entrepreneurship and survival of high-tech start-ups, we examine the literature on both topics under three categories, namely (i) studies that use entrepreneur's

characteristics and behavioral attitudes; (ii) studies that use the characteristics of the firm (organization); and (iii) studies that rely on evaluating the interplay of external environmental parameters that influence the survival of high-tech start-ups. We believe that this framework provides good context to understand the gaps in existing literature, as well as help us in developing a theoretical framework to further extend the existing knowledge that links transnational entrepreneurship to high-tech start-up survival.

4.2.1 Survival of High-Tech Start-Ups

A few decades ago entrepreneurial research heavily focused on relying on the traits and behavioral attributes of the entrepreneur to explain start-up survival. Factors such as the need for achievement (McClelland, 1961), risk taking propensity (Brockhaus, 1980), locus of control (Brockhaus, 1982), tolerance to ambiguity (Schere, 1982), previous employment and education (Storey, 1982) have been established as the necessary but not sufficient factors in determining survival.

In recent years, studies have shown that necessity-driven entrepreneurs demonstrate lower survival rates in contrast to the opportunity-driven entrepreneurs (Caliendo & Kritikos, 2010). Furdas and Kohn (2011) used a decomposition approach to arrive at the same results. They showed that opportunity-driven entrepreneurship as being associated with pull factors, and necessity-driven entrepreneurship being associated with push factors.

The age of the entrepreneur has been established as an important determinant in ensuring survival of start-up. Furdas and Kohn (2011) argued that age is considered a substitute for general and specific knowledge, and hence, one should expect the age of the entrepreneur to have a positive impact on the duration of self-employment. They also examined the impact of education, experience in paid employment, self-employment experience, and unemployment experience for their effects in influencing survival of the start-up. They concluded that studies on these entrepreneurs' background have provided mixed results.

Prior research on firm-specific factors indicates that human capital of the start-up, financial capitalization, and the market awareness capabilities of start-ups is the key influencing factor for survival. Kim, Aldrich, and Keister (2006) explained that human capital of the firm will help the firm to overcome challenges and difficulties related to the functional aspects of the firm, such as finance, sales, and marketing and in formation of new networks. To justify their explanation, they provided examples of educated entrepreneurs being able to obtain credit more easily, or that skilled entrepreneurs could identify the market needs better than the rest, or that by virtue of education and/or skills, some entrepreneurs may be able to create and sustain better social status and networks.

Gries and Naudé (2009) reviewed the capital requirements of high-tech start-ups and their influence on the start-up creation and survival. They concluded that there is mixed evidence on the impact of financial capitalization of the start-ups' survival.

Higgins and Gulati (2006) noted legitimacy establishment of the start-up as one of the key aspects contributing to the survival of high technology start-ups. They identified three types of legitimacy, namely the resource, role, and endorsement legitimacy as the key elements that influence the survival of high technology start-ups.

Shepherd et al. (2000) developed a theoretical model to explain new venture survival through the construct of mortality risk. They argued that the liability of newness of a high technology start-up is dependent on the degree of novelty (ignorance) associated with the new start-up. Three different dimensions of novelty (market, production, and management) were proposed to explain the survival through these measures.

From an external environment perspective, factors such as the industry structure, product–market mix, the regulatory environment, human capital, and financial capital environment are the principal drivers influencing the survival of high-tech start-ups. Audretsch (1995) studied the influence of industry-specific factors in influencing start-up survival. His work brought out the impact of the macroenvironment factors specific to an industry sector—such as the growth and profit rate of the industry sector, minimum efficient scale, degree and intensity of innovation on start-up survival.

Roininen and Ylinenpää (2009) noted that the differences in high-tech start-up survival and growth emanates from different factors such as the product characteristics, the product/service being offered, the markets being considered by the start-up, and the resources and strategies that the start-ups possess.

With this overview of key factors influencing high-tech start-up survival, we now focus our attention toward examining the existing literature that discusses transnational entrepreneurship.

4.2.2 Transnational Entrepreneurship

Chen and Tan (2009) defined transnational entrepreneurship as “a multi-faceted process, in which immigrant entrepreneurs discover and enact business opportunities across national borders.” They observe that an intimate know-how of the culture, language, and markets in the country of origin tend to be a competitive advantage in transnational practices. Drori et al. (2009) defined transnational entrepreneurs as “social actors who enact networks, ideas, information, and practices for the purpose of seeking business opportunities or maintaining businesses within dual social fields, which in turn force them to engage in varied strategies of action to promote their entrepreneurial activities.” They observed that the niche presence of entrepreneurs in multiple geographies provide them with new set of opportunities that would be otherwise not available or detectable to the local set of entrepreneurs.

Transnational entrepreneurship has been studied using different theoretical approaches, namely from a sociology perspective (Aldrich, Zimmer, & McEvoy,

1989); from a geography and industry sector specific lens (Light & Bonacich, 1988); behavioral aspects of transnational entrepreneurs (Portes, 1995; Light & Gold, 2000); and also through economics-related aspects such as creation of new business opportunities and technology transfer (Saxenian, 2002).

A review of individual factors influencing transnational entrepreneurship reveals that the experience of immigration measured in terms of years of residence or immigration class of the transnational entrepreneur as one of the key factors influencing the phenomenon. Further, transnational entrepreneurs have a better standing in their ethnic communities in many ways, be it human capital, social capital or financial capital, and legal status (Portes, Haller, & Guranizo, 2002). Light and Gold (2000) listed the resources such as professional knowledge and skills, material resources, cultural capital, social position within an organization, familial and communal lineage as being factors that enhance or constrain transnational entrepreneurs. These factors, along-with the individual factors that have been examined as the key influencers in the previous discussion on start-up survival, help us understand the entrepreneur-related factors influencing transnational entrepreneurship.

As regards the firm-specific factors influencing transnational entrepreneurship, the human, social, and financial capitals of the firm have been examined as the key factors influencing the start-up life cycle. In particular, the social capital of the firm has been identified as playing a pivotal role. Davidson and Honig (2003) stated that the social aspect of being a transnational entrepreneur allows access to both tangible (capital, technology) and intangible (emotional support) resources.

Appropriate financial capitalization has always been seen as critical aspect of enabling creation, survival, and sustenance of transnational enterprises. As venture capital firms start making deals on a sustainable basis in emerging markets, transnational entrepreneurs would view this development as being beneficial to relocate part of their business activities to these geographies. These activities result in mutually beneficial synergies and aid in development of the economy of the emerging markets (Cumming, Fleming, & Schwienbacher, 2009).

From an external environment perspective, Portes (2003) deduced that factors such as globalization, the market, and social conditions in the host countries as the key influencers on the growth of transnational entrepreneurship. Yeung (2002) observed that transnational entrepreneurs must also deal with the institutional constraints of two or more geographies. He noted that transnational entrepreneurial activities have to learn to withstand and change their mode of operations in tune with the institutional environment in both home and host countries.

In the case of India, the government policies, post 1991, have enabled a rise of transnational entrepreneurship. Levitt (2001) studied the relationship between economic development of home countries and transnational entrepreneurship. It was observed from the study that transnational entrepreneurship contributed to the economic development in many countries of origin of transnational entrepreneurs through investments and technology transfer. The study further noted that transnational entrepreneurship resulted in countries modifying the citizenship or

nationality laws and devised new policies to encourage transnational activities of the immigrants.

4.2.3 Need for the Study

The literature review provides a summary of the factors that influence survival of high technology start-ups on the one end and transnational entrepreneurship on the other end. However, a careful analysis of existing literature reveals that, to the best of our knowledge, not much attention has been devoted on examining the linkage between these two areas. Chen and Tan (2009) observed that there is a lack of studies related to the transnational entrepreneurship field, which examine the scope, mechanisms, and consequences of the domain.

The study of examining the extent and direction of influence of transnational entrepreneurship on the survival of high-tech start-ups is very relevant and important, especially, in the context of emerging economies like India. As discussed earlier, India has emerged as the third largest base for high-tech start-ups in the world, with approximately 3100 start-ups operating in the country. In order for these high-tech start-ups to make a significant dent in shaping up the Indian economy, suitable policy interventions are being made. In this context, understanding the influence of transnational entrepreneurs in shaping the Indian start-up ecosystem is crucial.

Given the above background, this paper investigates whether transnational entrepreneurs who create and operate high-tech start-ups in India are more likely to survive and sustain in comparison with local entrepreneurs. Answers from this research objective will aid in identification and creation of suitable policies toward transnational entrepreneurs. It will also help in shoring up the policies targeted at local entrepreneurs who are starting up high-tech ventures in the country.

4.3 Conceptual Framework

The conceptual framework that is used to examine the objectives of this paper is presented in Fig. 4.1.

Figure 4.1 framework indicates that entrepreneurial capabilities (individual entrepreneur-specific factors) and the firm-specific resources impact the entrepreneurship activities of a given region of study. Further, the survival of the high technology start-ups is influenced by these factors, as well as from the external ecosystem factors. Factors such as age, education, previous work experience, prior start-up experience represent the “entrepreneurial capabilities.” Factors such as the financial capitalization of the start-up, the development, and sales resources of the start-up represent the “firm-specific resources” in the above conceptual framework.

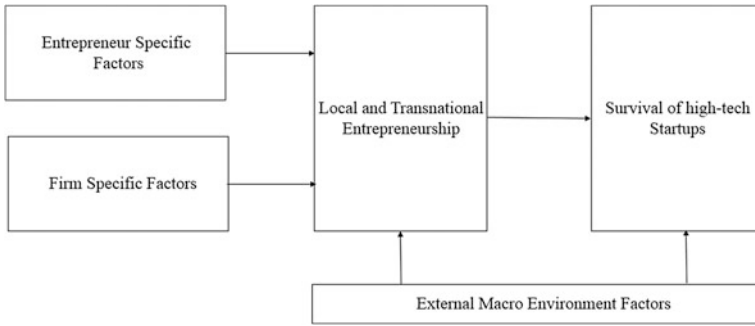


Fig. 4.1 Framework to evaluate contribution of transnational entrepreneurship on survival of high-tech start-ups

The government regulations on start-ups and taxation policies represent the “external environmental parameters” in the above conceptual framework.

Based on the above conceptual framework, the objective of this study is to examine whether transnational entrepreneurs who create and operate high-tech start-ups in India are more likely to survive and sustain in comparison with local entrepreneurs.

In order to validate the above objective, the following hypothesis is derived:

Ho: Ceteris Paribus, local, and transnational high-tech start-up entrepreneurs have the same survival rates for the firms set up in India

The following sections will detail the research design, methodology, and the statistical analysis that are used to validate the above objective and hypothesis.

4.4 Research Design

For the purpose of this study, the geographical location is set as India, and by design, the external environmental parameters are taken to be constant across all the samples collected during the study. Also, to ensure homogeneity of data, only the high-tech start-ups that are offering products and cloud-based solutions in the ICT sector are considered. Hence, the design of this study enables us to control the entrepreneurial and firm-specific factors on the survival of high technology start-ups.

4.4.1 Data and Data Collection Method

The paper uses primary data from 45 high-tech start-ups headquartered and operating across different locations in India for the purposes of analysis. Survival analysis of the data using accelerated failure time models is conducted to determine which entrepreneurial and firm-specific factors have a significant influence on the survival of the start-ups and to what extent do they impact the survival.

A questionnaire was developed to collect data and validate the objectives of this study. The questionnaire was designed to collect basic profile-related information related to the founder and the start-up, as well as to collect information related to the development and sales capabilities, funding status of the start-up, and time it took for the start-up to reach the survival milestone. The data on the development and sales capabilities were standardized to ensure comparison across the samples.

As indicated earlier, the scope of the study was restricted to ICT high-tech start-ups who have their registered headquarters in India. Since there is no single credible database of start-ups operating out of India, different data sources such as industry associations—National Association for Software and Services Companies (NASSCOM), Indian Software Product Industry Round Table (iSPIRT), Incubation Centers such as Microsoft Accelerator, T-Labs, N S Raghavan Center for Entrepreneurial Learning at IIM Bangalore—were contacted to identify the start-ups. The questionnaire was personally administered by the researcher or administered over the telephone to all the founders who agreed to participate in the study during the month of February 2014.

4.4.2 Sample Characteristics

The duration of operation of the start-ups in the sample ranges from 6 to 120 months. About 73% of the start-ups in the sample had found their product market fit (milestone for survival), while the remainder 27% were new firms created, but yet to claim survival. About 91% of the founders in the sample had a minimum of one year industry experience. About 51% founders of the sample did not have prior start-up experience. About 6% of the founders did not possess either start-up experience or industry experience at the time of creation of their start-up. The founders' age at the time of starting up in the sample ranged between 22 and 49 years. In terms of founders' education, about 9% of the founders had education other than engineering degree, 44% of them had an engineering bachelor's degree and 47% had masters' degree or higher educational qualification when they started their venture. About 40% of the start-ups had transnational entrepreneurs at the helm.

To ensure that our responses were representative of the population, we obtained the demographic distribution of start-ups data from the iSPIRT Product Industry Monitor Report 2014, which is considered a benchmark for authentic information

on Indian start-ups, and compared it with our data. From the descriptive statistics presented in the iSPIRT Report, we observed that the duration of operations of start-ups profiled for the Report was between 2 months to 25 years. Further, about 95% of the founders had prior work experience. About 61% of the founders did not have prior start-up experience as a founder. About 93% of the founders had their age ranging between 21 and 50 years. In terms of education of the entrepreneurs, 43% of the founders had an engineering bachelor's degree, whereas 46% of the founders had masters' degree or higher educational qualification when they started their venture. Based on the similarities of the descriptive statistics of the iSPIRT Report with our data sample, we conclude that our sample is representative on all dimensions that we could assess: industry demographics such as location, age of the start-up, market sector, founder profiles such as education, experience and external funding status.

4.4.3 Variables and Measures

Dependent Variable: Time to survival of the start-up in months is the dependent variable used in this study. The time in months of operation of the start-up since formal incorporation and whether the start-up has achieved survival or not, taken together form the dependent variable. The respondents to our questionnaire reported the month and year that they formally created the start-up. The start-up that had achieved product–market fit at the time of conducting the survey is considered to have survived. Start-ups that had not yet achieved this milestone are considered as not survived at the time of observation.

Independent Variables: The relevant industry experience, prior start-up experience, age, and education of the entrepreneur are the entrepreneurial factors that are examined in this study. The sales turnover in Indian currency, the research and development capability, and funding status of the start-up form the organizational factors that are examined for impact.

Type of entrepreneurship: A dichotomous (dummy) variable which differentiates between the local and transnational entrepreneurs. A value of 1 indicates that the entrepreneur is transnational, while a value of 0 indicates local entrepreneur.

Relevant industry experience: A dichotomous (dummy) variable which indicates whether or not the founder has previous industry experience (Beckman, Burton, & O'Reilly, 2007).

Prior start-up experience: A dichotomous (dummy) variable which indicates whether or not the founder has worked in a start-up prior to starting this current venture (Haber & Reichel, 2007).

Age of the entrepreneur: The age of the entrepreneur in years, at the time of founding the start-up (Furdas & Kohn, 2011).

Education of the entrepreneur: The education of the entrepreneur is categorized using two dummy variables. The base reference variable indicates graduate education without an engineering degree (degree in science, arts, and others), the first dummy variable indicates graduate education with a technical (engineering) degree,

and the second dummy variable indicating education with a technical master's degree or above (Watson, Steward, & BarNir, 2003).

Sales capability of the start-up: The sales capability of the start-up is measured as the number of customers/product offering at the time of the data collection (Ensley, Pearson, & Pearce, 2003).

R&D capability of the start-up: The R&D capability of the start-up is measured as the average work experience of the R&D team at the time of the data collection (Thornhill 2006).

Financial capability of the start-up: Measured by a dichotomous (dummy) variable which indicates whether or not the start-up obtained funding external to its founder's and his family's funds. A value of 1 for this variable indicates that the start-up was funded, and vice versa.

As indicated earlier, the external environment factors such as industry sector, region/geography, and policy are ensured to be controlled by the research design by limiting the scope of study to one industry based out of one country that has the same policies at macroeconomic levels.

4.4.4 Method of Analysis

In this study, we use survival analysis as the method to understand the key factors that impact survival of high-tech start-ups in India. Survival analysis deals with analyzing the time to event-related data. The survival analysis model is advantageous in scenarios such as the present study, because it has the ability to deal with missing information called censored information. The model built for survival analysis takes into account the time elapsed till the point of data collection, even for the units of observation for which the event under observation has not occurred (Aalen, Borgan, & Gjessing, 2008).

In our study, if the start-up did not yet achieve the product–market fit at the end of the observation phase, then this start-up was censored “on the right”, that is, we know that this particular start-up's survival time is known to exceed the time duration between its formal creation and the closure of observation. This censored data provides additional information for statistical analysis, which is the reason survival analysis is used in lieu of linear regression models.

4.5 Results and Discussion

The descriptive statistics for the variables that were used in the analyses are presented in Table 4.1.

The full model containing all independent variables and control variables represented in *R*—an open-source statistical software package is provided below:

Table 4.1 Descriptive statistics of the variables used for analysis

	Min	Max	Median	Mean
Stime	6	120	42	42.38
Survst	1	2	2	1.73
Fiexp	0	1	1	0.91
Fsexp	0	1	0	0.49
Fage	22	49	32	34.20
Sales	1	1500	60	124.57
Dev	0.5	7	2.5	2.89
Fin	0	1	0	0.33
Te	0	1	1	0.40

Source Author calculations

Table 4.2 AIC computation for AFT models with different assumed distributions

Distribution	Least AIC value	Optimum model corresponding to least AIC value
Exponential	336.24	$surv_data \sim fsexp + age + te$
Weibull	309.61	$surv_data \sim fsexp + age + fin + te$
Log-logistic	310.75	$surv_data \sim fsexp + age + fin$
Log-normal	309.64	$surv_data \sim fsexp + age + fin + te$

Source Author calculations

```
> modell = model1 = surv_data ~ fi exp + fs exp + fage + sales + dev + fin + te
> modell.step = stepAIC(survreg(modell))
```

For arriving at the most parsimonious model from the above full model, Akaike’s Information Criterion (AIC) (Akaike, 1974) was used. AIC is a numerical measure that weighs the likelihood of a model against its complexity. The AIC of the AFT model is defined as: $AIC = -2LL + 2(c + a)$ where LL is the logarithm of the model likelihood (log-likelihood), c is the number of covariates and a is the number of ancillary parameters (Weibull distribution has two parameters, λ and α , while exponential has only one parameter, λ). A lower value of the AIC suggests a better model.

The appropriate distribution of survival times to be used for analysis is determined by building AFT models for the above data using each of the following distributions: Exponential, Weibull, and Log-logistic. The resulting AIC computed for each of the distributions used which provides the most optimal model containing the independent variables is presented in Table 4.2.

Since the Weibull model is found to have the lowest AIC for most of the models, we choose to use this as the standard distribution that we subsequently discuss in

this study. The output of the computation using the Weibull distribution is provided in Box 1.

Box 1: Results of the AFT optimum model execution

Call:

Survreg (formula = surv_data ~ fsexp + fage + fin + te, dist = "Weibull")

	Value	Std. error	z	p
(Intercept)	3.258	0.436	7.47	7.86E-14
Fsexp1	-0.413	0.1928	-2.14	3.24E-02
Fage	0.037	0.0153	2.42	1.56E-02
Fin1	-0.482	0.1573	-3.06	2.18E-03
Te1	-0.314	0.2078	-1.51	1.31E-01
Log (scale)	-0.858	0.1288	-6.66	2.79E-11

Scale = 0.424

Weibull distribution

Loglik (model) = -148.8 Loglik (intercept only) = -157.5

Chisq = 17.46 on 4 degrees of freedom, p = 0.0016

Number of Newton-Raphson Iterations: 6

n = 45

Source Author calculations

All the variables present in the most efficient model are highly significant with very small *p* values, significant at 0.001 levels.

The results indicate that entrepreneur’s prior start-up experience, transnational status, and the financial capitalization of the start-up reduce the time to survival, whereas the age of the entrepreneur marginally increases the time to survival of Indian high-tech start-ups. These results are interpreted in the further paragraphs of this section.

The key objective of this study was to examine whether or not transnational entrepreneurs are able to reduce time to survival of their start-ups. The results provide sufficient evidence that transnational entrepreneurs are able to reduce time to survival of their start-up by a factor of $\exp(-0.314) = 73\%$ shorter survival time in comparison with the baseline. Hence, the null hypothesis proposed in the framework section is invalidated. This result provides empirical evidence to support many of the qualitative and theoretical propositions made in earlier transnational entrepreneurship literature.

It is important to elaborate why transnational entrepreneurs fare well in comparison with local entrepreneurs of emerging economies. To begin with, transnational entrepreneurs usually have better access to resources (Davidson & Honig, 2003). Most of the transnational entrepreneurs successfully leverage the best of both countries (their current host country and country of origin). The most prevalent model of such successes is to deploy capital, information, and technology from the developed country to markets of countries of their origin.

In this study, prior industry experience and prior start-up experience were introduced as two independent variables. The results indicate that prior start-up

experience will impact the survival time of a start-up rather than prior industry experience. The results indicate that prior start-up experience will accelerate the time to achieving survival by a factor of $\exp(-0.413) = 66\%$ shorter survival time in comparison with the baseline.

This is explainable, due to the fact that in a start-up, an individual will be exposed to accelerated learning on multiple facets due to involvement in selling to skeptical customers, developing a completely new product or service, creating a business plan, organizing for resources and finance etc. In contrast to the above, in a corporate or salaried environment, most often, an individual would need to work according to previously discovered set of rules and processes across these functional activities—hence leaving him with less room to gain further knowledge.

Besides the above, if the individual failed on account of not performing any of the above stated activities correctly, resulting in closure of his start-up, the experience and learning obtained out of this will provide him much deeper insight on how things should be done right the next time. This explains why prior start-up experience and not prior industry experience will reduce time to survival of high-tech start-ups.

The factor of funding has long been researched and established as a key factor that contributes to survival of the start-up. The results indicate that funding will accelerate the time to achieving survival by a factor of $\exp(-0.482) = 62\%$ times shorter survival time in comparison with the baseline. Funding of the start-up helps the entrepreneur in multiple ways. It frees the entrepreneur to focus his energies and abilities to exploit the entrepreneurial opportunity and also provides additional cushion to react and deal with uncertain circumstances that a start-up faces in its early stages. Further, the ability of the start-up to raise funds signals legitimacy and has further network effects which positively impact the time to survival of start-ups.

The age of the entrepreneur is shown to marginally increase the time to survival, based on the result obtained. Specifically, results indicate that age of the entrepreneur will lengthen the time to achieving survival by a factor of $\exp(0.037) = 3\%$ times longer survival time in comparison with the baseline. This implies that younger entrepreneurs are more likely to achieve survival faster, when compared to older aged entrepreneurs.

It has to be noted that all entrepreneurs in this study had the basic level of education of a degree at least. Given this background, all of these individuals would already have the necessary and sufficient basic skills to pursue an entrepreneurial opportunity. Younger generation entrepreneurs, below the median age of 32 years, clearly have more exposure to the possibilities of leveraging ICT as the technology as against the older generation entrepreneurs of median age 32 and above. This is because, the technology maturity occurred only a couple of decades back and clearly, the younger generation entrepreneurs can be expected to be more responsive and dynamic in responding to an entrepreneurial opportunity. Hence, these results indicate that given the minimum education, younger individuals are more likely to achieve survival than the older individuals.

4.6 Conclusion

In the emerging countries, it is not clear as to which factors contribute or hinder high-tech start-up survival. Our study has attempted to empirically examine which factors contribute to the reduction of time of survival of high-tech start-ups by using primary data. The outcomes of this study benefit both the entrepreneurs and policy makers.

The results indicate that transnational entrepreneurs are more likely to achieve survival of their high-tech start-up in comparison with their local counterparts. In addition, our findings establish that young technical transnational graduates, with prior entrepreneurial experience and who have obtained early funding, will have higher probability of achieving survival of their high-tech start-ups in India.

This study has attempted to investigate the broad phenomenon of start-up survival in emerging countries, using transnational entrepreneurship literature as a lens of examination. There are a few limitations and aspects for further research that need to be noted. While the results obtained add to the existing knowledge on transnational entrepreneurship, this study can further be extended in multiple ways in future. For example, this study takes into account, only the high-tech start-ups in one country for examination. While India as a country is a great representative of emerging economies, it will be prudent to enhance this study to include data from other emerging economies and examine if the same results are obtained. Secondly, this study has been conducted with a modest sample size. A larger sample would provide more statistical validity and help extend the empirical relevance of the contributions of this study. Thirdly, it is well acknowledged that entrepreneur-specific factors may have an impact on the outcome of the firm-specific factors. These aspects have not been taken into account in the present study, since the focus of the current study was to understand the impact and influence of the main factors.

The outcomes of this study benefit both the entrepreneurs and policy makers. For high-tech transnational start-up entrepreneurs looking to operate out of India, it provides insights on the factors they need to focus on enhancing their chances of survival. For policy makers, investors, and practitioners focused on emerging economies, it reveals the type and kind of factors that should be examined to enable a vibrant start-up ecosystem in the region.

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Chapter 5

Entrepreneurs to Enterprise (E2E): Facilitating Internationalization of SMEs through Virtual Entrepreneurship



Linda Susan Mathew, Abilash Daniel George and G. Chandramohan

5.1 Introduction

The high rates of economic growth of developing countries have provided enormous opportunities for business expansion for Small and Medium Enterprises (SMEs). These enterprises have considered international trade and alliances over the years, and due to the increased globalization, the internationalization of smaller firms was enhanced (Gjellerup, 2000).

The development of a global market was driven by the development of low cost technology, new markets being opened and a decrease in trade barriers (Axinn, 2002). These emerged markets became places for investments by firms as they were enabling further growth opportunities (Etemad, 2004). Small and Medium Enterprises are progressively more functioning in global markets and the trade liberalization and global rivalry puts forth further stress on firms. The firms must withhold a viable competitive advantage due to the intricacies of global trade. As the initial competitive strategies like differentiation based on the product development, price, or technology have become less appealing, new methods must be proposed (Lloyd-Reason, 2003).

Even though international business expansion of SMEs in business contexts has been highly dissimilar, research studies on SMEs and individual entrepreneurs

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being connected through virtual entrepreneurship in services industry are rare (Barnatt, 1997). So, the main objective of this study is to contribute understanding the key developments in internationalization processes considering SMEs of the services sector in an emerging market context and to propose an 'E2E' model which suggests a change in the existing organizational structure. The 'E2E' model encompasses a conceptual framework which will identify the supporting forces which promotes virtual entrepreneurship in the broad areas of business. It will be developed considering the factors including formation of 'E2E', intake of members with respect to the organizational fit evaluation and the specifics on the working principle on how it meets the demands with the supplies.

Objectives of This Study

- (a) To develop an Entrepreneurs to Enterprise (E2E) structure for enhancing internationalization of SMEs through Virtual Entrepreneurship
- (b) To create an E2E Integral Business Process Management Framework

5.2 Literature Review

The Government of India has propounded the Micro, Small and Medium Enterprises Development (MSMED) Act-2006 where micro, small and medium enterprises are defined as 'enterprises engaged in the manufacture or production, processing or preservation of goods as specified' (MSME, 2015). The microenterprise is where the investments in plants and machinery do not exceed Rs. 25 lakhs. Small enterprise is where the investment is more than Rs. 25 lakhs but does not exceed Rs. 5 crores in plant and machinery. In medium enterprise, the investment with respect to plant and machinery will be more than Rs. 5 crore but not exceeding Rs. 10 crore. The enterprise which provides or renders services is being defined by MSME Act-2006 as: microenterprise—investment in equipment does not exceed Rs. 10 lakhs, small enterprise—investment is more than Rs. 10 lakh but not exceeding Rs. 2 crores in equipment, medium enterprise—investment in equipment is more than Rs. 2 crores but not exceeding Rs. 5 crores (MSME, 2015).

Internationalization is an activity which is an organizational level activity, but which crosses the national borders (Wright, 1994). According to (Jones, 2005), internationalization is characterized as 'patterns of behavior, formed by an accumulation of evidence manifest as events at specific reference points in time'. The cross-border cooperation is often a viable form of internationalization for SMEs. The relationships between cooperating partners and the form of cooperation are very important for their success.

Internationalization is where the associations in international operations are at an elevated level (Welch & Luostarinen, 1988). It can also be considered as a cross-border expansion of economic activities by firms (Ruzzier, 2007). The expansion of firms geographically is one of required ways which accelerates the

firm's growth. It is a significant growth strategy for SMEs which has a geographically restricted business span (Barringer, 1998). Internationalization is also considered as a process of adaptation. The researches made earlier exploring SMEs were majorly with emphasis on growth aspects of industrial firms through exporting (Kiran, Majumdar, & Kishore, 2013), and very less data on the internationalization of smaller firms are being researched on since large multinational firms were being a typical unit of analysis.

SMEs can use various modes of internationalization including strategic alliances, production investments, exports, and contractual agreements. Earlier exporting was considered as a determined entrance to international markets as it serves as a base for international expansions in the future (Kogut, 1991). The SMEs faces competition from both domestic as well as overseas rivals (Lloyd-Reason, 2003). The barriers for international commerce continue to decrease as the economy across the world is more integrated, and there is enormous attention regarding the internationalization of SMEs (Lu, 2001). There has been an increased competition since substantial number of firms enters the international business environment, which reduces the capability of SMEs for controlling its own incremental paths to success (Kiran et al., 2013). Considering the competitive environment prevailing now, the need to identify and comprehend the factors which impacts international performance has become a requirement (Kuivalainen, 2012). SMEs are considered as an emerging sector, and it plays a crucial role in providing employment, and as a driving force for economic development, it in turn enables the growth of emerging nations (Kula, 2003). Internationalization theory is considered to affect large scale enterprises research (Welch, 2009) and so for SME research, apparently size of the firm does matter (Andresen, 2014).

Study of SMEs has been open for research but the role of SME is not yet actively explored considering emerging economies. Since overseas expansion due to the commencement of transformation process has made SME internationalization more demanding and so research has become inevitable. So, there is more focus on the theoretical aspects of the process of internationalization of the SMEs (Kraemer-Eis, 2014).

Studies on SMEs are very significant for social development and economic welfare of a country. The encouragement of SMEs by providing an abundance of government programs and policies emphasizes their significance which is aimed at the national development. The SMEs have a crucial role to sustain the parent country businesses with considerable pressure from foreign entrants in the home market. In India, SMEs have made exceptional contribution to the economy. The Micro, Small and Medium Enterprise (MSME) sector is also very crucial to the economy as it consists of 29.8 million enterprises present in various industries, and which employs around 69 million people. The sector also accounts for around 45% of the industrial output and 40% of the overall exports. About 94% of MSMEs are not registered, but the contribution of the SMEs to India's GDP is consistently increasing at a rate of 11.5% a year and is higher than the 8% of overall GDP growth (MSME, 2015).

High-tech SMEs in India are a significant driving force considering the growth of the manufacturing industries in the Indian industry. The technological

innovations are considered as an important aspect for high-tech SMEs. So, as a developing country, India also takes up high-tech SMEs as a model for developing the industrial achievements by taking technical entrepreneurship as technologically commercialized and nationalized. Therefore, technical entrepreneurship not only depends on technological and science implications, but also on significant research for the development of Indian SMEs (Gupta, 2014).

SMEs face prospective deficits in resources which are lesser in larger firms as a major challenge. The major barriers to internationalization of SMEs include lack of strategic resources, operational deficiencies including the capacity to meet the foreign market requirements by making use of marketing mix, limited capabilities for generating intelligence perspectives, and difficulties in the communication process which is a requirement for product creation and delivery (Kiran et al., 2013).

But SMEs exhibit prosperous internationalization much faster than multinational enterprises with abundant resource. The SME internationalization is an unorganized process and which is contradicting to the traditional internationalization process. International expansion is positively influenced by factors include education, experience, and foreign exposure. The wide experience in the area will be having a very strong impact on internationalization (Lu, 2001).

It is an essential and indispensable factor to have an autonomous theoretical concept regarding SMEs and on the process of internationalization. The factors such as concept, motives, barriers, and other dimensions of internationalization are considered for the practical aspects. The international activity helps to overcome these issues as factors such as restricted financial resources, the home nation emphasis, and smaller geographical base are barriers of SMEs. Most of the SMEs are short of resources required for getting engaged in activities overseas (Kirby, 2003). But factors such as globalization, technological development, and availability of information and a transformed organizational structure have supported enabled SMEs in overseas venture. SMEs as part of overseas venture were engaged in activities such as exports/imports, strategic alliances, mergers, and acquisitions (Etemad, 2004).

Internationalization was considered as a process which was sequential in Nature and included factors such as inconsistent export processes, exports by agents, sales overseas via knowledge contracts for licensing or franchising, and foreign direct investment (Axinn, 2002). According to (Lu, 2001), internationalization has been defined as 'a process by which firms both increase their awareness of the direct and indirect influence of international dealings on their future, and establish and conduct transactions with other countries'. Even though SMEs are keenly make its presence in a wide range of activities in global markets, they have key issues while entering in global markets (Gupta, 2014). The main issue which hinders the entrance is lack of awareness about the laws, exports, and marketing initiatives required. There are many ways by which SMEs internationalize which includes networking with overseas firms, accessing the foreign countries by the means of trade fairs, exporters, and valid publications. The alternative mechanism which enhances internationalization includes joint venture tie-ups, licensing arrangements, and subcontracting.

To sustain themselves in the global economy, SMEs must improve their products and processes by taking advantage of the intellectual capital by getting involved with an active system of knowledge-intensive relations across borders. The use of Information Technology to enhance the product designing and business operations especially in SMEs are limited regardless of the extensive promotion of information technology. SMEs also have limited capital investment that can be utilized for regular usage of information, for developing efficient organization processes, and for technology development. It is a clear indication that SMEs are not utilizing the probable benefits of Information Technology (IT) (Ebrahim, 2009).

Factors such as innovative thinking and opportunity and risk taking predominantly impact a firm's motive for internationalization (Lu, 2001). The barriers to internationalization of SMEs can be drastically minimized by the concept of E2E framework which arises from the conceptual framework of Virtual Enterprise.

Virtual enterprise is defined as 'a temporary network of independent institutions, businesses or specialized individuals, which works together in a spontaneous manner by way of information and communication technology, to gain an extant competitive edge. It integrates vertically, unifies their core competencies and function as one organization (or organizational unit)' (Christie, 1998). Virtual corporation is stated as 'a temporary or short-term network of independent companies, suppliers and customers linked by information technology to share skills, cost and access to one another's core competencies' (Barnatt, 1997). Virtual organizations create a network or coalition of valid providers, manufacturers, and administrative services that enables them to achieve the specific objectives of the assignments taken up. When the objectives get accomplished, the organizational relationships are then dissolved (Christie, 1998). This virtual network which mainly supports the collective interest for executing common tasks and which also supports the community members through the mutual interactions is the factor which binds trust among the members. It thereby enables the members in the organizational structure that are geographically dispersed to communicate, collaborate, maintain, and sustain the one-to-one relationships between members in the disseminated work environment of virtual world through the various medium of communications (Crespo, 2012).

As per researches, entrepreneurial teams are considered as key features in the international economic set-up and which gains a thrust by the dynamic forces and complexities related with globalization (Covin, 1994). Also, the creation of 'virtual' or distributed knowledge teams has been followed frequently in start-ups and in established organizations which generates new sources of value (Warkentin, 1997). The entrepreneurial teams are a defined group of individuals that holds together the foremost organizational events as a specific collective goal for a new venture formation or as the initiation of innovation and strategic replenishment within prevailing organizations (Andresen, 2014). The virtual teams include individuals who are disjointed by time and space and who depend on communication technologies to connect the geographic boundaries and wherein they aim to accomplish the common goal (Leimeister, 2006). So, virtual entrepreneurial team can be considered as two or more individuals who engage collectively in innovative and

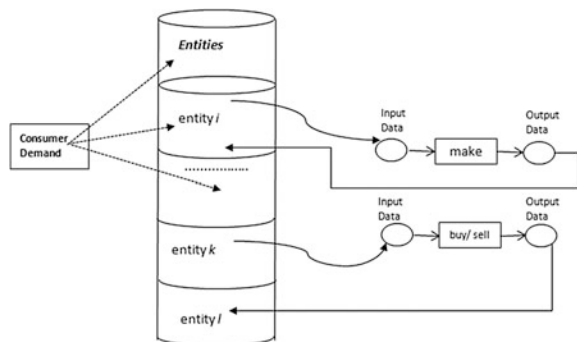
inventive activities together which in turn are proposed to form new ventures or which enhances organizational mission as a shared goal even in the absence of face-to-face contact between the members. Inadequate and contradicting results which were set up in team configuration studies (Chowdhury, 2013) directed researchers to give emphasis to resource-centred theory and to improve new insights regarding how entrepreneurial teams should function.

Enterprises in the modern world need to become accustomed to the increasingly competitive environment with rapid changes and should be able to adapt with the unstable and volatile environment. To address this instability, many organizational models and enterprise network models such as the comprehensive enterprise, networked enterprise, agile manufacturing system, and the virtual enterprise have been proposed (Abramovici, 2011). These innovative models can replicate the present business scenario where competition is among enterprise networks and is no longer between the enterprises since the individual enterprises have a lack of essential skills which is required to fulfil the new market necessities (Filos, 2006). Even though enterprise networks have become a very attractive and strategic option, many strategic alliances were unstable and ineffective in the working scenario (Mun, 2011).

5.2.1 *Creating Demand Through a Common Database*

The enterprise creation process starts when a business opportunity arises from the consumer demand (Davidrajuh, 2003). The entities with qualifying competencies come together wherein the partners through the process are formed. When an assignment is floated, the leading entities quests for the prospective partners in the central hub by using a broker which is denoted as proxy server. Once the potential partners are identified, the trust values of trustees are evaluated and an Enterprise is created by the negotiation process with the other alternatives available as in Fig. 5.1. During the process of creating demand, the project constrictions and strategies are revised and optimized accordingly (Mun, 2011).

Fig. 5.1 Creating demand through a common database (adapted from: Davidrajuh, 2003)



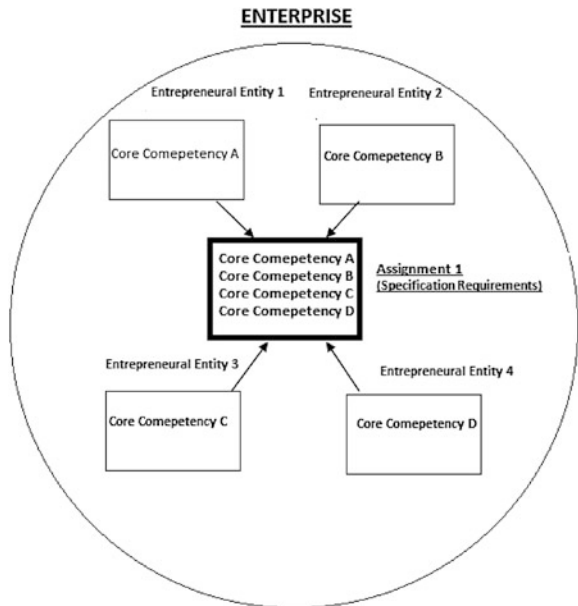
5.2.2 Identification of Entity Partners by Core Competency Requirements

Once the entities choose the partners, they will form an enterprise and each allotted work will be carried out by the respective entities according to their core competencies. A frame work is shown in Fig. 5.2.

5.2.3 Goal-Oriented Entity Selection

The ‘goal-oriented entity selection’ proposes the core paradigms of the trust model developed which evaluates the trust values of the entities. Here, entity refers to an entrepreneur which can be an individual or an organization itself. The entities created for the common purpose will together form an enterprise (Mun, 2011). In this model, the trust value created of entity A to entity B is fully subjected to the goal of association by which distributed entities are integrated and entity network is optimized (Yasir, 2013). In Fig. 5.3, the method of goal-oriented partner entity selection is being depicted. Here, when an entity also called as a ‘trustor’ takes up a business prospect and adopts to seek external resources, it generates an association called Business Organization Management (BOM) to find its partners (i.e. other entities). Based on it, the proxy server directs the information regarding the potential entities, and the ‘trustor’ creates a virtual organization or the enterprise by

Fig. 5.2 Identification of entity partners by core competency requirements (adapted from: Davari & Rezazadeh, 2015)



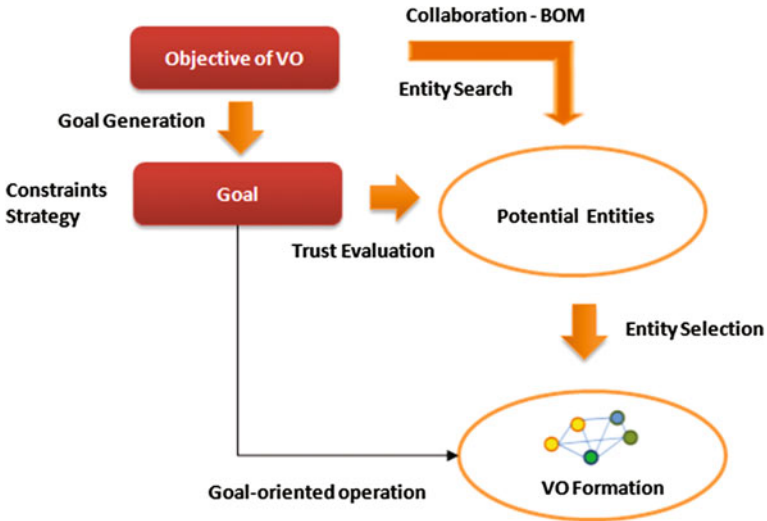


Fig. 5.3 Goal oriented entity selection (adapted from: Mun, 2011)

procedure of goal formation. The ‘trustor’ will then evaluate the trust values for prospective partners considering the earlier predefined goals of the respective assignment (Mun, 2011).

5.2.4 E2E Business Process Management Framework

The E2E Business Process Management Framework defines a group of process models that illustrates the Virtual Organization Breeding Environments (VOBE) and Virtual Organization (VOE) management processes. The VOBEs ‘are strategic associations/coalitions of autonomous, geographically dispersed and heterogeneous organizations adhering to a base long-term cooperation agreement, and adoption of common operating principles and infrastructures, with the main goal of increasing their preparedness towards collaboration’ (Romero & Molina, 2009) (Kiran et al., 2013). VOBE has an aim to form the core member organizations as well as support institutions. It also aims to develop the eagerness towards the prospective contribution in Virtual Organizations (Afsarmanesh & Ermilova, 2007). A Virtual Organization (VO) can be defined as ‘a temporary association/consortium of (legally) independent organizations that come together to share skills or core competencies and resources to achieve a common goal, such as preparing a proposal (or a bid), or jointly performing a value adding task needed to satisfy a market/society opportunity by co-producing products/services for the customer, and whose cooperation is supported by computer networks’ (Afsarmanesh & Camarinha-Matos, 2005).

The main components of the framework consist of VO Creation Framework, VO Management Framework, VOBE Entity Management, VOBE General Management, and VOBE Horizontal Management Processes as represented in Fig. 5.4.

The framework has the aim which gives prioritization for all VOBE and VOE management processes which are to be sustained by manpower or by information systems interfaces by the entire VOBE and VOE life cycles. There are three



Fig. 5.4 E2E business process management framework (adapted: Romero & Molina, 2009)

subframeworks which are (a) VOB Management Framework which includes VOB Entity Management, VOB General Management and VOB Horizontal Management Processes (b) VOB Creation Framework and (c) VOB Management Framework (Romero & Molina, 2009).

The VOB Management Framework has been defined as a group of processes and procedures managed by stakeholders in the entire life cycle which confirm that all tasks required are fulfilled to accomplish its objectives (Romero & Molina, 2009). VOB entity management is denoted by business processes namely Membership and Structure Management (MSM) and Profile and Competency Management (PCM). MSM is a group of responsibilities and associated tools which allows the process of incorporation, accreditation, degeneration, recompensing, and classification of members in VOB. The Profiling and Competency Management (PCM) consists of a tasks and associated tools which creates and maintains VOB (Ermilova, 2007).

MSM enables VOB Management Framework to include the required contrivances and processes to coordinate among the entities consisting of organizations that would like to join as VOB members (Romero & Molina, 2009). The initial phase includes aspects like VOB member's registration mechanism which has the objective to bring together the information necessary to construct credibility related to a VOB membership and is given to the VOB manager for the further decision-making in relation to the accreditation process. The VOB member's rewarding mechanism has the objective to monitor and to reward the VOB member's proactive behavior.

Ermilova (2007) suggests a PCM system which manages the profile- and competency-related information of the VOB members, VOs, and the entire VOB also. The mechanisms identified under PCM are profiling and competency management system which supports activities such as creating, updating, configuring, retrieval, and the analysis of VOB members, VOBs, and the VOB altogether. It also has the role to maintain catalogue of profiles which includes the VOB member's competencies, and it also has a discovery/search mechanism that analyses the VOB member's catalogue of competencies (Sitek, 2007).

VO Creation Framework (VOCF) consists of three main phases which includes (i) Preliminary Planning that comprises of the collaboration opportunity identification and classification, and VO rough planning (ii) Consortia Formation consists of prospective VO search for partners, valuation, and also the method of negotiation of contracts and principles of governance for the VOB structure (iii) VO launching makes the finishing facts, where VOB operations are adjusted, its where partners signs the agreements and also where the VOB is initiated (Romero & Molina, 2009). VOB Creation Framework includes Collaboration Opportunity (CO) Identification, CO Characterization and VO Rough Planning, Search for Partners and Selection, and the Agreement Contract Negotiation Wizard (Karvonen, 2005).

The first step in VOCF is to identify the collaboration opportunity (CO). The VO creation is initiated by the results involved in collaboration opportunity identification by a VOB member, by a system agent, or by a prospective VO customer.

The second step in VO CF is the representation of the CO recognized and to create the draft plan for the prospective VO. Here, the VO organizer will characterize and define strategies for reacting to the identified CO, which is enabled by the scheme of a draft plan intended for the formation and operation of potential VO (Sitek, 2007). The third step of VO CF is partner search and selection process and aims to enhance the potential VO partner identification process and the valuation and selection process where CO is recognized. VO planner carries out the VO partner search based on competency requests recognized in the process of CO characterization (Serrano, 2007). The last step of VO CF is the modelling of contracts and agreements between VO entities which reflects a collaborative process through the entire VO creation process. It is designed to support VO planner, VO coordinator, and the potential VO partners in negotiations involved in a VO (Camarinha-Matos, 2005).

VO Management Framework (VOMF) has the aim to integrate all the activities, measures, and processes to regulate the VO's processes (operational), the specific tasks and the probable interdependencies which supports in attaining specific VO objectives and to meet the prerequisites and expectations of VO customer without altering VOBE specific rules (Romero & Molina, 2009). The VO Management Framework has 4 parameters which include VO Initiation, VO Operation, VO Evolution, and VO Dissolution.

VO registration is where the VO profile is created which includes the broad details about VO and about the partners and the competency-related information (Karvonen, 2005). VO performance measurement deals with giving support to the VO coordinator on the process of visualization, monitoring, and alerting the functionalities and thereby managing various sources of data from the VO partner's processes. In VO Dissolution which consists of Inheritance information management Process, the VOBE management involves in the VO management as a support to inheritance process. Valuable immaterial assets are formed in the VO creation process. Operation of VOs creates several categories of assets in the life cycle; so as a support to these, VO Dissolution is being made use of (Romero & Molina, 2009).

The VOBE management facilitates the success of various activities in the VOBE and the fruitful conformation of VOs. The VOBE administration supports and coordinates the activities that are required to be executed throughout the VOBE life cycle stages from the first step of VOBE formation to the last phase of dissolution (Romero & Molina, 2009). VOBE General Management Framework includes the Management functions relating to areas such as marketing management, finance and accounting, governance, managing assets, and other functions such as Value System Information Management (VSIM), ICT Management (ICTM) and Support Institutions Information Management (SIIM).

Strategic management outlines the method of creation of strategies by outlining activities that would assist to align VOBE entity's interests by means of their respective proficiencies and towards the external business environment that VOBE and other entity's experience. The process of marketing which includes the branding process will promote competencies of VOBE with the potential VO

customers. The area of fiscal management involves VOBÉ administrative processes to raise, assign, and to utilize the financial resources in the VOBÉ life cycle and by carefully considering the investment risks (Romero & Molina, 2009). The Resource management process deals with the efficient and effective allotment of VOBÉs resources which includes financial resources, inventory, organizational skills, the various operational resources, IT resources etc.

Governance management is the process which includes observing (by policies) the long run strategies and for directing the organization of VOBÉ. The main elements of VOBÉ governance includes internal functioning rules and guidelines which constitutes of components like membership, incentive and sanction policies, the ethical code of conduct, VOBÉ cultural aspects and the administrative functions which is used to recognize priorities, roles and responsibilities, and which will also form bases for the process of decision-making (Serrano, 2007).

VOBÉ assets management has the main purpose of providing the valuable assets property of various VOBÉ entities with other VOBÉ entities. The VOBÉ-related assets intention is to speed up and improve the key processes involved in VO creation. The VOBÉ ontology management processes and tools provide functionalities of adaptation. VOBÉ ontology targets to make available a progress considering ontology in the VOBÉ life cycle with additional characteristics of observing and searching for relevant concepts (Romero & Molina, 2009).

The ICT infrastructure has the aim of being the key enabler for the protective and synchronized interactions between VOBÉ members (Camarinha-Matos, 2005). A support institution provides a range of services to the VOBÉ like providing assistance in recognizing and integrating the support institutions into the VOBÉ and to segregate them based on competency which will enable in identifying definite solution meant for precise conditions (Romero, 2007).

The VOBÉ Horizontal Management Processes intends to preserve, influence and optimize the day-to-day business process operations which form a basis for formation of trustable working environments and which also enables perfect performance evaluations which enhance the decision-making processes and so will contribute towards the continuous improvement. It includes other higher end management functions like Innovation, Trust Management, Performance Management and evaluation and Decision Support System (Camarinha-Matos, 2005).

Innovation management manages ideas by generating and developing it into new products, processes or services (Serrano, 2007). Trust building another task in VOBÉ management that holds and links the entities inside the VOBÉ. It also enables the collaboration and complication reduction during discussions between the VOBÉ entities.

Performance management measures the VOBÉ entity's specified activities with predetermined measurable indicators based on a standard and wherein it forms a baseline for judgment or decision. It denotes a systematic procedure of work being planning and it sets prospects and constantly monitors the VOBÉ performance and of the members of VOBÉ. It also has a system for rewarding the superior performance of VOBÉ entities (Romero, 2007). Decision support management considers

the various administrative resolutions that are taken to appropriately manage the numerous events and roles which are defined in a VOBE. So, a Decision Support System (DSS) tool helps VOBE administration and the VOBE members to retain the increased levels of competitiveness and to maintain the performance at peak level by taking the right decisions (Sitek, 2007).

The E2E Integral Business Process Management Framework of establishing an enterprise wherein entities join can be instituted more firmly by the defined group of process models that confers to instances during the management processes. This will thereby enable a firm structure of operation for the framework.

The research on the Entrepreneurs to Enterprise framework is revised model of the Virtual Entrepreneurship Model wherein the researches are not yet done. The Virtual Entrepreneurship combines sources across the globe to work together to achieve a common goal. Virtual Entrepreneurship Model has no definite structure as that of an enterprise and is also not involved in the profit sharing methodology, decision-making or share of liability (Khayami, 2011). But in E2E Model, the entrepreneurs will join to form an enterprise where it forms a structure of an enterprise and works in a profit sharing mode. Here, the characteristics of an enterprise which includes the liability, decision-making, management responsibilities, accountability etc. are being incorporated in the Model. So, E2E model functions virtually but as an enterprise.

5.3 Theoretical Framework of ‘Entrepreneurs to Enterprise’ (‘E2E’)

The E2E framework consists of entrepreneurs who can be individual entrepreneurs or an existing entrepreneurial venture and each and is named as Entity. The enterprise unit in E2E framework is formed when more than one Entity joins together for an assignment. In E2E framework, the profit is equally shared among the Entities according to the involvement in the activities of the enterprise. Also, an entity can be member of more than one enterprise at the same time.

5.3.1 E2E Structure Diagram

The E2E Structure Diagram is depicted in Fig. 5.5. It represents a hub which has many entrepreneurial entities and for an assignment, a set of entities will partner together to form an enterprise. The hub will have many enterprises and the entrepreneurial entities can be present in more than one enterprise. So, this encompasses the Entrepreneur to Enterprise (E2E) framework.

The assignments will be floated in the common portal and entities can register for the same. A goal-oriented entity selection as in Fig. 5.2 will be made. The

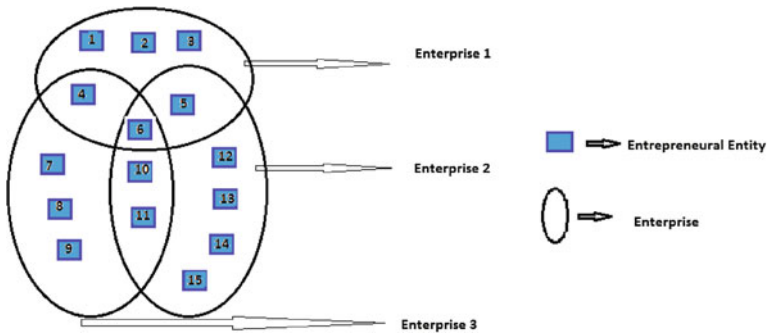


Fig. 5.5 E2E structure diagram

entities must register with respect to the skill set it has and it will be evaluated and qualified by Common Portal. The entity selection will be in will follow the ‘Identification of entity partners by Core Competency requirements’. The areas required for the assignment and other requirements will be specified and according to the registrations by the entities, the enterprise will be formed. Each entity will have to adhere to the deadlines of time. Termination of an entity from the assignment can be done in case of not meeting up with the quality or time. The E2E overall Structure will follow the ‘E2E Integral Business Process Management Framework’ for defining its business processes.

5.4 Limitations of the Study

The limitations of this study are as follows:

- (a) Considering the vast coverage required in presenting a model in virtual organizations which are wide spread, it is not fully possible to engage a detailed review of the operational constructs.
- (b) From a researcher’s perspective, the model developed aids the understanding of virtuality in a better way. It provides a framework by which the existing and future contributions in virtual networks can be developed, but the restrictions specifying locations (geographically) is not studied.

5.5 Conclusion

Internationalization has extended a wide range of novel opportunities to the SME sector which is considerably higher and SME sector has taken a great benefit of it. In this globalization era, SME sector has moreover developed in the global in

marketplace while compared with the domestic market. The Indian SMEs are having an impressive growth of exports since liberalization in 1991. The SMEs in international markets of service sector also have a key role played wherein it becomes the key contributor to the overall export of the country. The internationalization of service sector SMEs is projected in gaining better prospective since the global economy has its continuous advances in technology.

But the barriers faced by SMEs which includes factors such as limited capital, non-accessibility to technology, low production capacity, the rising constraints on updating and expansions, scarceness of skilled labour largely impact in limiting the growth of International SMEs. SMEs struggle with capital constraints matching options to utilize a recognized opportunity and making intensive use of technologies to organize and partner with already existing organizations.

The 'E2E' structure will enable to bring the members for an access to global markets and thereby makes it possible to globally share skills, knowledge, resources and capital and so the barriers to internationalization of service sector SMEs can be drastically minimized by the concept of E2E framework which adheres to the concept of Virtual Enterprise. The key advantages of 'E2E' over a traditional organization are that it has an extended flexibility, adaptability, responsiveness and the synergy between the Entities. The 'goal-oriented entity selection' will identify the ideal 'Entities' to partner for becoming the 'Enterprise'. The entity selection will be in will follow the 'Identification of entity partners by Core Competency requirements'. The E2E overall Structure will follow the 'E2E Integral Business Process Management Framework' for defining its business processes.

'E2E' model suggests a change in the existing organizational structure which incorporates a conceptual framework which will identify the supporting forces and thereby promotes virtual entrepreneurship in the broad areas of business.

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Chapter 6

Information Asymmetry Risks in Venture Capital (VC) Investments: Strategies of Transnational VC Firms in India



Kshitija Joshi and M. H. Bala Subrahmanya

6.1 Introduction

Venture capitalist (VC) firms are financial intermediaries focused on funding projects in emerging high-technology realms. Nascent technologies, domains and business models and most importantly intangibility of assets are the mainstay of such VC-funded projects. This results in an extreme level of information asymmetry, and thus funding these projects warrants specialized risk assessment skills. In fact, VC firms are known to possess the forte in selecting and monitoring ventures with an extreme level of information asymmetry (Chan, 1983; MacIntoch, 1994; Sahlman, 1990; Amit, Glosten, & Muller, 1990, 1993; Amit, Brander, & Zott, 1998).

Information asymmetry results in two distinct kinds of risks—adverse selection and moral hazard. Adverse selection risks are those resulting from hidden information (i.e., entrepreneurs possess certain information not known to the VCs). Moral hazard risks are the ones emanating from hidden actions (i.e., entrepreneurs can take certain actions not observable by the VCs). As *niche* financial intermediaries, VC firms are known to be well-versed with strategies to tackle both of these. While adverse selection is tackled by intensive proposal screening and due

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diligence, syndication of deals (co-investing with other VC firms), and specialization (by domain, funding size, stage of funding), moral hazard is overcome by staging of investments, legal contracting, and extensive monitoring of the investee firms (Gupta & Sapienza, 1992; Rosenstein, Bruno, Bygrave, & Taylor, 1993; Barry, 1994; Lerner, 1994; Fried & Hisrich, 1994; Gompers & Lerner, 2004; Pruthi, Wright, & Lockett, 2003). In general, presence of information asymmetry warrants an extensive usage of signaling mechanisms to overcome the ensuing risks.

Whereas the VC-funded projects are extremely risky in general, those funded by transnational VC firms operating in emerging economies are known to be even more precarious. Based on ownership type, the VC firms can be divided into two types—domestic and transnational. Domestic VC firms are the ones where the country of origin and the destination for investment are one and the same. Usually, these are either independent VC entities or offshoots of other domestic financial intermediaries or corporate houses. The transnational VC firms on the other hand are multinational VC entities for whom the countries of origin and the investment destinations are distinctly different. The global VC firms that scour the economies worldwide in search of investment opportunities fall in this category. Typically, the domestic and transnational VC firms are known to possess different set of skill sets. While the former are very well-connected with the local entrepreneurial and VC networks, the latter possess the expertise and scale required to expand into foreign markets (Devigne, Vanacker, Manigart, & Paeleman, 2013). In general, due to the prevailing geographic, socio-cultural, economic and institutional differences, the Foreign VCs encounter far more challenges while investing in countries different from their origin, in particular, emerging economies (Dai, Jo, & Kasscieh, 2012).

The incidence of transnational VC firms has been steadily growing in India. Today, India has emerged among the top destinations for emerging economies worldwide in the deployment of VC funds (Bain Consulting, 2012). Moreover, around 60% of the active VC firms operating in India are of foreign origin (Venture Intelligence, 2014) 80% of the VC investments in India are based on funds raised abroad (Bain Consulting, 2011, 2012, 2013; Ernst & Young, 2014; Deloitte, 2010). Despite this, there is only a limited understanding about how these transnational VC firms operate and what strategies they use in making their investment decisions. The paper attempts to fill this gap.

The paper aims to identify the signals used by the transnational VCs operating in India while investing in nascent ventures. A study of the literature revealed that the investment strategies of transnational VC firms have been explored in the literature only to a limited extent so far. Moreover, the studies with respect to emerging economies are far and few. This can be mainly attributed to two factors. First, the institution of VC itself is quite nascent in these economies. A large part of the transnational VCs in India have established their India-operations only post-2007 (Venture Intelligence, 2014). Second, the overall cultural and social context in these economies is quite distinct from that of the Western economies. Quite naturally, the tacit signals used by the transnational VC firms operating there are bound to be quite diverse from what they might rely on while investing in the developed world. Furthermore, even when such studies exist, they are mainly qualitative in nature. While such exploratory studies are certainly valuable, they need to be further

strengthened by statistically establishing the proposed hypotheses using rigorous quantitative methods. We believe our study to be one of the first few to quantitatively analyze the role played by latent signals in the risk assessment of potential deals by the transnational VC firms.

This study addresses multiple objectives. First is to exhaustively analyze all the potential signals assessed by VC firms while making their investment decisions and arrive at a methodical framework for doing so. Second is to validate and quantify the information pertaining to these signals. In particular, explore the sets of distinct signals that matter to the transnational VC firms within the Indian economic, political, social, and cultural milieu. Finally, to identify those set of signals that differ across transnational VC firms and their domestic counterparts.

This study is based on a dataset—compiled based on a semi-structured questionnaire and in-depth interviews with executives from 72 active VC firms operating in India between the period of June 2013 and May 2014. Using multivariate techniques such as Exploratory Factor Analysis and the Logistic Regression Analysis, we derive several interesting findings. To start with, we conclude that the transnational VC firms in India intensely use syndication as a risk assessment strategy, but not specialization. Moreover, they consciously stay away from investing in early-stage deals, since these are known to be further riskier. Past founding experience is valued a great deal in a prospective entrepreneur although finding such ‘serial entrepreneurs’ is still quite rare in India. Quite interestingly, the transnational VC firms here consciously stay away from investing in family-owned businesses (or any offshoots of it) and prefer to back only first-generation entrepreneurs since these are indicative of potential agency problems in the future.

This paper is organized as follows. Section 6.2 presents a detailed survey of the relevant literature. Section 6.3 discusses the Indian context of the VC firms. The conceptual framework for the study and the hypotheses that follow from it are presented in Sect. 6.4. Section 6.5 introduces the analysis dataset and describes the methodology. Empirical results from multivariate analysis are discussed in Sect. 6.6. Conclusions, business relevance, policy implications, and contributions to the existing body of the literature are discussed in the last section.

6.2 Survey of the Literature

As noted, information asymmetry compels the VC firms to intensely use tacit signals to arrive at potential risk estimates about an investee firm. This section attempts to provide a detailed overview of such signals with specific reference to those believed to be relevant in the Indian context. The latter were derived based on our discussions with VC executives in India during the pre-data collection phase.

Our principal postulate is that in general, the transnational VC firms investing in countries that are different from their countries of origin face peculiar risks arising due to geographical distance and cultural differences. These, further combined with the atypical domains that the VC firms tend to focus on (*viz.* nascent and emerging

businesses with intangible assets), result in an enormous magnitude of information asymmetry. Thus, it warrants an intense use of signaling mechanisms in assessing risks and accordingly making investment decisions.

Based on the review of the literature, we have classified the entire gamut of tacit signals into the following categories, viz. signals obtained from—entrepreneurial attributes, VC firm-related and deal-specific characteristics, and overall macro-economic environment and policy-related aspects. In addition to these, we also propose signals that are presumed to be relevant in the Indian setup.

6.2.1 Signals from Entrepreneurial Characteristics

Founder or founding team-related attributes are often viewed as a proxy of creditworthiness in the absence of historical performance data on the investee firm (Hsu, 2007). Entrepreneurial personality, experience, human, and social capital have been intensely probed in the VC literature (MacMillan, Siegel, & Narasimha, 1986; Goslin & Barge, 1986; Dixon, 1991; Hsu, 2007). In general, VC firms prefer investing in teams with industry experience and those with a fair mix of technical and business education. Entrepreneurs with a demonstrated track record of setting up successful start-ups in the past is another important signal in risk assessment (Hsu, 2007). These attributes are not only signals about the entrepreneurial skills but are expected to substantially reduce the involvement by the VC in the new venture. Since the opportunity cost of VC resources is high, these factors are considered to be critical in funding (Shane & Stuart, 2002).

6.2.2 Signals from VC Firm- and Deal-Related Characteristics

The domain of specialization of the VC firm is among the most important guiding factors in its investment decisions. Each VC firm consciously maps the domain of the potential new deal with its own specialized domain. As such, VC firms are not ‘generalists.’ In fact, they tend to specialize by industry (such as biotechnology or information technology), life stage of the venture (early, growth, late), geography, or even the funding size (Ruhnka & Young, 1991; Gupta & Sapienza, 1992). The resource-based view propounds that specialization provides the firm with idiosyncratic or tacit knowledge about a domain which, in turn, enables the VC firms to clearly weed out the riskiest projects thus reducing the intensity of the adverse selection problem. In fact, it is this tacit knowledge that enables the VC firm to derive its *niche* competitive advantage (Barney, 1991; Barney, Wright, & Ketchen, 2001; Newbert, 2007). Thus, in general, any potential project whose

profile does not match with the specialization domain of the VC firm is deemed to be risky and hence not considered viable for funding.

Syndication or co-investing with other VC firms is another important signal of potential risk. Different venture capitalists coming together and jointly investing in a single deal is known as syndication. Usually, VC firms are more comfortable with a deal when other VC firms of similar experience are willing to invest as well (Lerner, 1994). The rationale behind syndication is that if multiple entities review risk, it might be possible to reach closer to the 'true' estimate of risk. This leads to a superior selection of investments (Sah & Stiglitz, 1984). Also, syndication can help in spreading the risk across multiple entities thus providing the motivation to the VC firms to consider those investment projects which would not have got considered earlier (Barry, 1994). Syndication not only helps in spreading risks but also brings together more expertise and support that is warranted to add value to the venture (Gompers & Lerner, 2004). Thus, syndication may actually help in alleviating the agency risks as well. For transnational VC firms spreading their wings to Asian economies, syndication with the local VC firms proves to be an important strategy of handling the information asymmetry risks associated with geographical distance and cultural differences (Dai et al., 2012). However, it must be understood that not all VC firms view syndication favorably. In the event of conflicts of interest among co-investing VC firms, syndication might actually result in negative synergies (Lerner, 1994; Gompers, 1996; Gompers & Lerner, 2004).

Geographical distance between the VC and the investee firm is another potential indicator of riskiness. It is a proxy for the extent of monitoring that is possible. Since monitoring is critical for reducing agency risks, lesser geographical distance is typically associated with lower risk (Sapienza, 1992; Lerner, 1995; Sapienza, Manigart, & Vermeir, 1996; Manigart et al., 2002; Sapienza, De Clercq, & Sandberg, 2005; Cumming & Dai, 2010). Geographical distance not only impacts the risks emanating from moral hazard but those from adverse selection as well. In the VC industry, the information on investment opportunities is not public. Rather, it is only discretely available through organizational networks. A high geographical distance reduces the effectiveness of these channels and thus affects the ability of the VC firms to access high-quality investment opportunities (Cumming & Dai, 2010).

Synergies between the proposed venture and the existing portfolio of VC investments are regarded to be quite important in estimating risks. The proposed new venture may either compete with the existing ventures in the VC's portfolio or may complement it. In either way, this would create significant synergies. In case of competing deals, there may be economies of scale and scope to be leveraged and risks reduced. However, these might also result in a mutual conflict of interests or end up in the cannibalization of one another's market share. In case of complementarities, the deals may potentially add significant value to each other thus reducing the overall risk from both investments. In fact, it has been pointed out in the literature that at certain times, the new venture would not have got selected on a stand-alone basis, if not for the synergies it has with the rest of the portfolio (Chesbrough, 2002; Petty & Gruber, 2011).

6.2.3 *Signals Obtained from the External Macroenvironment and Government Policies*

Expectations about the current and future macroeconomic environment are critical for VC firms. A boom goes hand in hand with a liquidity of the markets and hence directly affects the ease of exit. Exit is the only mechanism for a VC firm to realize its return on investment and thus VCs closely monitor any conditions that could be possible deterrents to successful exits (Schwienbacher, 2005, 2009; Cumming & Johan, 2010). The other area that is of importance to VC firms is the favorable government policies pertaining to VC investments in general—particularly, those relating to taxation (Poterba, 1989; Gompers & Lerner, 2004).

Over and above the set of signals discussed in this section, we have identified other relevant signals that are pertinent in the Indian social and cultural milieu. These have been discussed at length in Sect. 6.3.1.

6.3 Venture Capital in India¹

As of 2015, India ranked among the fastest growing global economies and is likely to retain that position over the near future. Given its demographic dividend, India needs to create about 10–15 Mn jobs annually over the next 10 years in order to provide gainful employment opportunities to its young population (India, Planning Commission, 2012). Moreover, it is well-understood that these jobs are unlikely to emerge from either government or private sector but rather from innovative entrepreneurial ventures (India, Planning Commission, 2012).

Likewise, India possesses an abundant pool of trained engineers and scientists. There exist about 3450 engineering institutes (India, Economic Survey, 2014–2015) that produce about 14 lakh technical graduates a year (All India Council for Technical Education, 2016). Simultaneously, there exists no dearth of viable problems (such as high-quality education, affordable health care, clean energy, waste management, and financial inclusion among many others) that warrant urgent attention (India, Planning Commission, 2012). And increasingly it is believed that the innovative technology start-ups are best positioned to provide non-conventional solutions to address the same (India, Planning Commission, 2012). Furthermore, India's consumer market is among the largest in the world and will continue to remain so till 2030 (BCG, 2013). Given these factors, it should not be surprising that India has indeed established itself as one of the most attractive destinations for the deployment of global VC funds.

¹This section draws from the author's published open access article "Managing the risks from high-tech Investments in India: differential strategies of foreign and domestic venture capital firms", in 2018 in SpringerOpen journal *Journal of Global Entrepreneurship Research*, and can be accessed via <https://doi.org/10.1186/s40497-018-0106-6>.

Since the last decade, VC has been one of the prominent routes for funding emerging businesses in India (Planning Commission, 2012). Although India has had a rich historical tradition of entrepreneurship, the strategy of building businesses to sell is albeit a relatively recent phenomenon (India, Planning Commission, 2012). Among others, this change in the perspective of the Indian entrepreneurs can be thought to be one of the principal factors responsible for the rapid emergence of the VC industry here. Reverse migration of transnational entrepreneurs is another noteworthy influence that has contributed to its evolution (Madhavan & Iriyama, 2009; Saxenian, 2010).

While VC as source of finance had been in existence in India since the late 1980s, it started playing an instrumental role in supporting emerging businesses only during the post-dot-com era (Planning Commission, 2005). The growth of VCs and the emergence of High-Tech start-ups in India has happened almost parallelly, with both of them having witnessed a significant boom since the latter half of the past decade (Planning Commission, 2012). As of 2014, there are more than 400 VCs in India, with about 309 of them being active. Collectively, these have funded about 6000+ deals (Venture Intelligence, 2014) as the VC investments in India in dollar terms have grown at a compounded annual growth rate of 30%.

The financial crises of 2008-09 that largely impacted the western world, in particular the US, acted as a significant 'push' factor that drove VC funds to emerging economies such as India and China in search of better returns. Incidentally, the technology start-up landscape in the latter economies was just developing wherein the VC funds acted as a much needed catalyst (Bain Consulting, 2011, 2012). This was also the period when India witnessed high interest rates regime (owing to high inflation rates), thus making VC funds an attractive source of funding for technology entrepreneurs (Joshi & Bala Subrahmanya, 2014).

Transnational VCs have led the rally of VC investments in India. About 80% of the VC invested in India originates abroad and about 54% of Foreign Direct Investment in India is in the form of VC and Private Equity (Bain Consulting, 2011, 2012, 2013; Ernst & Young, 2014; Deloitte, 2010). Several notable multinational technology companies (such as Microsoft, Intel, Qualcomm, SAP, Amazon) have established their own corporate VC set-ups to leverage the technologies developed by the latter, while many others have set up their own business accelerators that incubate young companies (Planning Commission, 2012; Venture Intelligence, 2014).

The growing investments by transnational VC firms have many aspects to it; the most important among them being the restrictions on Indian fund providers to contribute to the VC fund pool. In the interest of retail investor protection, in India there exist several restrictions on pension funds, insurance companies, and provident funds contributing towards VC fund corpuses (Planning Commission, 2012). However, it would be wrong to say that transnational VCs provide just finance, rather they are known to possess the niche for 'opportunity recognition' in high-tech domains. Additionally, they bring with them international networks that provide access to markets abroad which is critical during scale-up phases of the businesses (Devigne et al., 2013). On the contrary, domestic VCs have limited

opportunity recognition potential as can be seen from the fact of rejection of funding for Infosys Technologies, an Indian and global IT services major, which later went on to successfully list on NASDAQ (Dossani & Kenney, 2002). Consequently, the portfolios of domestic VCs are found to be specialized in more conventional domains.

Yet the transnational VCs intending to invest in India encounter multiple challenges. India's performance on the indices of 'Ease of Doing Business' and 'Public Sector Corruption' is not particularly notable (Transparency International, 2015). The multitude of languages can pose a significant barrier in understanding the local context especially when the investee venture is located in a 2nd-tier town. Trust deficit between VCs and entrepreneurs is another major area of concern (Panda & Dash, 2013). Moreover, VCs are still largely looked upon as only fund providers by Indian entrepreneurs and their involvement in any other aspects of the business is strongly resisted (Bain Consulting, 2014). Bankruptcy procedures in India are still not easy to navigate and closing down a business is often looked upon as a cumbersome task (Planning Commission, 2012).

However, despite these trends, knowledge pertaining to the micro-level functioning of Indian VC firms in general (and the transnational VC firms in particular) is still quite limited. The aim of this study is to fill this gap.

6.3.1 Signals Relevant in the Indian Scenario

For gaining an insight into the set of signals that mattered in the Indian milieu, we consulted with several VC firm executives during the pre-data collection phase. Additionally, we also perused through numerous VC industry reports that highlight from time to time, the concerns of the VC firms operating in India (Bain Consulting, 2011, 2012, 2013, 2014; Ernst & Young, 2014). Based on the same, we identified a set of factors that we believe to be germane in the Indian context and hence decided to probe these further.

The first among these pertains to the nature of ownership of the investee firms. In particular, we are interested in understanding how the Indian VC firms view family-owned businesses as potential targets for funding. A family-owned business is defined as a one in which the firm is owned and managed by one or more family members (USA, National Family Business, Survey, 1997). In India, the family-owned businesses generate about two-third of the total GDP (90% of the aggregate industry output) and account for 79% of the organized private sector employment (KPMG, 2013). Naturally, such businesses are expected to provide an attractive source of deal flow for the VC firms. However, on the other hand the family-owned businesses are known to encounter significant corporate governance issues (PwC, 2012–2013). This lack of corporate governance standards is likely to further compound the magnitude of agency problems for the VC firms. Given the above, we believe it will be interesting to probe how the Indian VC firms view firms that are family-owned and entrepreneurs coming from business families.

The channel of origination of the sourced deal is another important attribute that we believe needs to be probed in the Indian context. Currently, the Indian market is heavily intermediated, with about 80% of the deals being directly sourced from investment banks and other networks. In fact, very few VC firms are known to possess the proprietary edge in proactively sourcing prospective deals (Bain Consulting, 2012). Of late, the Indian government too has been making efforts toward augmenting the early-stage deal flow by actively promoting setting up of academic and industry incubators (Ministry of MSMEs, 2013; Union Budget, Ministry of Finance, 2014). These multiple channels of deal flow may be classified into—‘warm’ referrals (those received from other VC firms, investment bankers, and other existing entrepreneurs on their portfolio), ‘cold’ leads (from business founders erstwhile unknown to the VC), and those that have been ‘proactively sourced’ by the VC firms themselves. Generally, the risks associated with deals coming via ‘warm’ referrals and ‘proactive sourcing’ are considered to be much lower than those from the ‘cold’ leads. In fact, some of the most successful deals are often those that have been actively sourced by the VC firms themselves (Tyebjee & Bruno, 1984; Steier & Greenwood, 1995; Van Osnabrugge, 2000). Thus, in this regard, we feel that it might be interesting to investigate how the VC firms view the origination source of a prospective deal specifically from the viewpoint of being a signal of potential risk.

Lastly, we believe it is important to probe how the Indian VC firms view businesses necessitating a high interface with the government. The reasons for the same are quite apparent. India is often viewed as a country where understanding government procedures/regulations and maneuvering through them can be a cumbersome and notorious process. India’s poor rankings in ‘Ease of Doing Business’ and ‘Public Sector Corruption’ indices well support this fact.

6.4 Proposed Conceptual Framework and Hypotheses

Based on the review of the literature discussed in the previous section, we have developed a conceptual framework identifying and linking the key variables. Figure 6.1 presents the conceptual framework for this study that has been derived based on the review of literature.

Based on the proposed framework in Fig. 6.1, our proposition is that the latent signals used by the VC firms in India in assessing the risks of a prospective investee firm can be divided into the following categories: entrepreneurial signals, VC firm and deal signals, macroeconomic and policy-related signals, and relevant economic/political/cultural/social signals. Each of the above signals is further divided into multiple sub-categories. A VC firm intensely analyzes all of the above signals to arrive at an estimate of potential venture risk. The nature of signals used to arrive at risk estimates distinctly differs across domestic and transnational VC firms.

Based on the proposed framework given in Fig. 6.1, we propose the following nine hypotheses regarding the signals used by the transnational VC firms in India.

- Hypothesis 1 In the absence of tangible historical performance data on the venture, the transnational VC firms extensively use entrepreneurial signals.
- Hypothesis 2 Specialization is regarded as an important risk assessment strategy by the transnational VC firms.
- Hypothesis 3 Transnational VC firms are more likely to use syndication as a strategy for overcoming information asymmetry risks as compared to domestic firms.
- Hypothesis 4 Transnational VC firms are more likely to stay away from early-stage deals as they are likely to possess a high degree of information asymmetry.
- Hypothesis 5 Geographical proximity between their own location (in India) and that of the investee firm is important to transnational VC firms in overcoming agency problems arising from information asymmetry.

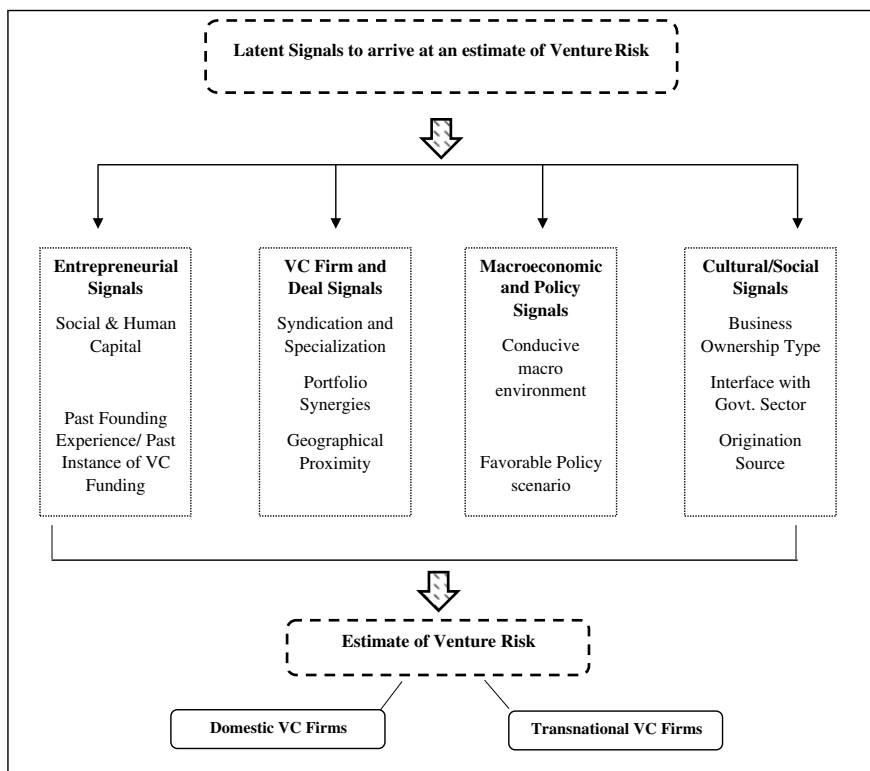


Fig. 6.1 Conceptual framework: risk assessment based on latent signals. *Source* Authors' proposition

- Hypothesis 6 Transnational VC firms consciously assess portfolio synergies while making new investments as it enables them to reduce risks.
- Hypothesis 7 Macroeconomic and policy-related signals are regarded important by the transnational VC firms when they prioritize to allocate funds to India over the other emerging economies.
- Hypothesis 8 In the Indian context, the transnational VC firms would consciously stay away from funding family-owned businesses and would prefer to fund only first-generation entrepreneurs.
- Hypothesis 9 The transnational VC firms in India do not prefer investing in domains having a high interface with the government.
- Hypothesis 10 In India, transnational VC firms consciously look for a trusted source of deal origination.

6.5 Methodology

The research design and methods of analysis are presented in the present section.

6.5.1 *Scope, Data, and Methods of Analysis*

This study is mainly based on primary data collected from the VC professionals across 72 active VC firms in India during the period from July 2013 to May 2014. The VC firms in our sample have funded about 70% of the VC deals in India between 2007 and 2013. These VC firms are spread across all major Indian cities—Mumbai, Bengaluru, Chennai, Delhi (NCR area), Kolkata, Hyderabad, and Ahmedabad.

To start with, we established contacts with the VC professionals in our sample via multiple sources. To start with, we obtained their contact details from the India Venture Capital Association (IVCA) Directory and the Venture Intelligence Database. These directories list down the contact details (email addresses, telephone numbers, and postal addresses) of these professionals. The professionals were then contacted via emails and *LinkedIn* (professional networking Web site). Additional contacts were also established by attending various professional networking events (such as VC—entrepreneur meet-ups, seminars, and workshops). VC professionals who exhibited an active interest in our study were requested to provide us further references to their peers from the same domain.

As noted earlier, the VC firms in our sample have been categorized into two distinct categories—those of domestic origin and others of transnational origin. The VC firms of transnational origin are offshoots of larger transnational VC firms or other multinational corporate entities. While a majority of them have established registered offices in India, a few do not have any formal setup in India and primarily

operate from their countries of origin. Domestic VC firms are primarily of Indian origin and are either offshoots of financial institutions/domestic corporates or are independent VC entities themselves. It must be noted here that although a majority of domestic VC firms too rely on overseas sources of funds, yet we have classified them as domestic VC firms since their primary destination of investment is India (Table 6.1).

Transnational and domestic VCs in our sample are both approximately of the same age, viz. 6–7 years in terms of their years of operations in India. Each of them has funded about 18 deals between the period 2008 and 2013 and has experienced about 4–5 successful exits (mergers, acquisitions, and IPO exits). About 48% of the transnational VCs are in Bengaluru as compared to just 27% of the domestic VCs. The possible reason for this could be to effectively leverage the existing start-up ecosystem, given their limited social capital. About 30% of the former are focused on funding early-stage deals as compared to that of 47% for the latter. About 48% of the transnational VCs are focused on funding ventures in high-tech domains (as defined by deals in IT and ITeS and biotechnology sectors) as compared to that of 33% for their domestic counterparts. About 22% of these transnational VCs have been started by erstwhile entrepreneurs as compared to that of 27% for the domestic VCs.

Semi-structured questionnaire approach was used as the tool for primary data collection. This was complemented by either face-to-face or telephonic interviews. Along with primary data, we have also used secondary data from the Venture Intelligence Database (2014) and in some instances from the respective VC fund Web sites after seeking relevant clarifications with the concerned VC professionals. The unit of analysis for the study is an individual VC firm (each of which has been divided into either transnational or domestic).

Data analysis involved two steps: Exploratory Factor Analysis—EFA (to validate and quantify the latent signals) and Logistic Regression Models to distinguish between the signals used by transnational VC firms vis-à-vis domestic ones. The analysis was performed using SPSS 21.0.0.0 software. For factor analysis, we

Table 6.1 Comparison of transnational and domestic VC firms

	Transnational VC firms	Domestic VC firms
Age of the VC firm	6 years	7 years
Number of deals funded	18	18
Number of successful exits	4	5
Location—Bengaluru	48%	27%
SEBI registered	19%	51%
Early-stage focus	30%	47%
High-technology focused	48%	33%
Started by erstwhile entrepreneurs	22%	27%

report the Cronbach alpha values. For logistic regression, we report the chi-square values for model coefficients, Nagelkerke R^2 , $-2 \log$ likelihood, overall model chi-squared value, Hosmer–Lemeshow statistic and the percentage of pairs correctly classified.

6.5.2 *Sample Description*

To start with, we provide a brief description about the VC firms from our sample. Our sample comprised 29 transnational VC firms (about 40%), and 43 domestic VC firms (60%). About 33% of the VC firms in our sample belonged to Bengaluru, 16% to Delhi, 40% to Mumbai, and the rest 11% to other cities in India.

While majority of the transnational VC firms were based in Bengaluru (43% of all transnational VC firms), an overwhelming proportion (viz. 50%) of all domestic VC firms belonged to Mumbai. This reaffirms the commonly held notion about Bengaluru being one of the top emerging global technology hubs (Pullen, 2013). Bengaluru is known to have one of the most vibrant start-up ecosystems in the world (Pullen, 2013). Given the fact that transnational VC firms may not have well-entrenched networks of their own in the local economy, they are more likely to leverage such networks where they already exist (Dai et al., 2012). Thus, naturally, they seem to gravitate toward Bengaluru as it has an already existing ecosystem of incubators, accelerators, and a critical mass of early-stage companies. Mumbai, on the other hand, is home to majority of the financial institutions. In fact, most of the domestic firms that are offshoots of these institutions are located there.

The average age of VC firms (number of years of operations in India) in our sample is about six years. Each of them has on an average funded 18 deals and witnessed five exits. Both average age and the number of funded deals and exits do not differ significantly across domestic and transnational VC firms. About 52% of the domestic VC firms are registered with the Securities and Exchange Board of India (SEBI—the official governing body for all VC firms operating in India) as compared to that of 19% for the transnational VC firms. While it is mandatory for most domestic VC firms (ones relying on *pooled* capital) to get registered with SEBI, the same is not true for transnational firms. They can choose to invest in India via the Foreign Direct Investment route with automatic approval from the Reserve Bank of India or Foreign Investment Promotion Board (Desai, 2012). It must be pointed out here that while it is not mandatory for all transnational VC firms to register with SEBI, registration brings in some added benefits such as tax pass through status. However, it also imposes constraints in terms of the exposure to certain categories of firms, sectors of funding, and also the lock—in period for exits (SEBI, 2012a, b). Thus, most transnational VC firms prefer to bypass the SEBI route.

6.6 Discussion of Results: Latent Signals Influencing VC Investments

This section is divided into two subsections. The first section discusses the results from Exploratory Factor Analysis (EFA). This is followed by the discussion on the results obtained from the Logistic Regression Models.

6.6.1 Factor Analysis Results—Analysis and Findings

The data obtained from the questionnaire were subjected to the EFA procedure. The purpose of EFA is twofold. First is to validate the constructs proposed by us. Second is to obtain the numerical value of each sub-construct (latent signals in this case) based on factor scores. The factor scores obtained from the exploratory factor analysis procedure are used as explanatory variables in regression models.

Our questionnaire comprised 40 items relating to four broad constructs about the latent signals—entrepreneur and team, deal- and VC firm-related characteristics, macroeconomic and policy-related characteristics, and India-specific attributes. While a majority of the questions were based on the review of the literature, others were arrived at after an initial round of discussions with VC industry professionals. Each item listed in the questionnaire was aimed at measuring ‘the favorability with which the VC firm viewed a prospective deal if it were to exhibit the stated attribute’ (as mentioned in the item).

Content validity was taken care of based on expert opinion. In this regard, we contacted both academicians and industry professionals. Among academicians, we contacted other professors from reputed institutes in India working in similar domains. Among industry professionals, we established an initial set of contacts with a few VC professionals in Bengaluru and solicited their feedback on the questionnaire. The feedback thus obtained from the two categories of experts was incorporated in the latter version of the questionnaire. Construct validity was measured using EFA. Reliability was assessed using Cronbach alpha values. Varimax rotation was applied to principal components in order to extract factors. Each of the constructs was separately factor analyzed to identify the sub-constructs therein. Items that exhibited high reliability (Cronbach’s alpha >0.60), high factor loadings (>0.40), and low cross-loadings (<0.40) were chosen to represent factors. Based on the EFA results, each construct was further subdivided into multiple sub-constructs. The Cronbach alpha values have been given in Table 6.2.

The construct on entrepreneurial signals got further subdivided into six sub-constructs. *Educational Pedigree* measures the importance that the VC firms would attach to factors such as entrepreneur being an alumni of top engineering or B-schools in India or having a degree from abroad. *Team Size and Composition* measures the relative importance of factors such as team size and diversity within the founding team (in terms of experience and education). *Past Founding*

Table 6.2 Reliability statistics—Cronbach alpha values

	Cronbach alpha values
<i>Entrepreneur and founding team-related signals</i>	
Educational pedigree	0.975643308
Team size and composition	0.774058226
Business ownership type and owner characteristics	0.828935166
Past founding experience	0.795490065
Past managerial experience	0.66212178
Networking ability	0.740779113
<i>Deal- and VC firm-related signals</i>	
Negative synergies—competing deals	0.976330027
Positive synergies—complementary deals	0.783271833
Specialization	0.53101929
Syndication	0.473521819
Portfolio diversification fit	Single variable construct; Cronbach alpha values cannot be computed
<i>Macroeconomic and policy-related signals</i>	
Favorability of the current scenario and policies	0.790279561
Favorability of the future scenario and policies	0.7750934

Source Authors' calculations

Experience measures the importance of attributes such as the past entrepreneurial experience of the founder, past instance of VC funding or the founder having worked for a start-up in the past. *Past managerial experience* refers to kind of responsibilities handled in the previous jobs. These include factors such as business leadership positions, P & L responsibilities. *Networking Ability* refers to factors such as being well-networked within the alumni (of their educational institutions and previous jobs) and the ability to recruit critical team members from their own networks.

The construct on deal and VC signals is further divided into four broad sub-constructs. *Negative Synergies* attempt to capture the conflicts of interest that a prospective deal might potentially have with those already existing on the VC portfolio. The next sub-construct *Positive Synergies* on the other hand attempt to capture the complementarities the prospective deal might have with rest of the VC portfolio. The factors just discussed are intended at assessing whether the VC firm takes a 'deal-specific view' (i.e., each deal is evaluated on its own merit) or 'portfolio-level view' (each deal is evaluated from the point of view of its portfolio fit) while assessing a prospective venture. *Specialization* captures how well the prospective deal maps with the VC profile in terms of its own domain of specialization—viz. size of funding, sector/industry expertise, or stage of funding.

Syndication measures the importance of having a co-investor in the prospective deal. *Portfolio Diversification Fit* measures the overall fit of the deal with the portfolio from the view of portfolio risk diversification.

Macro and Policy signals capture the role played by the overall macroeconomic and policy environment. The construct related to India-specific signals comprised three sub-constructs: *Business Ownership Type and Owner Characteristics* measure how the VC firms view aspects such as whether the business is a family-owned one and whether the prospective founder is a first-generation entrepreneur. The other variables, viz. *Trust* (Trusted origination source), *Limited Government Interface* (the extent of government intervention in the sector that the prospective venture belongs to), thus the Cronbach alpha values for them cannot be computed. Hence, we have included the raw values for these variables in our analysis instead of their factor scores.

6.6.2 Logistic Regression Results—Analysis and Findings

Having discussed the results obtained from the EFA procedure, we now move on to the discussion of the regression results. The results from the Logistic Regression Model have been given in Table 6.3. To reiterate, the primary conjecture in these models is—transnational VC firms encounter severe information asymmetry risks while investing in countries different from their country of origin. Thus, they intensely need to rely on tacit signals in their risk assessment while making investment decisions.

The information on tacit signals is quantified using the factor scores. In addition to these, we have used additional variables pertaining to the VC firm profile in the regression models. These are the following: indicator variable for an early-stage VC firm, indicator variable for SEBI registration, and indicator variable for the location of the firm. Due to the correlation between the variables—*Family Ownership Type and Owner Characteristics* and *Limited Government Interface*, these have been included in separate models.

Coming to the discussion of model variables, we find that *syndication* is an important signal relied on by the transnational VC firms while making their investment decisions. The transnational VC firms in our sample have a lower number of non-syndicated deals (consequently, a higher number of syndicated deals) as compared to the domestic VC firms. This finding is well-supported by the academic literature. It has been found that the information asymmetries between the VC and its portfolio companies are often difficult to resolve when the portfolio company is located outside the VC's own home country (Schertler & Tykvová, 2011).

Although transnational VC firms have advantages in terms of the magnitude of their large financial resources, international experience, and wider networks, they are hugely constrained by the information asymmetry while investing in foreign destinations (Delloitte, 2010). Co-investing with the local VC firms aids in

Table 6.3 Logistic regression results—transnational VC firms and the use of latent signals

Dependent variable: transnational VC firm = 1; domestic VC firm = 0						
Number of observations = 70						
Latent signals						
	Model 1			Model 2		
	Beta-coefficient	Chi-square statistic	Exp (β)	Beta-coefficient	Chi-square statistic	Exp (β)
Constant	0.985	0.149	2.677	-0.918	0.297	0.399
<i>Latent signals</i>						
Portfolio diversification fit	0.971**	4.544	2.641	-	-	-
Business ownership type and owner characteristics	1.034**	3.905	2.813	-	-	-
Proportion of non-syndicated deals	-2.246*	3.699	0.106	-	-	-
Past start-up experience	2.276**	3.862	9.744	-	-	-
Geography	-0.923**	4.885	0.398	-	-	-
Trust	1.076**	4.590	0.032	-	-	-
Limited Government Interface	-	-	-	0.715	2.351	2.044
<i>VC firm profile-related variables</i>						
Early-stage deals	-3.452***	8.294	0.032	-2.802***	9.616	0.061
SEBI registered	-1.622*	3.295	0.069	-1.918***	7.622	0.147
Located in Mumbai	-3.505***	8.372	0.030	-1.534**	5.213	0.216
<i>Model statistics</i>						
Nagelkerke R^2	0.605			0.395		
Cox and Snell's R^2	0.448			0.292		
-2 log likelihood	52.683			70.049		
Model chi-square statistic	41.539 with 9 degrees of freedom. p -value 0.000			24.173 with 4 degrees of freedom. p -value 0.000		
Hosmer–Lemeshow goodness of fit statistic	0.832			0.877		
% Correctly classified	85.7%			71.4%		

Note *indicates significance at 10% level, **indicates significance at 5% level, ***indicates significance at 1% level

Source Authors' calculations

alleviating the information asymmetry arising due to geographical and cultural differences (Dai et al., 2012). In fact, studies show that partnering with local VC firms is a prominently used strategy by the transnational VC firms to invest in informationally opaque early-stage ventures. In general, transnational VC firms prefer investing in businesses whose potential has been well-established and shun investing in ventures belonging to emerging domains unless backed by significant local partnerships with other VC firms (Zhang, Gao, White, & Vega, 2007).

Typically, domestic and transnational VC firms possess different types of skill sets. While the domestic companies have well-developed regional networks with potential vendors, customers and other significant stakeholders in general, the transnational VC firms possess the financial muscle and networks to scale up and grow internationally (Devigne et al., 2013). Thus, *syndication* of deals between the two parties enables each of them to leverage the skill sets of both these parties. Apart from explicitly syndicating with the local VCs, the transnational VCs are known to extensively hire their investment teams by *poaching* from the former (Dossani & Kenney, 2002). This helps them in piggybacking on the social networks of these local professionals.

Specialization as a signal did not turn out to be significant in our models. This may possibly be attributed to two factors. On the one hand, the Indian market is not yet deep enough in terms of the number of prospective deals available for investment. The depth of the market can be established by the volume of VC investments in a region—the average annual VC investments between the years 2006 and 2013 were USD 31.2 Bn in the USA as compared to that of USD 1.23 Bn for India (Ernst & Young, 2014). Second, the transnational VC firms have relatively larger fund sizes (as compared to their domestic counterparts) thus making *niche* domain specialization even more difficult in the face of an already existing low-depth market. The average fund size of transnational VC firms is USD 95 Mn as compared to USD 53 Mn for domestic ones (Venture Intelligence, 2014).

It is also observed that transnational VC firms consciously stay away from funding *early-stage deals*. It is well-understood that transnational VC firms prefer investing in informationally transparent ventures (Dai et al., 2012). Early-stage firms belonging to technology domains have a huge level of information asymmetry associated with them consequently adding an additional layer of risks. Handling these risks warrants a deep understanding of local conditions. Since such abilities of the transnational VC firms are likely to be quite limited, they stay away from such ventures. Also, the early-stage companies require a much higher level of involvement on the part of the VC firm (Gupta & Sapienza, 1992). Given their in-depth understanding of local conditions, the domestic VCs are well positioned to assist investee firms during their earlier phases (Devigne et al., 2013). Thus in general, since the local VC firms are more likely to possess the requisite skill sets for investing in and managing the early-stage ventures, investment in such ventures is usually considered a prerogative of the domestic VC firms.

Another signal that is considered important by the transnational VC firms is the *past start-up experience* of the prospective founder. Since local networks of the transnational VC firms are expected to be quite limited, they seem to place a high value on prospective founders who have set up ventures of their own in the past. Such founders are likely to have well-developed networks of their own due to their prior involvement with community-based entrepreneurial clubs, events, and media (Hsu, 2007). Above all, their prior founding experience enables them to have an intimate understanding of the legal and institutional mechanisms. To sum up, such founders with prior founding background are seen to be well-endowed with significant social capital as compared to others (Hsu, 2007). These findings are

well-supported by the resource-based view of the firm which propounds *that tacit knowledge* possessed by a firm is associated with superior performance since such resources are valuable, rare, inimitable, and non-substitutable (Barney, 1991; Kraaijenbrink, Spender, & Groen, 2010; Dimov & Shepherd, 2005). Links to the existing networks and an intimate understanding of the legal and institutional mechanisms may be viewed as one of such potential sources of tacit knowledge.

Geographical proximity is another important signal used by all categories of VC firms in general (Cumming & Dai, 2010; Dai et al., 2012). In general, VC firms are known to possess a strong local bias in their investments (Dai et al., 2012). However, in our regression model the variable *Geography* enters with a negative sign. This means that geographical proximity is not regarded as important by the transnational VC firms. This can be explained in many possible ways. First, the market for deals in India lacks sufficient depth to permit intense geographical specialization. Thus, they are forced to invest in deals even if they are geographically quite distant from the location of their offices. Second, many transnational VC firms have more than one regional offices in India well-spread across geographical regions. Thus, in principle, they do ensure that the location of the investee firm is closer to at least one of their local offices. Third, they intensely syndicate with the local VC firms when investing in geographically distant ventures. Syndication with the local VC firms ensures smooth information flow and monitoring (Bergemann & Hege, 1998; Wright & Lockett, 2003; Manigart et al., 2006) which makes up for the physical distance.

Portfolio Diversification Fit of the prospective deal is another important signal in the context of transnational VC firms. As discussed earlier, VC firms may either have 'deal-specific' or a 'portfolio-specific' view to investments. Our results reveal that as compared to the domestic VC firms, transnational VC firms are more likely to assess how well a prospective deal fits their preexisting portfolio from the viewpoint of risk diversification. We believe there to be two reasons for the same. Since the relative deal sizes are much larger for transnational VC firms, risk diversification becomes a necessity to consciously avoid overexposure to certain sectors or investment stages. The average size of an early-stage deal is about USD 4.8 Mn for transnational VC firms as compared to that of USD 2.4 Mn for domestic VC firms (Venture Intelligence, 2014). Second, since the relative fund size is also much higher for transnational VC firms as compared to their domestic counterparts, diversification is also feasible. The average fund size of transnational VC firms is USD 95 Mn as compared to USD 53 Mn for domestic ones (Venture Intelligence, 2014). Although many domestic VC firms would certainly like to practice diversification, their smaller fund sizes inhibit them from doing so.

Coming to the economic, political, social, and cultural signals relevant to India, we found *Business Ownership Type and Owner Characteristics* to be an important signal for the transnational VC firms. This factor assesses how the VC firm views attributes such as the prospective venture (not) being a family-owned business and the entrepreneur being a first-generation entrepreneur. The transnational VC firms were very particular that they would refrain from funding family-owned businesses and fund only first-generation entrepreneurs. It was quite commonly felt that

family-owned businesses usually had significant corporate governance issues associated with them. The founders were often not willing to get external talent on board particularly at senior levels and in positions of financial control (Romano, Tanewski, & Smyrnios, 2001; Upton & Petty, 2000). Moreover, such firms were not open to third-party audits. Above all, an intense involvement from the VC firm was often looked upon as an unnecessary intrusion rather than a meaningful value-adding partner. It was also commonly believed that ‘first-generation entrepreneurs’ were often more receptive to feedback as compared to those with a family background in business. To sum up, *Business Ownership Type and Owner Characteristics* were regarded by most transnational VC firms as an important signal about the extent of agency problems in the future.

The next signal that is particularly relevant in the Indian scenario is *Trust*—which refers to originating deals from a trusted source such as investment banks and academic incubators. This variable enters with a positive sign indicating that transnational VC firms heavily rely on such formal deal origination sources. This result is as per our expectations. Given the limited extent of their local networks, it is quite unlikely for them to originate their deals by proactively sourcing the same through informal channels. On the contrary, for domestic VCs, the most successful deals are the ones that have been actively sourced by them through informal channels. For translational VCs however, limited social capital enhances their reliance on formal channels.

Quite interestingly, we find that the variable *Limited Government Interface* is insignificant. This implies that transnational VC firms do not consciously stay away from domains that warrant a high government interface. During the course of our interactions, most VC firms revealed to us that the lack of depth in the market for deals prevents them from imposing such additional constraints; albeit they do agree that dealing with the government bodies can often be a frustrating task in India.

Moreover, projects warranting a greater level of interaction with the government machinery are typically large projects and transnational VC firms usually possess the requisite scale to fund them. Rather, the transnational VC firms handle the risks emanating from such projects head-on by deploying the services of specialized consultants. The larger transnational VC firms in India typically have specialized teams for each domain such as real estate, health care, energy which would in turn solicit the services of highly specialized consultants (in these respective domains) who are well-versed with understanding the systemic procedures. Not only this, but also transnational VCs are known to hire retired government professionals such as income tax officer or those with the experience of having worked in other important government departments to enable them to tide over the procedural difficulties—especially those related to bureaucratic red tape and corruption.

Among the variables pertaining to the VC firm profile, we find that most transnational VC firms are not registered with SEBI. As discussed earlier, it is not mandatory for the transnational VC firms to be registered with SEBI; rather they can invest in India via the automatic approval route of the Reserve Bank of India by adhering to the Foreign Direct Investment norms. Since SEBI registration imposes

harsh constraints on the VC firms pertaining to the terms of investment, most of them prefer to bypass this route.

6.7 Discussion, Conclusions, and Implications

In this study, we have developed a conceptual framework to assess the information asymmetry risks encountered by the transnational VC firms in India. Our primary conjecture is that owing to geographical distance and cultural differences, transnational VC firms need to heavily rely on latent signals for arriving at risk estimates about an investee firm. For assessing the same, we first devise a method to quantify these signals and later outline the ones that seem to influence the decision making of the transnational VC firms in India.

Our study, which is based on data gathered from 72 active VC firms in India, throws up several interesting findings. To start with, we find that since the transnational VC firms lack local networks, they intensely use investment strategies that enable them to compensate for the same. Thus, they prefer investing in ventures started by entrepreneurs with *erstwhile founding experience* and intensely *syndicating* with the local VC firms; since doing so enables them to make up for their lack of networks. Further, lack of depth in the market for VC deals in India is a cause for concern. It deters the transnational VC firms from using *specialization* and *geographical proximity* as a risk management strategy. Moreover, the transnational VC firms consciously stay away from investing in *early-stage deals* since these are associated with a high magnitude of information asymmetry. Thus, funding such deals would further compound their risk profile. Coming to the India-specific signals, we found that transnational VC firms prefer to consciously stay away from ventures that are *family-owned businesses* and prefer to fund only *first-generation entrepreneurs* as these are indicative of potential agency problems in the future. Further, these VC firms prefer on *trusted* channels of deal origination such as investment bankers and academic incubators.

This study has made some several important contributions to the existing literature. First, we have laid down a generic conceptual framework for assessing the VC investment risks based on latent signals alone. Further, we have devised a method to measure these signals quantitatively. Finally, we have identified the unique set of factors that seems to be guiding the investment decisions in the Indian cultural milieu.

Coming to the practical implications of this study, we believe it to be relevant to both the VC and the entrepreneurial communities in India. To the transnational VC firms, it provides a guideline about the specific signals that they need to give importance in the Indian cultural milieu while making funding decisions. It might also provide an interesting insight into when they should co-invest with other VC firms. To the entrepreneurs, it sets a guideline about what to expect in case they come from specific backgrounds that are not viewed positively by the VC firms. Having a good understanding of these underlying risk factors could potentially

enable both the parties to set up mechanisms (viz. in the form of appropriate contracts) to alleviate these.

From the policy angle, we can draw a few interesting conclusions. We find that lack of depth of the Indian VC market emerges as one of the major areas of concern. Of late, the government has taken several steps to enhance the deal flow. One of these is the emphasis on setting up more and more incubators (Ministry of MSMEs, 2013). However, most VC firms in our sample consider the academic incubation setups far from satisfactory. Rather, it is felt that these incubators are not functional in the true sense, i.e., they provide just physical infrastructure but not the requisite technical know-how, mentoring, and access to other vital networks. Another important factor is the lack of local networks that deters the transnational VC firms from investing in early-stage ventures. To resolve this issue, it is also important to encourage local private intermediaries that will facilitate the transnational VCs to develop their own networks and thus facilitate in resolving the underlying information asymmetry.

The importance of early-stage investments has been well-recognized by the policy makers (Planning Commission, 2012). Also, given its mammoth technological manpower, India has a comparative advantage in terms of establishing businesses in the high-technology arena. Hence, it is important that government policies need to focus on facilitating the networks between local and transnational entrepreneurs, VC firms, and other financial intermediaries via formal or informal channels; such that the transnational VC firms will be more amenable to investing in early-stage technology ventures.

We believe that there can be two possible extensions of this study. First, it is necessary to undertake this study at a deal level in order to probe the nature of signals with greater granularity. We were unable to do so currently due to data limitations. Second, we believe that the VC firms in India may be additionally segmented into early- versus late-stage VCs and those that have been set up by erstwhile entrepreneurs versus those that are not. Naturally, the signals influencing each of these categories of VCs are expected to be very different from one another. This needs to be further probed.

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Chapter 7

Influence of Information Systems Strategic Orientation on SMEs' Perception of Export Barriers



R. Rajendran

7.1 Introduction

As all economic activities are moving in the direction of globalization through a worldwide system of production and distribution (Acs & Preston, 1997), not only large enterprises but also Small and Medium sized Enterprises (SMEs) have to internationalize their businesses to remain competitive in the emerging economies (Dutot, Bergeron, & Raymond, 2014). Internationalization among SMEs (Coviello & McAuley, 1999) drives economic development at national, regional and international levels (Bell, McNaughton, Young, & Crick, 2003; OECD, 2009). With an increasing number of SMEs aggressively engage in international business, the rapid internationalization of SMEs has become the focus of considerable research (Arenius, Sasi, & Gabrielsson, 2005; Bell & Loane, 2010; Gabrielsson & Kirpalani, 2004; Madsen, 2013; Weerawardena, Mort, Liesch, & Knight, 2007).

Internationalization usually refers to the geographical expansion of business activities over a nation's border (Andersen, 1993; Ruzzier, Hisrich, & Antoncic, 2006). European Commission (2010) considers all activities related to exports, imports, FDI, international subcontracting and technical cooperation that put SMEs into a meaningful business relationship with a foreign partner as internationalization. However export is one of the most common modes of internationalization (European Commission, 2011).

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In an expanding industry under the globalized business environment, the international entrepreneurship enables SMEs to become “born global” (Baum, Schwens, & Kabst, 2011; Moen, 2002) from their creation (Chetty & Campbel-Hunt, 2004). Born global firms pursue rapid and dedicated internationalization from inception (Crick, 2009). Jones and Coviello (2005) and Weerawardena et al. (2007) find these firms account for significant volume of exports.

They have to adopt multi-focused business strategies (Tallon, 2007) and invest in Information Technology to develop Information Systems to support their business strategies (Jobnston, Wade, & McClean, 2007). While SME business strategy formulation is implicit and informal (Mintzberg, 1988), the portfolio of their realized Information Systems indicates an observable pattern known as Information Systems Strategic Orientation (Rajendran & Vivekanandan, 2008). The Information Systems Strategic Orientation is an outcome of organizational information technology capability in dynamically determining the portfolio of Information Systems in pursuit of achieving the strategic alignment with their business strategy.

Even though globalization and Internet and Web based technologies melt down a number of export barriers, these SMEs face a number of external and internal obstacles and perceive substantial barriers in the process of internationalization (Bennett, 1997; Gabrielsson & Kirpalani, 2012; Leonidou, 2004). Contradictory findings on role of information technology capability in internationalization and firm performance are also surfacing (Raymond & Bergeron, 2008; Chae, Koh, & Prybutok, 2014). The alignment (Peschken, Shukla, Lennon, & Rate, 2016) and orientation (Gerschewski, Rose, & Lindsay, 2015) are emerging as new dimensions of investigation in SME internationalization. This study attempts to examine the influence of Information Systems Strategic Orientation on perception of Export Barriers in SME Internationalization.

The remainder of this chapter is structured as follows. The subsequent section lays the theoretical foundation for the research model. The next sections describe the methodology used and present the results. The chapter concludes with a discussion of the major contributions of the research study, its limitations and directions for future research.

7.2 Theoretical Foundation

7.2.1 *SME Internationalization*

In international business literature, the studies on SME internationalization are gaining momentum. SME’s strategic internationalization and their export behavior attract broader interest (Ruzzier et al., 2006). Globalization coupled with explosive advances in information and communication technologies and dismantling of trade barriers through deregulation drives SME internationalization.

The SME internationalization is being seen in different perspectives namely market, firm and entrepreneurship perspective. Stage models of internationalization

come under firm perspective. The Uppsala internationalization model (U Model) and the innovation related model (I Model) are the two primary stage models (Gankema, Snuif, & Zwart, 2000). U Model is a learning dynamic model that considers the international expansion involves small incremental steps whereas I Model considers each phase of internationalization as an innovation (Knight & Cavusgil, 2004).

In network approach, the network is used as the starting point. The SMEs internationalize following the other firms in their international network (Holmlund & Kock, 1998). Resource based approach is another perspective on SME internationalization focusing on their critical resource development and SME strategic behavior.

International entrepreneurship is a new emerging perspective to SME internationalization. This is a process approach primarily focusing to the strategic entrepreneurial behavior of international start-ups and this model is more relevant to the born global manufacturing SMEs (Andersson, 2000; Hitt, Ireland, Camp, & Sexton, 2001).

7.2.2 Internationalization Export Barriers

The most commonly discussed topic in SME internationalization reports is the barriers for internationalization as perceived by the SMEs (Leonidou, 2004) and the barriers are more important the smaller the SME (European Commission, 2010). An extensive literature is available regarding the importance and extent of various internationalization export barriers (Bauerschmidt, Sullivan, & Gillespie, 1985; Kedia & Chhokar, 1986; Namiki, 1988; Sharkey, Lim, & Kim, 1989). Leonidou (1995a) made an attempt to integrate the relevant literatures. There is no consensus in usage of export barrier measurement scale (Arteaga-Ortiz & Fernandez-Ortiz, 2010). Hamill and Gregory (1997) classify the export barriers into four major categories namely organizational barriers, operational barriers, product and market barriers, and psychological barriers. The psychic distance is another set of barriers. Leonidou's (1995b) study among 112 SMEs reveals that the biggest hindrance to export development activities is fear of acute competition in the international market.

Bennett (1997) finds that with usage of Web for export marketing, some of the basic reasons for the progressive internationalization of enterprises (Gankema et al., 2000) are no longer relevant in the SME context (Arenius et al., 2005; Knight & Cavusgil, 1996). Hornby, Goulding, and Poon (2002) concludes that usage of Internet made Australian SME exporters perceived export barriers less severe than that perceived by SME exporters in UK. However, Vivekanandan and Rajendran (2006a) finds among born global manufacturing SMEs the Web presence alone do not significantly influence the perception of severity of export barriers. Only in the case of growth oriented young SMEs with the company age less than 10 years, the website ownership has significant influence on perception towards export barriers. The perception towards export barriers significantly differs among the adopter categories of electronic commerce (Vivekanandan & Rajendran, 2006b).

The European Commission (2010) categories the barriers perceived by SMEs into two types namely internal and external barriers. The study finds the adoption of E-commerce weaken the relationship between certain export barriers and organizational sizes. Another study (European Commission, 2011) reports that the three most important barriers for doing business in the seven target countries namely Brazil, Russia, India, China, Japan, South Korea and Ukraine are payment risks, difficult paper work and lack of financing. The export barriers remains as challenges in the process of SME internationalization and the national governments are spending a lot of money in addressing these issues (Hashim, 2012). Thus the internationalization export barriers are continued to be the focus of one segment of the SME internationalization literature.

7.2.3 Information Systems Strategic Orientation

The application of information systems in general, the Internet and Web technologies in particular provide not only operational, managerial and strategic advantages to manufacturing SMEs, but also provide them opportunities for internationalization (Bell & Loane, 2010; Loane, 2005). For young born global startup firms, their web presence lessens the perception of severity of export barriers (Vivekanandan & Rajendran, 2006a). European Commission (2010) concludes the Internet enabled SMEs of all sizes to break the export barriers to internationalization.

Raymond, Bergeron, and Bili (2005) emphasis the investment in E-business can ensure greater performance only when SMEs are aligned with their business strategies. Rajendran and Vivekanandan (2008) found the strategic orientation of the existing portfolio of information systems applications, representing the information systems strategies realized from the process of strategic alignment had business performance implication for born global Indian SMEs.

The SME business strategy literature provides evidence that SMEs have to adopt numerous strategies. These studies have formulated on typologies based on large firms namely Ansoff's (1965) matrix of strategies and Porter's (1980) generic strategies but failed to draw a consensus model for strategies of small businesses (Southern & Tilley, 2000). As the SME business strategy formulation is informal, implicit, intuitive and incremental (Mintzberg, 1988), the explicit identification is found to be more elusive (Lefebvre, Langley, Harvey, & Lefebvre, 1992).

Cragg, King, and Hussin (2002) extracted a list of strategies that contributed toward SMEs business competitiveness from these studies and refined the list to arrive a total number of nine business strategies. To capture the actual and realized deployment of information systems applications, the researchers design the instrument for information systems strategies around the same nine business strategies that are aimed for alignment (Bergeron, Raymond, & Rivard, 2004; Henderson & Venkatraman, 1993). The assessment reveals the extent to which the information systems support that particular aspect of business strategy. The

underlying factors of these variables reveal the strategic orientation (Rajendran & Vivekanandan, 2008).

The strategic orientation of information systems applications represents the general pattern of realized information systems strategies. This strategic orientation of information systems provides valuable predictive information on perceived business performance. Rajendran and Vivekanandan's (2008) survey among the born global manufacturing SMEs revealed the three dimensions of information systems strategic orientation named as Cost—Quality Leadership, Product Development and Market Development.

Mohamad and Ismail (2013) confirm a positive relationship between usage of E-business applications and the cumulative business value for SMEs. Dutot et al. (2014) call for a deeper understanding of how SMEs are developing their information management capabilities based on various business strategies to insure greater international performance.

The current research study extends the earlier research studies on export barriers (Vivekanandan & Rajendran, 2006a) and information systems strategic orientation (Rajendran & Vivekanandan, 2008) a step further by investigating the impact of information systems strategic orientation on perception towards export barriers to reveal the inner mechanism of SME rapid internationalization through the more advanced data analysis techniques.

7.2.4 Research Model with Hypothesis

The present study examines the direction, strength and significance of the influence of the Information Systems Strategic Orientation (ISSO) on the perception of Internationalization Export Barriers (IEB) among born global manufacturing SMEs. The second order reflective construct ISSO has three dimensions namely Cost-Quality Leadership (CQL), Product Development (PD) and Market Development (MD). The four indicators of the second order construct IEB are Organizational Barriers (ORB), Product and Market Barriers (PMB), Psychological Barriers (PSB) and Operational Barriers (OPB). The Psychic Distance Barriers (PDB) is considered as part of PSB for parsimony.

Various researches found the information systems that facilitate the electronic commerce and electronic business practices lessen the severity of export barriers perceived by SMEs. Hamill and Gregory (1997) concluded that the effective usage of Internet (Loane, 2005) could not only support SMEs in overcoming the export barriers but also result in rapid internationalization. The development of information technology capabilities was found positively influencing the SMEs internationalization (Hassouneh & Brengman, 2011; Raymond & Bergeron, 2008) and their organizational performance (Zhang, Sarker, & Sarker, 2008). However Chae et al. (2014) found the link between information technology capabilities and business performance does no longer exist for larger firms.

Gerschewski et al. (2015) have considered the international entrepreneurial orientation and competitor orientation in understanding the factors for international performance of born global firms. Thus it is pertinent to investigate the influence of the strategic orientation of information systems on the perception towards export barriers in internationalization to reveal the inner mechanism of lessening, if any. Thus the research hypothesis follows from the above is:

H1: Higher the Information Systems Strategic Orientation, the lesser the severity of Internationalization Export Barriers perceived by the SMEs.

7.3 Method

7.3.1 Sample—Participants Characteristics

The participants of the mail survey conducted for the study are the SME exporters of Tirupur, a town of export excellence in the state of Tamil Nadu, India. This industrial natural cluster of manufacturing SMEs is well known for its excellent export performance and its participation in the global apparel supply chain as a quality supplier.

The first hosiery factory was setup in 1935 with hand-operated sewing machines. From the early 1980s onwards, the focus of this cluster shifted from domestic to international market. From 1995 onwards, the SMEs are active members of the global apparel (readymade garment) production network. The social capital with flexible specialization is the most important facilitator of the fast growth of the industry. The industrial natural cluster is dominated by born global SMEs (Svensson & Payan, 2009).

The ownership status of majority of the participating SMEs is Partnership and three-fourth of the SMEs are more than ten years old. Two third of the SMEs have grown beyond stabilization phase in their growth stages. Europe and North America are the primary export market for these SMEs. The usage of computer systems has become ubiquitous among these SMEs. Eighty three percentage of the SMEs are using Internet for more than three years and sixty one percentage of the SMEs have their own websites.

7.3.2 Sampling Procedure

The 1100 active member SMEs of Indian Apparel Export Promotion Council, a Government of India organization sponsored by Ministry of Textile and registered under section 25 of Indian Company Act was considered as sample frame. Using simple random sampling method 150 SMEs were selected for pilot study from this sampling frame. The remaining 950 members were contacted through postal service

for main survey. In total 127 valid filled in questionnaires were received. The final response rate is 14%, which is within the typical response range of 10–15% for similar SME survey (Karimabady & Brunn, 1991). For non-response bias (Armstrong & Overton, 1982), the data of the first thirty respondent SMEs and last thirty respondent SMEs are analyzed and found no significant difference suggesting no non-response bias.

7.3.3 Measurement

The sixteen barriers derived by Vivekanandan and Rajendran (2006a) from a list of export barriers arrived from the literature was considered as export barriers for this study. To measure the perception among exporting SMEs toward these export barriers, the five point Likert scale (1—very minor problem and 5—very major problem) employed by Bennett (1997) was adopted.

The nine strategies identified by Cragg et al. (2002) were considered as Business strategies of these born global manufacturing SMEs. The instrument for information systems strategies was designed around these nine business strategies. A five point Likert scale (1—strongly disagree and 5—strongly agree) was used for measurement of information systems strategies by assessing the extent to which the information systems support that particular aspect of business strategy (Chan, Huff, Barclay, & Copelan, 1997). The structure of information systems strategic orientation found by Rajendran and Vivekanandan (2008) was considered as the dimension of strategic orientation and concerned information systems strategies as their indicators.

The questionnaire was subjected to a pre-testing with professionals and practitioners and then to a pilot study to refine at three stages. Each questionnaire was mailed with a prepaid business reply envelope accompanying a letter explaining the purpose of the research study.

7.3.4 Research Design

The causal research design was adopted for this study. A research model has been developed and a hypothesis was proposed for analysis. A mail survey was conducted for data collection. The collected data were analyzed using structural equation modeling (Gefen, Rigdon, & Straub, 2011) with SPSS AMOS. The structural equation modeling is selected for its ability to assess the modeled relationships comprehensively with confirmatory analysis. AMOS, analysis of moment structure is a software tool that provides an advanced computing engine for structural equation modeling with an easy to use graphical interface for analysis.

7.4 Results

The respondent SMEs perceived the four export barriers—Fall in the international market prices, severe competition in the foreign markets, Import restrictions in foreign market and Training and holding skilled labor as their major problems in their internationalization. Whereas the export barriers perceived as minor problems are Getting payment, Inability to use foreign language, Documentation problems and Transport problems. The indicators of international export barriers (Vivekanandan & Rajendran, 2006a) and information systems strategic orientation (Rajendran & Vivekanandan, 2008) are presented in the Tables 7.1 and 7.2 respectively with concerned internal reliability coefficients.

7.4.1 Common Method Bias

To minimize the common method bias (Change, Witteloostuijn, & Eden, 2010), different scale points were used in the instrument to provide individual context for

Table 7.1 International export barriers constructs

IEB dimension	Export barrier	Descriptive statistics		Reliability coefficient (α)
		Mean	Standard deviation	
Organizational barriers	Absence of skilled staff	2.8228	0.9971	0.7734
	Scarcity of ready availability of management consultancy service			
	Appreciation of Indian rupees			
	Training and holding skilled labor			
Product and market barriers	Cost of free sample	2.6949	0.8936	0.6687
	Need for sample in procuring each order			
	Inability to use foreign language			
	Quality cost			
Psychological barriers	Severe competition in the foreign markets	3.2362	0.8866	0.6805
	Fall in the prices of international market			
	Entry barriers of foreign markets			
	Need for foreign representation			
Operational barriers	Getting payment	2.3484	0.9611	0.6898
	Transportation problems			
	Restrictions for capital goods import			
	Documentation problems			

Table 7.2 Information systems strategic orientation (ISSO) constructs

ISSO dimension	Information systems strategy	Descriptive statistics		Reliability coefficient (α)
		Mean	Standard deviation	
Cost quality leadership	Quality product	3.8228	0.7754	0.8442
	Quality service			
	Process efficiency improvement			
	Cost reduction			
Product development	Product differentiation	3.2336	0.7871	0.8777
	New products			
	Wider product range			
Market development	Intensive marketing	3.5866	0.7483	0.7789
	New market expansion			

the two concepts measured (Podsakoff, MacKenzie, & Podsakoff, 2003). However to analyze the extent of the common method bias, the principal component analysis was carried out and the Rotation Sums of Squared Loadings (% of Variance Explained) for the first three components (17.47, 10.55 and 10.37 respectively) show that the common method bias is not a significant problem that could affect the results of the data analysis.

7.4.2 Reliability Analysis

The standardized factor loading of measurement items on their respective factors were considered to examine the reliability and validity (Hair, Anderson, & Tatham, 2005). The internal construct composite reliability of the first order and second order construct are calculated and found it ranges from 0.7 to 0.9, supporting reliability.

7.4.3 Convergent Validity

The average variance extracted (AVE) was calculated for first order and second order constructs and it ranges from 0.4 to 0.7. Except for a few items, all values are greater than minimum value of 0.5, supporting convergent validity.

7.4.4 Discriminant Validity

The comparison of the square root of average variance explained (normally shown as the diagonal elements) with the correlation coefficient among the constructs

considered determines the discriminant validity of constructs. The values calculated for the second order constructs and the first order constructs of information systems strategic orientation and internationalization export barriers. The comparison revealed that in all the cases the correlation coefficients are less than the square roots of average variance explained, confirming the discriminant validity.

7.4.5 Structural Model

The structural equation modeling (Fornell & Larcker, 1981) was used to test the hypothesis proposed. The path diagram of the research model with resulted standardized regression weights and squared multiple correlation is shown in Fig. 7.1.

The result (Table 7.3) supports the hypothesis H1: The information systems strategic orientation has a significant negative effect on the perception towards internationalization export barrier ($\beta = -0.473, p < 0.001$). The information systems strategic orientation explains the variation in the internationalization export barriers to the extent of 22.4% (R^2). Overall the model demonstrates adequate fit to the data (Table 7.4).

To explore the improvement of the fit, the modification indices were examined by setting the threshold value as four (Hair et al., 2005). The largest modification index (Table 7.5) obtained with the research model (Model A) suggests adding a covariance between e20 and e25. This allows e20 and e25 to be correlated

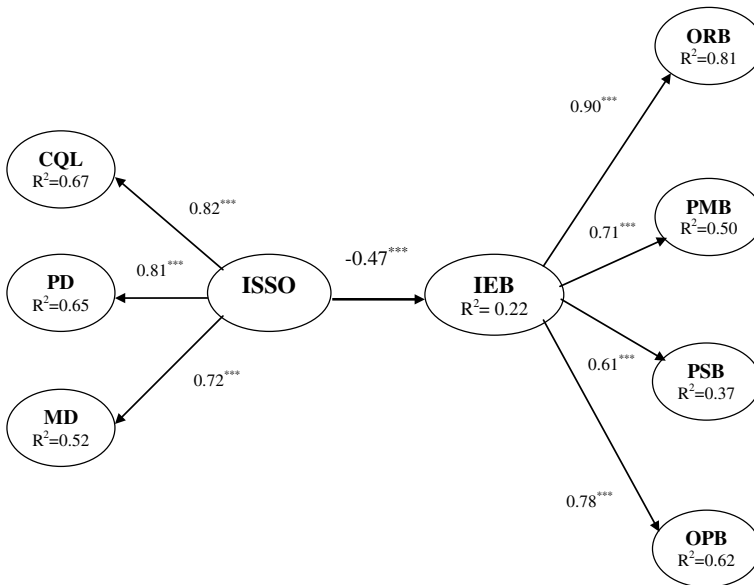


Fig. 7.1 Path diagram of research model. ***Significant at the 0.001 level

Table 7.3 Maximum likelihood estimates

Unobserved, endogenous variables		Unobserved, exogenous variables	Estimate	S.E.	C.R.	P	R ²
Internationalization export barriers	←	Information systems strategic orientation	-0.473	0.247	-3.640	***	0.224

Note ***p < 0.001

Table 7.4 Model fit summary

CMIN	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
374	1.399	0.816	0.911	0.897	0.908	0.056

Table 7.5 Modification indices (threshold-4)

Covariance			M.I.	Par change
E20	↔	E25	11.198	0.393
E20	↔	E24	11.208	0.405

Table 7.6 Covariance and correlations

Covariance			Estimate	S.E.	C.R.	P	Correlation
E20	↔	E25	0.441	0.120	3.667	***	0.372
E20	↔	E24	0.416	0.126	3.305	***	0.335

Note ***p < 0.001

Table 7.7 Model comparison

Model	CMIN	CMIN/DF	GFI	IFI	TLI	CFI	RMSEA
A	374	1.399	0.816	0.911	0.897	0.908	0.056
A1	361	1.357	0.822	0.920	0.907	0.918	0.053
A2	349	1.316	0.827	0.930	0.918	0.928	0.050

Table 7.8 Standardized regression weights and other parameters

Path			Model	Estimate	S.E.	C.R.	P	R ²
Internationalization export barriers	←	Information systems strategic orientation	A	-0.473	0.247	-3.640	***	0.224
			A1	-0.481	0.249	-3.679	***	0.231
			A2	-0.484	0.251	-3.699	***	0.234

Note ***p < 0.001

(Table 7.6). The results are shown in the Tables 7.7 and 7.8. The resulted model A1 is an improvement over Model A but not enough of an improvement.

This exercise was again repeated resulting in again adding a covariance between e20 and e24. The second modified model is presented in Fig. 7.2. The results are shown in Tables 7.7 and 7.8. Again the Model A2 is an improvement over Model A1 and A, but not enough of an improvement.

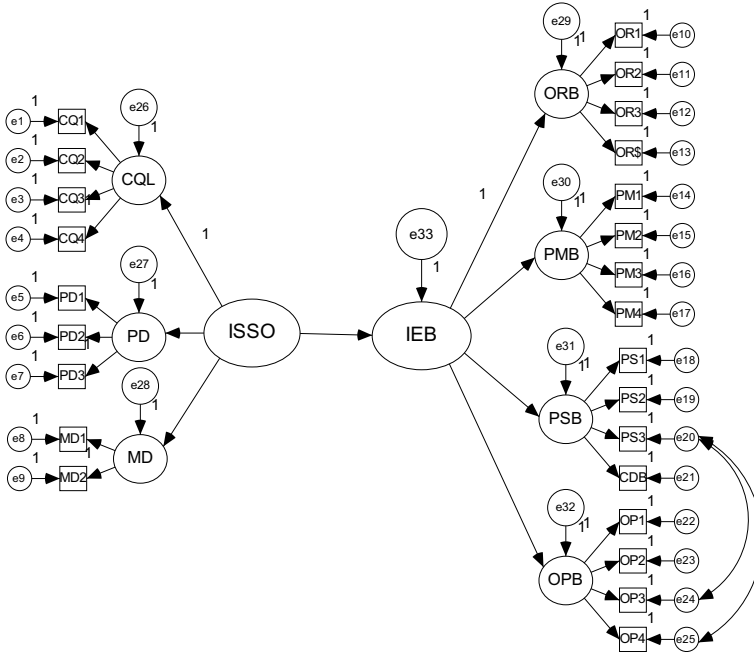


Fig. 7.2 Model A2

7.5 Discussion

The export barrier—getting payment receives the lowest rating indicating that the products/services of these SMEs are of acceptable international quality. The information systems strategy—quality service receives the highest mean score and it is followed by process efficiency and cost reduction strategies. The mean score of all the information systems strategies are above 3.0 in a five-point scale. This shows that the information systems in general support their business strategies.

The mean score for all dimensions of internationalization export barriers except for the psychological barrier are lesser than the mean value of 3.0 that reveal the expertise of the industry in international business. The descriptive statistics of information systems strategic orientation indicates their highest priority is to cost—quality leadership and thereby their primary focus is to internal.

The data support the hypothesis H1: Higher the information systems strategic orientation, the lesser the severity of internationalization export barriers perceived by the SMEs. The negative relationship explains how the information systems strategic orientation facilitates SMEs to overcome internationalization export barriers. A significant amount of variation in SME internationalization export barriers is explained by their information systems strategic orientation. Thus, information

systems strategic orientation is one of the important factors that could influence internationalization export barriers.

As the possible covariance suggested by the modification index, between error term of the export barrier—restriction in foreign market and the error terms—documentation problems and import restriction of capital goods are logical, the alternative models are examined by imposing these constrains in structural equation modeling. Even though the resulted improvements in parameters are marginal the improvement in the fit indices are considerable.

The standardized direct, indirect and total effect of information systems strategic orientation and internationalization export barriers on the various dimensions of internationalization export barriers are provided in the Table 7.9. Based on the total effect, the order of impact is on organizational barriers, operational barriers, product and market barriers and then on psychological barriers.

These results clearly indicate the hindrance for SME internationalization arises mainly from organizational barriers and other non-psychological barriers and the orientation of their portfolio of information systems correctly addresses these concerns. The direct effect of information systems strategic orientation on cost-quality leadership, product development and market development are 0.817, 0.808 and 0.723 respectively. Stronger the information systems strategic orientations, the born global manufacturing SMEs are more competitive in addition to be psychologically comfortable. Thus the strategic usage of information systems (Levy and Powell 2000) in pursuit of achieving the strategic alignment with their business strategies (Chan et al., 1997; Henderson & Venkatraman, 1993) put these SMEs in correct direction in the presently emerging business environment that governed by liberalization, the globalization of markets and productions and the need for higher productivity and competitiveness (Rialp, Rialp. & Knight, 2005). This emphasizes the need for strategic management practices among SMEs (Kalantaridis, 2004; Raymond and St-Pierre 2013).

As an industrial natural cluster, these SMEs are subjected to institutional isomorphic pressures in adoption of strategic information systems (Rajendran & Elangovan, 2012). These SMEs normally consider the strategic information systems as innovations of type III (Swanson, 1994). These born global manufacturing SMEs are driven by international entrepreneurship (Ruzzier et al., 2006) and the core of their entrepreneurial activities is innovation (Hitt et al., 2001; Rogers, 1995). The findings give richer insight into the role of information systems and its strategic orientation in SME internationalization process.

Table 7.9 Standardized direct, indirect and total effects

Export barriers	Direct efforts		Indirect efforts		Total efforts	
	ISSO	IEB	ISSO	IEB	ISSO	IEB
Organization barriers	0.000	0.900	-0.426	0.000	-0.426	0.900
Operational barriers	0.000	0.784	-0.371	0.000	-0.371	0.784
Product and market barriers	0.000	0.709	-0.335	0.000	-0.335	0.709
Psychological barriers	0.000	0.611	-0.289	0.000	-0.289	0.611

SMEs have to use different strategies to compete internationally. These SMEs also face two types of competitive pressures namely pressure for cost reduction and pressure to be locally responsive and have strategic choice among four basic strategies ranging from international strategy to transnational strategy. The extent of pressure for cost reduction and local responsiveness determine the appropriateness of each strategy (Hill & Jones, 2010). The international strategy is appropriate when the pressure for local responsiveness and cost reduction is low and the transnational strategy is required when pressure on cost reduction and local responsiveness is high. Being in the middle of global apparel supply chain with B2B relationship, these born global manufacturing SMEs are gaining a competitive edge by localization. However the globalization of production and markets with intensification of competition in the foreign market forces these SMEs to reorient towards transnational strategy. The findings demonstrate the capability of their information systems portfolio and its strategic orientation in supporting these SMEs moving towards transnational strategy to successfully face the international competition in the emerging economies.

The implication of these findings is that the government organization and non-government organization promoting SME internationalization should focus to the information systems strategic management among SMEs (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013; Knight & Liesch, 2002; Levy, Powell, & Galliers, 1999) in addition to merely providing financial export incentives. The industry could play a major role in providing an institutional isomorphic pressure to create a force towards adoption of strategic information systems (Rajendran & Elangovan, 2012; Liang, Saraf, Hu, & Xue, 2007). In the same time they should adopt an audience segmentation strategy in bringing a greater equality in the distribution of the beneficial consequences to avoid the small business digital divide (Vivekanandan & Rajendran, 2006b). The individual SMEs should adopt an 'inside out' approach in deriving the competitive advantage.

The study emphasizes the importance of realized strategy and highlights the need for going beyond strategy formulation (Chan et al., 1997). The SMEs should understand the need for fine tuning their information systems investment (Weill & Vitale, 2002) and adjusting the existing portfolio of information systems application by knowing the efficacy of their information systems strategies and their orientations (Dutot et al., 2014; Grover & Kohli, 2013) in internationalization of their businesses in a given business setting (Jobnston et al., 2007; Raymond et al., 2005; Zhang et al., 2008).

7.5.1 Limitations and Directions for Future Research

The research study may be replicated in different business setting to generalize these findings. Further studies with SMEs at different stages of internationalization will be required to validate the findings of the study (Leonidou, 1995b). The orientation dimensions of information systems strategies may also be considered in line with that of business strategies namely aggressiveness, analysis, internal

defensiveness, external defensiveness, futurity, pro-activeness, risk aversion and innovativeness (Chan et al., 1997) to assess the comparative merits of the present findings.

The future research could investigate the relationship between the SME internationalization export barriers and their business performance and examine the influence of information systems strategic orientation on this linkage.

As cultural challenges are involved in the information technology projects (Rajendran, Kalaiarasi, & Amaravathi, 2015), the culture may be considered in the future investigations (Kummer & Schmiedel, 2016). Since, the knowledge sharing and collaboration in global supply chain can also influence the perception of export barriers, these evolving topics including Social media (Taneja & Toombs, 2014) may also be considered in the future investigations in SME internationalization (Costa, Soares, & de Sousa, 2016; Rajendran & Rajagopal, 2015).

The study has other research limitations. The same respondents were used for both types of variables giving scope for common method bias (Conway & Lance, 2010). The second order constructs information systems strategic orientation has only three indicators (Chen, Sousa, & West, 2005). Some of the loading of the indicators representing the export barriers and AVE values of the related constructs are less than the threshold values suggesting a need for improvement in its measures.

7.6 Conclusion

The SMEs perceive a number of internationalization export barriers in the present globalized business environment. On the other hand, they are investing in developing information systems to support their business strategies for internationalize their business activities. To explore the influence of orientation of the realized information systems strategies on their perception towards internationalization export barriers, a mail survey was conducted among born global manufacturing SMEs.

The results reveal the direction, strength and significance of the relationship between strategic orientation of their information systems and internationalization export barriers and present the effects of information systems strategic orientation on individual dimensions of internationalization export barriers. The study demonstrates the need for strategic use of information systems by SMEs and calls for the attentions of the agencies promoting internationalization of SMEs in this direction.

The major contributions of the study is the synthesis of two different research streams—export barriers in the context of international entrepreneurship (Dimitratos, Plakoyiannaki, Pitsoulaki, & Tuselmann, 2010) and information systems in the framework of strategic alignment (Chan & Reich, 2007) and providing a new dimension to the research on SME internationalization.

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Chapter 8

Strategies and Processes of Internationalization: A Case Study of the KARAM Group of Companies



Jyoti Dewan and A. K. Singh

8.1 Introduction

Small and Medium Enterprises (SMEs) currently have emerged as a prime participant in international trade. Organization for Economic Cooperation and Development (OECD) reports that products sourced from SMEs constitute a sizeable share of exports from most developing nations. Not much information is, however, available on the benefits of having an international entrepreneurial orientation or the contribution of specific strategies followed by them on the performance of these firms. Paunovic and Prebezac observed in 2010 that business internationalization is emerging as an imperative ingredient for further growth and development.

Ahroni (1999) and Ghanatabadi (2005) identified two sets of factors that propel entrepreneurs toward international markets, firstly those emanating from the domestic environment, for instance, strong competition, uncertainty and instability, lack of foreign exchange, etc., and secondly the predisposition of the entrepreneur to internationalize.

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A report published by Directorate-General for Enterprise and Industry (2007) concludes that internationalization should not be viewed as a separate dimension of the company or as a contingency strategy to be implemented when local demand gets saturated, but it should be fully internalized into the Small and Medium Enterprise as an integral part of the company's long-term strategic planning. These key findings are strengthened by the point that internationalization has been identified as the most important instrument for competitiveness and growth all over the world.

8.2 The Current Indian Scenario

As established by a report published by Grant Thornton India LLP and FICCI (2013), Micro, Small and Medium Enterprises (MSMEs) play an important and defining role in the world economy, specifically in India where they comprise nearly 94% of the industrial organizations in the country. 'The sector contributes 36% of the total value of the exports of the country and employs over 80 million people. The contribution of this sector to the output of the country is 40% and to the GDP is over 8%.' In the past few years, it has been observed that the MSME sector has unfailingly registered growth greater than the industrial sector. Now as the world is being considered a 'global village,' companies who do not capitalize on the benefits of internationalization may suffer a downtrend in terms of market share and profitability.

Ridderstrale and Nordstrom (2002) aver that the international economy is exposed to strong globalization processes and a speedy introduction of IT technologies. It is oft reiterated that enterprises desisting internationalization of their business can have no long-term prospects in any modern economy. In summation, instead of being reactive or defensive, a discerning marketer must not be rigid and adopt a more progressive and flexible view of the international market. This will assist them in transforming potential problems into challenges and opportunities (Onkvisit & Shaw, 2009). Exhibit 1 demonstrates the role of MSMEs in the Indian economy.

Exhibit 1: Contribution of Micro, Small and Medium Enterprises in the Indian Economic Scenario
<ul style="list-style-type: none"> • More than 440 lakh MSME units contribute a gross output of over Rs.1.8 lakh crore in India.
<ul style="list-style-type: none"> • An observation of the growth pattern of the past four years has revealed that the MSME sector has proven double-digit growth.
<ul style="list-style-type: none"> • With more than 40% contribution towards the complete output of the country and 8%-10% contribution to the GDP the MSME sector is expanding rapidly.
<ul style="list-style-type: none"> • Yielding more than 6,000 products, the MSME units are a valued component of national growth.
<ul style="list-style-type: none"> • The MSME sector is home to 90% of the industrial units in India.

Source: Adapted from Grant Thornton India LLP and FICCI (2013)

In view of the given figures, it is estimated that since the MSME sector is thriving in the domestic market, by going global it will add to foreign exchange earnings for the nation and help these organizations grow in stature. Internationalization will further provide them economies of scale, release sources of better and cheaper raw material, generate multiple revenue streams and accrue other added benefits.

8.3 Barriers to Internationalization

‘Small and medium sized firms face two challenges in globalization: property rights protection and barriers to entry’ (Acs, Morck, Shaver, & Yeng, 1997). Some of the recognized barriers are demonstrated in Exhibit 2.

Exhibit 2: Small and Medium-sized Enterprises: Barriers to Internationalization (In order of relative importance)	
1.	Lack of adequate skills in terms of entrepreneurial, administrative and marketing acumen.
2.	Red tape and consequent difficulty in obtaining governmental permissions.
3.	Lack of sufficient information regarding the market and competing products.
4.	Problems in getting financial resources for initiating, sustaining and growing the business.
5.	Limited access to technology, machinery and operational support.
6.	Inability to understand the relevance and importance of quality. Difficulty in maintaining consistent and uniform standards.
7.	Insufficient range of products and services for different markets.
8.	Difficulty in adapting to different cultures and languages.
9.	Perils of selling to a foreign audience in an alien land.
10.	Competition/ resistance offered by companies of the host nation.
11.	Threat posed by multinational corporations.
12.	Difficulty in handling diverse set of documentation, packaging and labeling requirements.
13.	Inadequate governmental support for internationalization.
14.	Insufficient knowledge of intellectual property rights.

Source: Adapted from Szabo (2002)

The above-mentioned barriers are applicable in the current Indian context too, and are the reason why the prime minister has given the clarion call for 'Make in India' and the latest union budget has funds ear-marked for promoting entrepreneurship. Indian bureaucracy is known for its delays, as is the slow progress of paperwork in the financial arena. Low percolation of technology also limits people from internationalization which requires high degree of standardization and adherence to quality. Entrepreneurs in India with its myriad languages and low English literacy face even more resistance when transacting abroad, where the entrepreneur has to grapple with newer languages. Lack of trustworthy intermediaries and agents also acts as a deterrent. Complicated trade documentation leaves many dumbfounded. Successive governments have laid out several schemes and incentives, such as low import duty for raw material or tax holiday for export-oriented units; however, the dissemination of this information is not very good. Low awareness exposes the businessmen to risks of intellectual property theft too.

8.4 Imperatives for Success

One needs to look into the imperatives that entrepreneurs need to inculcate, in order to court success in the international arena. An amalgamation of government policy, educational orientation, and exposure to the international environment and technology is essential for the same. Companies can be initiated as international firms or export-oriented units, or they can gradually test the water and grow into the area by natural progression, viz. selling, offshoring, outsourcing, foreign market entry, and foreign direct investment as they grow incrementally in competitiveness.

8.4.1 Government Support

The Government of India has introduced various policies at the national level and state level, special incentives for women entrepreneurs and cluster development. However, much needs to be done to propagate these schemes and inform the beneficiaries about them.

8.4.2 International Imperatives

The international arena is very sensitized to ethical trade practices such as Forced and Child labor, and needs certification ensuring that such measures have not been utilized in the manufacturing process. Provision of safe and healthy working conditions in a nation burgeoning with population and unemployment is another

concept that needs to be understood. Delimitation of working hours, equal pay for equal work in a society divided along caste and gender lines is also a challenge. Sensitivity to the environment and its preservation is taught by all our religious and mythological text, but we have meandered away from it in the complex process of modernization. All the above-mentioned issues have to be consciously dealt with and inculcated into the fabric of Indian business culture, for our products to gain international acceptance.

8.4.3 Perception of Brand India

Since Indian companies inherently suffer from an image disadvantage of belonging to the land of 'snake charmers,' new age marketing tools, advertising and brand promotion, building brand identity, use of social media for generating interest, creating awareness, and generating leads have to be pressed into action.

8.4.4 Leveraging Networks

Companies also need to learn the art of developing customers and the use of networks, referrals, bidding for tenders, participating in exhibitions and building alliances through industry associations like FICCI, CII etc.

8.4.5 Advantages of Internationalization

Internationalization reinforces growth, increases market size, reduces dependence on any one market, creates economies of scale, enhances competitiveness and supports the long-term survival of companies. It provides an opportunity to counterattack global competitors in their home markets and fulfill customer requirement of international service.

8.5 Theoretical Models of Internationalization

Over the years, in order to better understand the internationalization process, various researchers on the basis of their observation and research have made different models which claim to provide success to a firm in the process of entering and sustaining themselves in the international market. Li, Li, and Dalgic (2004)

highlight three broad perspectives regarding the internationalization process of firms namely ‘Experiential learning’ (Johanson & Vahlne, 1977; Lam & White, 1999; Cavusgil, 1980; Cavusgil & Zou, 1994); ‘Systematic planning’ (Root, 1987, 1994; Miller 1993; Yip, Biscarri, & Monti, 2000); and ‘Contingency perspective’ (Welch & Welch, 1995; Boter & Holmquist, 1996; Coviello & Munro, 1997, Li et al., 2004, etc.).

Each of these models has made relevant contributions, however, due to the onset of Internet age, widespread globalization, and changes in the business and cultural environment from time to time; none of these models can be considered to be the final word. This led to the development of the hybrid model.

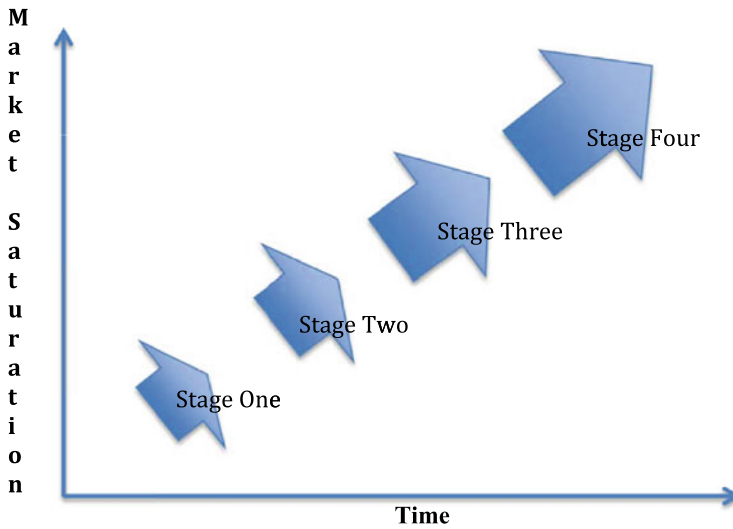
8.5.1 Experiential Learning Model

This theory is rooted in the empirical behavior and development of enterprises and is called the ‘incremental internationalization model’ or Uppsala model, which is shown in Exhibit 3. It explains the ways in which prevailing knowledge regarding foreign markets aids in crafting the strategy of entry and also impacts a change of strategy for businesses. An organization undertakes internationalization in stages, gradually while adding knowledge at each stage (Scholl, 2006). However, it was observed that this model does not foretell the speed of moving from one stage to the next and neither does it explain why some organizations may skip a particular step and still be successful.

8.5.2 Systematic Planning Model

This model assumes that internationalization is a precise process in which each step follows the other sequentially. Several authors such as Miller and Root have worked on it. Yip calls his systematic planning model ‘Way Station Model’ of internationalizing Small and medium enterprises and includes the following six steps in this process which have been visualized in Exhibit 4 (Yip et al., 2000): motivation and strategic planning, research of the market, selection of the market, selection of entry strategy, problem shooting, and post-entry behavior. However, the systematic models are criticized on the grounds that some organizations often move in several directions concurrently and not in a serial manner, and hence, the success of such organizations does not validate the systematic planning models. Also, in the modern era, the variables change so fast that giving weightage to each aspect over time may be difficult.

Exhibit 3: Visualization of the Uppsala Model



Source: Adapted from Szabo (2002)

Stage One: The company does not indulge in exports.

Stage Two: The company undertake exorts assisted by agents.

Stage Three: In order to serve the consumer better, subsidiary is created in the foreign market.

Note: The Stages of growth from indigenus company to international organization often overlap and cannot be segregated into water-tight compartments.

Exhibit 4: A Simple Visual representation of Yip’s Model of Internationalization



Source: Adapted from Yip, Biscari and Monti (2000)

8.5.3 Contingency Model

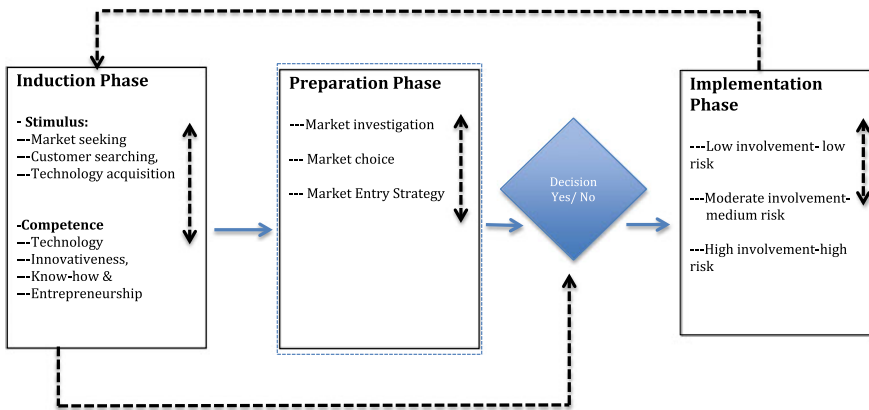
This model contends that internationalization of firms depends on their circumstances and situations. Firms in the traditional sector adopt the long-term approach, whereas firm in emerging sectors adopts internationalization in an unpredictable manner because of the innovative nature of their products (Boter & Holmquist, 1996). The contingency viewpoint proposes that a firm's internationalization process depends on contextual factors (Welch & Luostarinen, 1993; Jones, 1999; Roberts, 1999).

Turnbull (1987) holds the opinion that a company's internationalization is largely determined by the functional environment, structure of the industry and its own marketing approach. Assimilation of the incremental internationalization models was attempted by Coviello and Munro (1997) with the network perspective. They found that the process of internationalization of small-scale software firms is influenced by formal and informal inter-firm relationships and is similar to an accelerated version of the incremental and sequential stage models. The hastening of the process of internationalization is even more noteworthy in the 'born global' firms (Knight & Cavusgil, 1996).

8.5.4 Hybrid Model

The hybrid model (Li et al., 2004) evolved by integrating the systematic planning and experiential learning models. In this way, a more balanced process of internationalization emerged. This is demonstrated in three main phases: basic (antecedent), planning, and execution phases. Exhibit 5 demonstrates the hybrid model of small and medium sized enterprises' internationalization.

Exhibit 5: Hybrid Model of Internationalization of Small and Medium-sized Enterprises



Source: Adapted from Li, Li and Dalgic (2004)

Note:

- The Hybrid Model has emerged by integrating the systematic planning and experiential learning models.
- The Hybrid Model advocates that within each phase the factors interact to create synergy.
- The Synergy thus generated releases feed-forward and feedback forces, which propel the international business model ahead.

8.5.5 Born Global Model

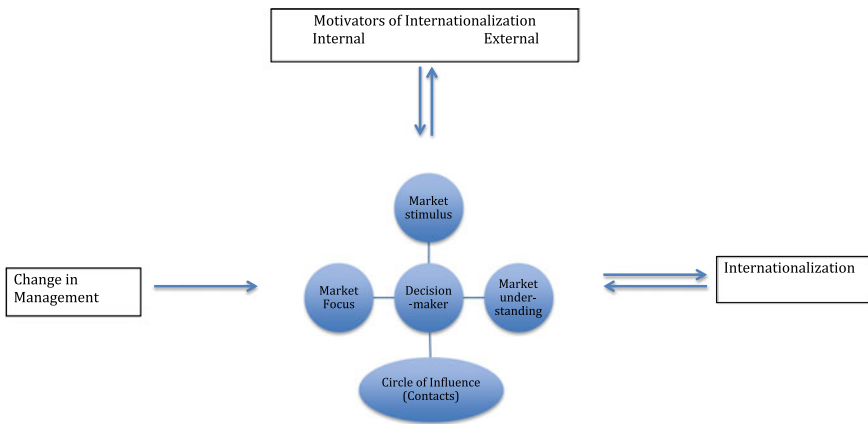
This describes a sudden spurt into the global arena by a small firm. This has been observed more in knowledge-based and software industry, e.g. Facebook, Skype, Amazon etc. They capture a domestic niche quickly and start targeting their marketing activities toward the global consumer within the first five years of existence (Knight & Cavusgil, 1996). According to Sharma and Blomsterno (2003), the born global companies are in possession of international market knowledge much before their first foreign foray. Their choice of foreign market entry strategy is based on their existing knowledge and the inputs provided by their networks.

All the above models have their limitations, and it has been observed that companies often follow a combination of one or more models. Many times, they follow a particular route and then adapt and innovate as per the dictates of situation.

8.6 Impact of Decision-Makers on the Process of Internationalization

After a reading of various papers on the topic, it has been observed that in Small and medium enterprises, it is the owner/decision-makers' viewpoint/opinion/attitude/motivation that directs the internationalization process. His assessment of the environmental factors, cost–benefit analysis, and expectation of the outcome plays a critical role in guiding the process. Exhibit 6 shows the factors that influence the internationalization of enterprises.

Exhibit 6: Factors Impacting the Internationalization of Enterprises



Source: Adapted from Collinson and Houldon (2005)

8.7 Case of an Indian Company: An Analysis of 'KARAM'

8.7.1 *KARAM: Origin and Overview of the Organization's Business Philosophy*

This paper charts the growth of KARAM (P. N. International), a firm involved in the manufacture and marketing of personal protective equipment (PPE) and sketches its trajectory over the past 15 years. This company is taken as an example to illustrate how firms establish a core competency, capture a niche market, gain a dominating position in a small domestic market, and subsequently fan out into the

international market, keeping with the owners' attitude, motivation, knowledge, their analysis of the environment, and expectations from international operations.

To glean information about the company, a focus group interview was conducted with the four founders and their inputs on their international foray collated. Knowledge accumulated, over the years, as their communication consultant was utilized. Feedback was also solicited from their distributors to get a comprehensive picture.

In this case, the company was competing with an inherent disadvantage, because terms like 'safety,' 'quality,' and 'protective equipment' do not gel well with 'Brand India,' especially in the international market. The local personal protective equipment market itself was largely unorganized due to low premium attached to human life, in this land of population explosion, where implementation of government safety guidelines is weak.

When KARAM ventured into the international markets, 'country of origin' provided an opinionated and biased audience, which had to be convinced and compelled to recognize their credibility and superiority in terms of quality and technology.

In order to compete, KARAM garnered the support it got from government policy, in both home and host countries, and charted its evolution, by strengthening its organizational structure, establishing good corporate governance practices, and mentoring leaders that helped the company grow in stature and profitability.

This paper chronicles the mutation of its products from low-tech (safety nets and traffic cones) to hi-tech products (exhaustive range of personal protective equipment). It highlights the impetus it received from training provided by the Government of Netherlands in the 'Art of Exhibiting' and the subsequent development of networks. The paper discusses the tumult that it faced due to ire for Brand India, mistrust and skin hostility and solutions to overcome it.

Starting from a small setup with a core group of four members, KARAM is today having an employee membership of 2700 and plans to go 'public' are being deliberated. The case delineates its foray, makes a SWOT analysis of the company, and assesses the contribution of its marketing strategy and how it made use of information technology and networking through conferences for international success. The case provides an illustration of other such organizations, which develop their expertise and competencies and then fan out internationally to locate additional demand, after finding the domestic market saturated.

8.7.2 Decision to Internationalize

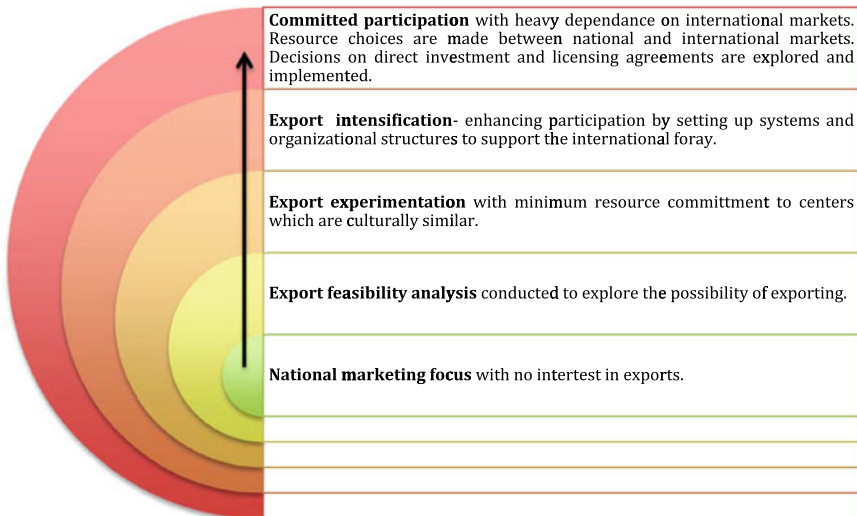
A decision to internationalize was made by the owners subsequent to attending a conference organized by the Government of Netherlands to promote imports from developing countries. The conference etched in their mind that the rock bed of

success in the international arena was ‘QUALITY’ which coupled with lower manufacturing costs in India and their attitude of determination to ‘be the best’ would lead to success. They also learnt at the conference: the art of presenting at exhibitions, soliciting customers, utilizing feedback loop to remain connected, and the use of government incentives in various countries. Though the internationalization of KARAM did not follow any particular model, it has elements of the ‘Uppsala’ model and ‘born global’ model. Gankema’s five stages of internationalization can also be traced in the evolution of KARAM.

8.7.3 Expansion

The parent company started by exporting surplus but with the earning of international ‘quality certification,’ export-oriented unit was established to acquire benefits offered by the Indian Government. Geographical areas where the government has provided tax concessions were identified for setting set up manufacturing units with a fanning out of the marketing team in India and abroad. Exhibit 7 demonstrates the five stages of internationalization.

Exhibit 7: Five Progressive Stages of Internationalization



Source: Adapted from Ganekeema, Snuif and Zwart (2000)

Exhibit 8 highlights the yearwise progress of KARAM.

Exhibit 8: Year Wise Progress of KARAM	
Year	Progress Dateline
1994	Founded as a small scale 'Safety Net' Manufacturing Unit;
	But conceptualized as a unit specializing in Design, Development, Manufacturing and Marketing of Quality Fall Protection Devices.
1997	Set up the first Safety Belt Manufacturing Unit in Lucknow, UP, India.
	Bureau of Indian Standards, Govt. of India. Awarded quality certification for Safety Belts as per IS:3521:1989
1998	Got empanelled by Director General of Mines and Services, Government of India.
1999	Became the first Indian Company to achieve CE Certification on Fall Protection Equipment. All equipment were now manufactured as per EU norms.
2003	Awarded Trophy by Government of India for achieving Best Exports of Safety Equipment from the state of Uttar Pradesh.
2004	Set up vertically integrated plant for production of Fall Protection Equipment
	Achieved the systems Certification of ISO 9001-2000 from UKAS (UK)
2005	Set up Manufacturing Unit in Rudrapur, Uttarakhand, to cater to market needs.
2006	Launched new range of Personal Protective Equipment- Safety Eyewear, CE certified
	Established regional offices in Delhi, Mumbai and Bangalore
2007	Safety Footwear introduced
	Doubled infrastructure in both manufacturing and marketing in country
	Developed full body harnesses complying with American and Australian Norms
	Launched ear protection complying with CN norms and CE certified
2008	Launched Karam range of Welding Shields
2009	Introduced premium range of Full Body Harnesses with extreme comfort and ergonomic features
	Introduced exhaustive range of Max Catch KARAM Retractable Fall Arrestor Blocks
	Introduced wide range of Harnesses and lanyard conforming to ANSI Z 359.1
2010	Established a State-of -the-Art manufacturing set-up in Sitarganj
	Consolidated vertical integration process and research design activities
2011	Enhanced production capacity
	Launched new series of Gripp, Safety Shoes
	Launched exhaustive range of Fixed Line Systems
2012	Introduced Special Purpose Harnesses and Fixed Anchorage line in its range
2013	Awarded best exporter award in the state for 2013 by Uttar Pradesh Export Promotion Council
	Felicitated as New Star Export House

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Year	Progress Dateline
	Set up complete automation in various operations by establishing robotic processes
	Expansion of range of safety shoes
2014	Established additional state-of-the-art 'administrative' wing in Lucknow
	Launched New Revolva Harnesses, Telescopic Pole, Micron Block, KomfyKruze, Shelblastetc
	Retractable Fall Arrester Blocks tested as per ANSI norms
	Further expansion of FLS section

Source: Nigam (2015a)

8.7.4 Carefully Crafted Vision Statement Encapsulates the Company Goals

Proactive attitude of the owners coupled with their commitment to quality, powered by innovation generated thorough research and development, adherence to time deadlines, adaptation to multiple national environments and customization for customer satisfaction were found to be the main factors for success.

Exhibit 9 reveals the KARAM vision statement. The entire range of business activities, products, and services is clearly outlined in the vision statement. It shows the management’s intent to service international and domestic markets. However, the international markets are mentioned first, which shows the focus, flow, and dedication of resources. The company has worked hard to gain acceptance abroad, and having gained quality certifications is keen to capitalize on it.

Exhibit 9: KARAM Vision Statement	
Vision Statement	
1.	To provide entire range of Fall Protection equipment to a global market, through sustained efforts in R&D, manufacturing under cost effective, safe and systematic processes.
2.	To reach out to customers in more than 200 countries across the globe providing prompt and effective services to them.
3.	To provide a full range of Personal Protective Equipment to our Customers serving the needs of the workers in India.
4.	To equip the workers in every part of India exposed to various hazards at their working environment, with complete knowledge on Personal Safety. To dedicate efforts in reaching out to them, understand their needs, and provide appropriate solutions through right equipment selection and training.

Source: Nigam (2015b)

8.7.5 Aligning with Internal and External Customers

KARAM prides itself in being customer centric and a good listener. Customer feedback is scrutinized carefully, and quick action is taken. In rare cases of defective product, complete replacement of consignment is offered, free of cost. It is a company, where ‘Quality is a way of life,’ and this percolates to the smallest activities. The factories are neat and clean, and provide good working environment. Information technology tools (ERP, CRM) are used to make processes more efficient and effective.

8.7.6 Building a Dream Team

The company decided to use human touch to cement all relationships. It understood the value of each employee to communicate the KARAM brand and philosophy. Next-level managers were developed, empowered, and motivated by creating in them a feeling of ownership. They were provided with travel budgets so they could visit markets and get the bigger picture. The management took them deep into R&D and manufacturing processes so that they were convinced of the quality of production. Care is taken to ensure safety in the entire production cycle, and accidents are minimized to almost negligible. Importance is given to both white and blue-collar workers.

8.7.7 Identifying the Cutting Edge

The production process of PPE is labor intensive; hence, India and China have inherent advantage. KARAM soon realized that India had an extra edge due to greater dissemination of English (global language), better commitment to quality, adherence to timeline, and honesty (surprisingly).

Market for PPE products is not so developed in India, due to poor enforcement of norms. Abroad the market for PPE have matured as there are fines for non-conformance to security norms. USA provides the largest market for personal protective equipment with EU just a notch behind, but obtaining quality certifications is an uphill task. However KARAM soon surpassed the quality specifications benchmarked by various countries.

8.7.8 Going International

The decision to go international can be traced back to the contact program initiated by the Netherland’s Government with the objective of giving a boost to companies

from developing nations. From amongst a host of companies, based on inherent potential, a few companies were selected. There was initial handholding for a period of 6 months, on how to get a break into the European market. CE certification acquired by KARAM was the first step toward export. The company learnt the lesson of quality and gave up 'chalta hai' attitude. Positive thought processes and motivation were also imbibed along with determination to overcome all obstacles to international trade. Germany became the hub for attending conferences.

Government of India's initiative to educate exporters also helped. In 2012, a tax holiday was declared in Uttaranchal, and KARAM was quick to make a move. This gave further impetus to exports by reducing costs. KARAM decided to follow upright invoicing and create records for all activities so that decision-making could be based on facts. An export-oriented unit was also established.

Each prospective market was evaluated at the pre-entry level by an expert team which made pertinent observations for developing the market launch strategy. Market research revealed that the Americans liked their products large, while Europeans focused on design. Information was also obtained from catalogs of competitors and their web sites. Having penetrated Europe and America, KARAM was ready for Dubai and Southeast Asia too. Gulf was found to be an easy entry after breaking the European and American barriers. Germany required the maximum persistence in gaining a market foothold. In China, it was discovered that price was irrelevant and quality was the prime consideration. In Japan, the demand for quality was found to be the greatest.

Initially, the company supplied to existing companies like 3M and Honeywell, but gradually thought of building their own label. To cut the time barrier, a private label was acquired. Gradually, a new company was also acquired through trade associates.

In the process of running the acquired company in Europe, cultural problems were encountered wherein the Europeans refused to take orders from Indians. This was overcome by making a European team and launching a new label with 30% local equity. Profits doubled in the first year as the company soared to join the league of the top 10 in the world.

8.7.9 Backward and Forward Integration

The company executed backward integration to make components with the basic objective of ensuring and enhancing quality and reducing costs. This also helped to create a monopoly and provide fast customization. Forward integration was done in the area of after-sales-services, training, and providing safety assurance certification. New products are constantly added. The company is expanding in the area of warehousing and self-owned distribution channel to improve pace and provide price flexibility.

8.8 Product Range

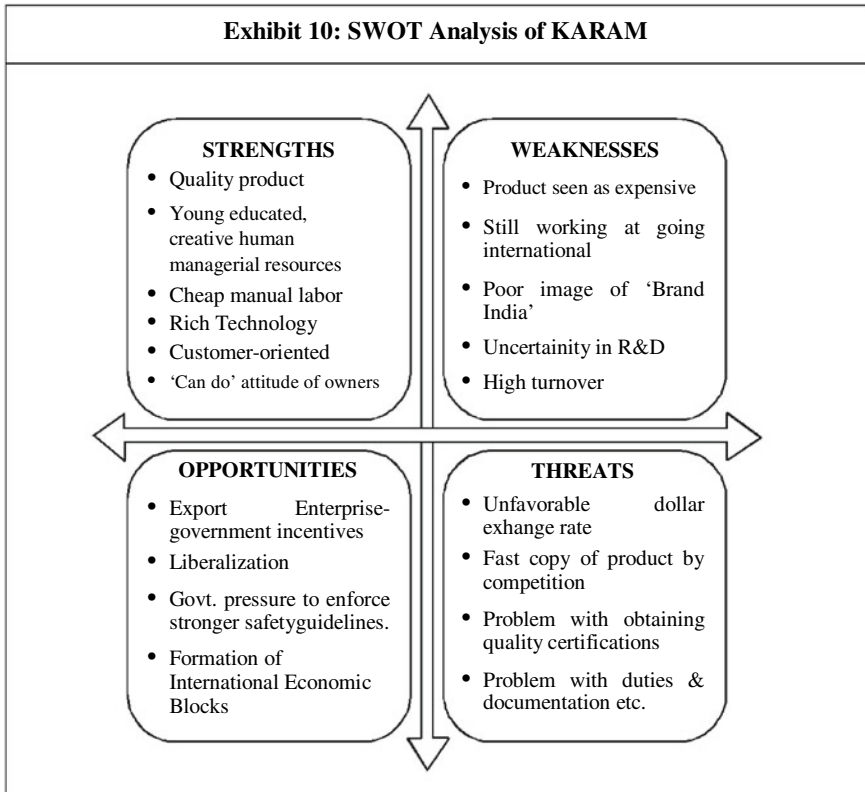
Starting from safety nets and traffic cones (low-tech), KARAM moved on to ladders, harnesses, eye, foot, and all body protection. Incremental innovation is continuously followed by the company. Qualification of stringent quality norms abroad fueled demand. In the meanwhile, domestic demand is also catching up. Close at the heels of KARAM are a host of ‘me too’ companies, who imitate their innovations and glut the market. Hence, KARAM has to innovate fast, resort to premium pricing, and then move up the innovation chain. Training, consultancy, and creating awareness also constitute part of the business paradigm. Care is taken to use best instrumentation for manufacturing processes. A team is nominated to visit tool exhibitions and work on constant upgradation of manufacturing facilities.

8.8.1 Market Research

The market for PPE is a niche market, so research was primarily done while attending conferences and trade fairs and using internet resources. Information was also collected through trade magazines in order to identify target audience and the products to manufacture. A team has also been formed for launching products in new countries. Their job is to provide guidelines for culture fit and to establish an edge over competition. Taking feedback from sales personnel is an important part of the KARAM culture. Customer feedback is also dealt with solemnly.

8.8.2 Situation Analysis

The main objective of the SWOT analysis was to collect information concerning the inherent strengths and weaknesses in order to equate them to opportunities and threats that KARAM has to face in its operating environment. Exhibit 10 sums up the SWOT analysis of KARAM.



Source: Authors

8.8.3 Competition Analysis

The next important step in external factor analysis is competition analysis. KARAM is the clear leader in the niche. However, the nature of competition is such that one has to continuously grapple with it, progressively each day. The follower companies are quick to imitate product and market-driven innovations carefully crafted by KARAM through the expensive research and development process. There is competition to reckon with at home and also in the external countries with better R&D and more supportive government. Also quotas for local vendors in international markets prove to be a hindrance. The PPE markets are more advanced and developed in Europe and America so continuous upgradation is required. Local markets are still developing.

Key Success Factors

- Commitment to quality.
- Commitment to innovation (strong R&D).
- Commitment to time deadlines.
- Commitment to customization.
- Continuous networking.
- Careful selection of key managerial cadre in India and abroad.
- Careful selection in appointment of distributors.
- Nurturing vendors for loyalty.
- Inculcation of organization culture to hold thing together.
- Use of technology for production.
- Use of ERP and CRM for monitoring staff and integration of customer reviews and customer perspective. Proactive customer orientation.
- Development of indigenous technology.

Key Problem Areas

- Numerous certifications and approvals needed are a nightmare.
- Long and expensive processes required for getting licenses to export to foreign countries are a difficult proposition.
- A large chunk of investment goes into research and development with final outcome and return on investment being unknown.
- Also, counterfeit products and replication of design by competitors are difficult to contain.

8.8.4 *Dynamic Marketing Mix****Product and Services***

KARAM has a comprehensive product range. It specializes in the field of fall protection, head protection, safety shoes, safety spectacles, hearing protection, welding protection, respiratory protection, protective equipment and rope access and rescue. It is a one-stop shop for personal protective equipment, providing solutions for protection from head to toe. It is also involved in training, consultancy, and providing certification of security equipment.

Price

Pricing is handled very sensitively by KARAM. For each market, a detailed analysis of competition is done. Customers' viewpoints regarding 'what the market can bear' is also taken. Demonstration programs are held, where customers are given a product presentation and then asked to plot prices. Volume and quantity discounts are offered so customers can plan their purchase. However, the prices are kept a little above competition to reinforce the extreme care taken to ensure perfect

quality and high technology used to manufacture products. Adequate credit cycles are provided to facilitate the buyers.

Distribution

Immense care is given to the process of dealer selection, nurturing, and their initiation into the company culture of quality and customer orientation. Within the country, products are supplied through zonal dealers who are given quantity discounts. The dealer/distributor network has expanded rapidly over the past few years. It grew from 450 in 2010–11 to 575 in 2012–13 and expanded rapidly to touch 933 in 2015–16. Hence, the dealer network doubled itself in the six-year period from 2010 to 2016 (Nigam, 2016a).

Dealers are appointed in each country for further distribution of products. However, attempts are being made to distribute directly in foreign lands through subsidiaries. Here, the staff is being locally appointed for culture fit, and branding is also changed so that it appears to be a local product of that particular country (e.g. France). This mechanism is being used to bypass biased opinion toward ‘Made in India.’ Cerrato and Piva (2007) make a similar observation and mention that ‘... level of human capital and the presence of foreign shareholders in the SME positively influence both export propensity and the export intensity’.

Communication channels are established with all links in the distribution chain. Customers are also solicited directly, using Internet and social media and through interaction at trade fairs. E-Business model, with its extensive database, is used to be in constant touch with distributors and customers alike.

By being a direct supplier, company saves middleman margin which is forwarded to consumer (provides price flexibility) or used to augment company reserves. Various entry methods such as operating through subsidiaries, agents, and distributors are viewed as centers for building and sustaining relationships (Jansson & Hilmersson, 2007).

Firms acquire knowledge about doing business abroad, in geographically and culturally contiguous markets, and increase their involvement gradually, initiating as agents, and graduating through sales companies to manufacturing operations (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). This has been chiefly observed in evolution of not only MNCs but also SMEs (Hohenthal, 2001). Studies on the export of North American small and large corporations have revealed similar results (cf. Cavusgil, 1980). However, ‘Born Globals’ or ‘International new Ventures’ (that are formed with an international orientation) are inclined to follow a different pattern (Madsen & Servais, 1997; Zahra, 2005).

However, in case of KARAM, the tipping point was a workshop organized by Netherlands Government to promote exports from developing countries. Exports started after gaining compliance for EU standards. So, the most difficult market was initiated first, and geography did not play such a great role. Knowledge of the process and handholding done by the workshop personnel initiated export orientation.

...the findings indicated that ...the initiating forces and knowledge of international market opportunities resulted in the receptiveness of the entrepreneurs to available international opportunities. (Kirzner, 1997).

Promotion

The chief motive of the promotion exercise is to create awareness regarding the products, highlight their quality and technological superiority, and communicate with domestic and global audience. A well-designed site is used for the purpose. The website is closely monitored and updated with all new offers. This is followed up with e-mails, which are customized as per requirements of the consumer. Products are also presented at all prominent national and international trade fairs and in all leading specialized trade magazines and publications. Since its inception, KARAM has participated in 18 exhibitions in India and about 45 abroad (Nigam, 2016b).

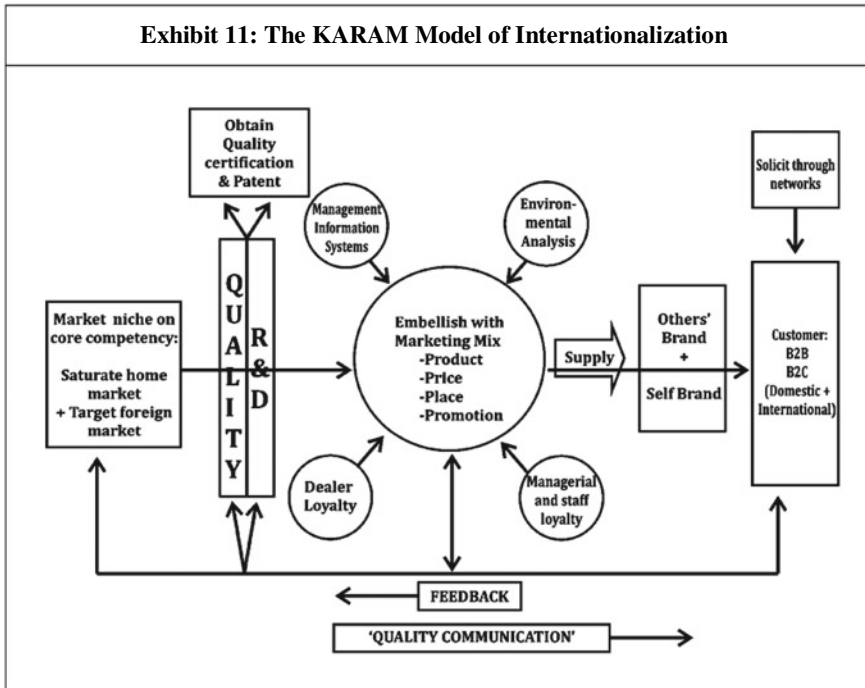
8.9 Model of Internationalization Based on the KARAM Experience

The KARAM model of internationalization is demonstrated in Exhibit 11. This model assumes that intent is preexisting and emerges on saturation of home market or is triggered by opportunity and motivation of entrepreneur and only the route needs to be chalked out. In the KARAM case study, intent was intensified by the availability of opportunity, after attending a seminar for export promotion organized by the Netherlands Government and the ‘Can do’ attitude of the owners.

Indications were found of a parallel expansion abroad and at home, even using foreign markets as a springboard for further growth at home (Sandberg, 2012).

The model asserts the following points:

- Develop market niche based on ‘core competency’ which has strong roots in R&D and quality assurance.
- Saturate home market and make inroads into foreign markets based on ‘competitive advantage’ and analysis and assessment of entry barriers. Karam’s established customers in India mushroomed from 3250 in 2010–11 to 4575 in the year 2012–13. By 2015–16, it had expanded to 8241 customers. Karam’s foreign customer base has grown from 5 in 2010–11 to 40 in 2012–13. By 2016, the company was supplying to 138 customers abroad (Nigam, 2016c).
- Have a firm grounding in quality for brand development in domestic and foreign markets. Investment in R&D for incremental quality improvement and new product development was executed. This has resulted in the growth of certified products from 51 in 2005 to 235 in the year 2010. By 2016, the company had an astounding 502 certified products (Nigam, 2016d). It is also extremely important to be aware of patenting and intellectual property norms and obtain required quality certifications.



Source: Authors

- Embellish a good product with a sound marketing mix on the basis of environmental analysis supported by management information systems.
- Invest in managerial and ground staff. Build loyalty. Initiate organizational culture. Create ownership and sense of pride. Develop work ethics.
- Invest in dealer loyalty programs. Provide sound margins and incentives.
- Feed other brands. Build own brand.

The above-mentioned steps are not necessarily sequential but have been aligned to chart an approximate course of action to be followed by a firm planning to go international. It is based on the KARAM experience and provides guidelines to others. Unlike other models which use 'push' methods, this model is based on the assumption that sound quality and innovation will create 'pull' factors for product and provide repeat purchase. There is belief that alongside supplying to superior brands attempts should be made to develop self-identity to indemnify against drop in business. Alongside the marketing mix importance is given to people: customer and employee.

The model is based on observations made in the 'Personal Protective Equipment Industry' but may be used across sectors where quality is a prime consideration.

8.9.1 The Road Ahead: Succession Planning

KARAM knows that the road ahead is not easy. But the key may be in keeping the old managers motivated and also ensuring the next-generation ownership is competent to take the venture forward through constant innovation and adaptation. Competition has to be preempted and prepared for.

8.10 Conclusion

As the world, connected by the internet shrinks to a global village and online sale and purchase of products permeates all sections of society, the consumer is spoilt for choice and the producers and distributors have to compete in terms of quality and price. In such circumstances, no business can afford to remain an island. Internationalization becomes a necessity and not a choice. Business internationalization is becoming an important precondition for further growth and development as also pointed out by Paunovic and Prebezac (2010).

Only decisions regarding the degree of internationalization remain. However, going global, one comes across numerous challenges in terms of culture, cost, knowledge, exposure, attitude, and rules and regulations. The process can be made more difficult for the Small and medium enterprises in view of the fact that they may have limited funds and manpower at their disposal.

Some of the models discussed in the paper can be utilized by firms that have a desire to have transnational operations. However, no model is perfect and a great deal of adaptation is required. Due to the uncertainty of circumstances and huge number of variables involved, predicting success is difficult. Each firm needs to learn from the example of others and chart their own course. The onus of creating awareness about the need for and advantages of internationalization and the associated processes lies with educational institutions, governments and NGOs.

The burden of taking the international plunge lies with the owner of the company (Cerrato & Piva, 2007). He has to decide when, how and the extent to which he wants to handle international assignments and the results he can expect (Collinson & Houlden, 2005). He has to be the motivator and has to have the vision in a continuously changing environment. This vision needs to percolate through his company to his employees and team members. The enclosed case study of a 'started small' and 'now' midsize company, supplying to over 150 countries from Lucknow in Uttar Pradesh, that has successfully identified a niche, provides useful information about planning and execution of a foreign market entry strategy.

Care has been taken to include all important factors in internationalization, while the model was being developed in this research, but the variables are not exhaustive. Since the model is based on the experience of one company, further researchers can test and build on it by considering inputs from a larger sample. It is specifically suited for developing economies, where the world 'quality' perception

is poor and needs correction. This model has evolved out of the models addressed in the paper and hopes to take the study further by providing a unique Indian dimension in the development of ‘a process for internationalization.’

From their experience, we learn that:

- Dedicated R&D is essential to establish identity and sustain lead.
- Investment in professional networks is of utmost importance (Welch & Luostarinen, 1993).
- Attending trade fairs aids the process and helps stay competitive (Coviello & Munro, 1997).
- Trust can be won by consistent striving.
- Technology helps leverage strengths and cut time (Jones, 1999).
- Certifications are essential for building trust.
- Listening to the customer is imperative (This is a firm KARAM conviction).

Brand India needs to improve its perception. Many times, our companies end up being outsourcing units for big firms, with no identity, as they fight a losing battle in terms of quality perception. Commitment to quality, consistency, and adherence to deadlines can change consumer viewpoint over time as demonstrated by the given case study.

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Chapter 9

Serviced Apartments Industry in India: A Study on Issues, Growth Prospects, and Best Practices for Internationalization



S. P. Deepeka and M. K. Badri Narayanan

9.1 Introduction

A Serviced Apartment is often referred as “a home away from home” that provides the guest with accommodations at affordable prices. Service companies and housing developers let out fully furnished apartments as corporate housing units. Few companies manage owned properties, and they are furnished by individual real estate investors. The Serviced Apartment includes studio units, or two or three bedrooms, which are furnished with all modern amenities like refrigerators, kitchenettes, microwave ovens, televisions, and Internet facilities (Wi-Fi). It also includes full housekeeping facilities which are mostly outsourced. They also provide other additional services like gyms, conference rooms, and party halls which are not mandatory. All these are offered at prices lesser than five-star hotel tariffs including the taxes.

Universally, Serviced Apartment is a term had been used to describe an alternative accommodation for long stay purpose in urban locations. The Global Serviced Apartment Industry Report views that the term Serviced Apartment is generic, just as the hotel is the umbrella term for a myriad of different products from bed-and-breakfast to lodges, restaurants, pubs with rooms, and even private houses—as well as traditional hotels. Each niche product has its own market, and each market has seen homegrown products evolve.

In its process of transition between the hotel and residential worlds, the availability of amenities and services varies. Round-the-clock reception desks, on-site staff or restaurants, have now become an exception, rather than the norm, but

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Table 9.1 MSME classification in India

S. No.	Enterprises	Manufacturing sector	Service sector
1	Micro	Should not be more than Rs. 25,00,000	Not exceeding Rs.10,00,000
2	Small	More than Rs. 25,00,000 but not exceeding Rs. 5,00,00,000	More than Rs. 10,00,000 but not exceeding Rs. 2,00,00,000
3	Medium	More than Rs.5,00,00,000 but not exceeding Rs.10,00,00,000	More than Rs. 2,00,00,000 but not exceeding Rs. 5,00,00,000

Source Govt. of India, Development Commissioner MSME (Ministry of Micro, Small, and Medium Enterprise)

customer service, cleaning, maintenance services, health, and safety compliance are essential features of any Serviced Apartment (Krishna Kumar, 2015).

In July 2014, fifteen of Europe's leading operators signed a charter at the second Serviced Apartment summit held in London. This charter recognized Serviced Apartment as the generic term for aparthotel and corporate housing, but stopped short of recognizing terms, such as extended stay or branded residence, affirming instead that the two distinct types of product fall under the umbrella term Serviced Apartment.

In India, the Serviced Apartment Industry falls under the MSME sector as it complies with the investment criteria—between Rs. 10 lakh and Rs. 5 crore in case of a service sector enterprise. According to MSMED act 2006, enterprises are classified into manufacturing and service enterprises. The manufacturing sector would venture in plant and machinery whereas, the service sector for equipment. The investment limit for these enterprises is as follows (Table 9.1).

This study has targeted 30 Serviced Apartment operators; in which most of them belong to the startup category, whereas the others have entered the business because of the market demand and to earn profit.

9.2 Literature Review

Since the Serviced Apartments (SA) sector is emerging, a very few research studies have been pursued. Majority of the literature on the Serviced Apartments are either press reports, expert interviews, or industry reports by consultancy firms. A glimpse of selected research works is presented below:

- The alternative accommodation industry comprises of three types: Serviced Apartments, guest houses, and commercial homes. Commercial homes have been further classified into different categories such as bed-and-breakfast cottages, bed-and-breakfast hotels, bed-and-breakfast inns, country inns, and homestays (Gunasekaran & Anandkumar, 2012).

- A Serviced Apartment can be understood as a self-contained unit that has additional service facilities and is suitable for short-term stay. While the facilities it offers would be comparable to those offered by a hotel, it also provides the privacy and appeal of a home (Foxley, 2001). Serviced Apartments offer a good value proposition for slightly longer term travelers like those who would like to stay for a working week at a location, as they cost are priced at least 20% less than a comparable hotel (ASAP, n.d.). Today, Serviced Apartment offerings worldwide have been further categorized as follows: (i) condotels (Smoke & Burk, 2005); (ii) extended stay hotels (Geieregger & Oehmichen, 2008); and (iii) serviced residences (Hirsh, 2015).
- In Serviced Apartment summit “Serviced Apartment sector in the cusp of major growth” more than 200 participants including Spain, the US, Dubai, Italy, France, and Saudi Arabia gathered in Andaz Liverpool Street for the first Serviced Apartment summit. The summit concentrated on the concept of demand and supply, financing, and structure of the business; online marketing and OTAs were discussed for the further growth of the industry. So many industry people shared on the growth of the industry. Among them, Sean Worker, CEO of Bridge Street Global Hospitality said the sector has growth opportunity for future expansion. He also indicated that the need for standardization and a code of conduct is necessary for this industry. Mark Harris of the Travel Intelligence Network from his research measured the Serviced Apartment sector around 650,000 units in 9,000 locations worldwide. He concluded that the Serviced Apartment industry has the huge potentiality to grow in future, and the education toward this has to be realized.

It is quite evident that there exists a lack of a universal definition for Serviced Apartments, as it is an emerging industry. Also, there is a dearth of research studies focusing Indian scenario. This research paper is intended to fill this gap in the literature.

9.3 Objectives

- To study the Serviced Apartment industry in India, its emergence and composition
- To analyze the growth opportunities, challenges, strategies adopted by the Serviced Apartments
- To trace the process, internationalization of Indian Serviced Apartment industry
- To understand the best practices adopted at UK in Serviced Apartment industry and highlight the lessons for the emerging industry in India

9.4 Methodology

A descriptive methodology has been employed in this study using both primary and secondary data. Primary data was collected using a prestructured questionnaire (provided in the appendix) from the owners/key executives of 30 selected Serviced Apartments (SAs) in Chennai city, the capital of Tamil Nadu state in India. Simple random sampling method was used to collect primary data. Secondary data used in this study has been collected from published sources.

9.5 Serviced Apartments: the Asian Scenario

The GSAIR 2015/16 has highlighted that 72,857 Serviced Apartments are spread across 551 locations in Asia in 2014–15, when compared to 49,480 Serviced Apartments in 419 locations in 2013–14. This represents a sharp rise both the number of SAs and locations. The GSAIR report states that “on the world’s total supply of Serviced Apartments, Asia accounts for 9.6% in 5.5% of the world’s Serviced Apartments’ locations.” Table 9.2 presents the Asian scenario.

Table 9.2 Leading Serviced Apartment operators in Asia

Operator	Promoter	Locations	Apartments
Somerset	The Ascott Limited	49	9,031
Other serviced residences	The Ascott Limited	58	4,612
Ascott The Residence	The Ascott Limited	23	4,789
Citadines	The Ascott Limited	27	4,378
Oakwood	Oakwood Corporate Housing	27	4,014
Fraser Suites	Frasers Hospitality	11	2,628
Co-op Residences—Seoul	Co-op Serviced Residences	8	2,195
Compass Hospitality—Bangkok		10	2,000
Nieva World Apartments		14	2,000
Tokyo Stay Apartment Hotels—Tokyo		15	1,950
	Sub-total	242	37,597
	Total for the region	551	72,857

Source The Global Serviced Apartments Industry Report (2013–14)

9.6 Serviced Apartments: the Indian Scenario

Due to globalization over the last decade and the subsequent incursion of MNCs, top executives, business travelers, professionals, expatriates, students, medical tourists, and leisure travelers into the country, Table 9.3 indicates a positive trend in different categories of foreign tourist arrivals in India.

According to industry experts, the Indian extended stay market broadly consists of two segments, namely 3–4-star hotels and budget/economy hotels. India also has a large number of smaller single property motels/guesthouses providing services to the budget traveler. But there is definite emergence in the growth of dedicated Serviced Apartment chains, especially in commercial cities.

9.7 Star Hotel Chains in Indian Serviced Apartments Industry

Reputed chains of branded hotels like Hotel Leela Venture, Grand Hyatt, Hilton, and Marriott International have their presence in the serviced apartment’s scenario of India. Ascott is considered as the world’s largest recognized serviced residence operator. It has its apartments operating across Mumbai, Bengaluru, Delhi, Chennai, and Pune to utilize the opportunity and to bridge the demand–supply gap. Top Serviced Apartment brands are operated by branded hotel chains so that the operating costs can be lowered, and the staff/guest ratio can also be reduced. A number of international brands have developed Serviced Apartments in association with local developers, catering largely to the corporate sector.

In addition to standalone Serviced Apartment properties, several hotel chains are offering a section of their suites as serviced residences and are even launching new properties that will be operated as Serviced Apartments. GRT Hotels and Resorts, for instance, is setting up serviced residence properties under the brand name GRT Vibes, in Hyderabad and Coimbatore, investing close to Rs. 10 crore for each

Table 9.3 Foreign tourist arrivals (FTAs) in India and their purpose of visit 2009–2013

Year	FTAs (numbers)	Business and professionals	Leisure, holiday and recreation	Visiting friends and relatives	Medical treatment	Education	Others
2009	5167699	15.1	57.5	17.6	2.2	–	7.6
2010	5775692	18.6	24.0	27.5	2.7	–	27.2
2011	6309222	22.5	26.0	24.9	2.2	–	24.3
2012	6577745	22.5	27.1	27.2	2.6	–	20.6
2013	6967601	20.9	30.3	25.9	3.4	1.9	17.6

Source India Tourism Statistics at a Glance (2013)

project. Five-star hotels like Marriot, Hyatt, and ITC which offer Serviced Apartments within their hotels and are seeing good growth. Hotels are motivated to offer Serviced Apartments to guests as that would bring them assured occupancy (Sushma, 2014). For instance, a guest might check out of a hotel for a week on holiday but would not move out of the Serviced Apartment even if he was to go on vacation for a week or more. Any guest who wishes to stay for longer than 15 days is suggested a Serviced Apartment. It works well as expats who have just come into India need not set up a house from scratch and for the hotel, revenues are better.

9.8 Other Operators in Indian Serviced Apartments Industry

Several small- to mid-size builders have started positioning Serviced Apartments as a good investment opportunity with attractive returns ranging from 9 to 14% per annum. Predominantly, investment in residential properties is preferred more for capital appreciation than rental income. The annual rental income from a residential property ranges between 3 and 4% per annum as against the capital appreciation of 10–15%.

Rents across the country for corporate clients range from Rs. 2,000 to Rs. 8,000 per room night. Medical tourists who are staying for long durations pay between Rs. 40,000 and Rs. 200,000 per month. The costs go up based on the city and the amenities offered. The high growth rate is putting a downward pressure on average room rates. Meanwhile, shrewd investors have quickly entered the model of buying residential apartments, outfitting them, and letting them out as Serviced Apartments, either by themselves or through professional agencies.

According to GS AIR 2015/16, Bengaluru has experienced the biggest annual growth in average rate, with double-digit increase in all Serviced Apartment types.

The year 2013–14 has witnessed a growth in the number of Serviced Apartments and other budget options emerging across India. There has also been retrofitting of conventional apartment building and conversion to Serviced Apartment usage—especially in Delhi–Gurgaon (Table 9.4).

Table 9.4 Costs involved in converting a property into a Serviced Apartment

S. No.	Particulars	Amount
	<i>Fixed expenses</i>	
1	Kitchen appliances	Rs. 50,000–Rs. 60,000
2	Communication facilities	Rs. 25,000–Rs. 30,000
3	White goods	Rs. 3,00,000–Rs. 4,00,000
4	Furniture	Rs. 1,25,000–Rs. 1,50,000
	<i>Recurring expenses</i>	
5	Regular maintenance (per annum)	Rs. 100,000–Rs. 1,50,000

Source Amit Shanbaug, The Economic Times (2014)

As a move to encourage individuals with investible surplus to invest in Serviced Apartments, in Noida, a Delhi suburb, Serviced Apartments are being promoted with a return of 14% per annum on a minimum investment of Rs. 10 lakh. Developers from the region of Delhi are launching serviced residences for sale to individuals. This trend is certainly picking up in several emerging destinations of the country. Such initiatives while bringing in more players also intensifies the competition in this emerging industry.

9.9 Growth Estimates for Serviced Apartments

Industry sources are pegging the growth of Serviced Apartments in India at 20%, while the overall hospitality market is growing at 4%.

The growth of sectors like IT, ITES, BPO, consulting, and financial services has also driven this demand.

According to the GSAIR 2015/16, while the five-star hotels recorded a 5.2% dip in overall RevPAR from 2012 to 2013 the budget hotels recorded a growth of 10.4%. Serviced Apartment RevPAR has been similar during the last 5 years, whereas the revenues of hospitality industry have grown. The growth in revenue is seen mostly outside the top five commercial cities in India, as shown in Table 9.5.

This supply and demand table indicates that the average room rate has gone down, as the market is more competitive providing wider choices to the customers, resulting in the lower average room rate with higher volumes. To make profits, it is essential to offset the lower revenue by having a larger capacity.

9.10 The Viability Question

The GSAIR declares that the fixed cost of marketing/commission per room has slightly increased. This implies that to earn profits, a Serviced Apartment should be large enough to sell rooms at a lower price and thus keep its occupancy percentage high and enjoy overall higher revenue compared to a smaller establishment selling at high costs.

Table 9.5 Supply and demand trends in India, 2009–13

City	Supply (%)	Demand (%)	Avg room rate (%)
Ahmedabad	32.70	30.10	-5.10
Gurgaon	31.20	26.20	-5.90
Noida	40.70	19.30	-3.70
Pune	39.90	37.50	-14.60
All India	17.80	17.30	-6.90

Source Perch Service Apartments, The Global Serviced Apartments Industry Report (2015–16)

Table 9.6 Indian market scenario

Mature/Oversupplied markets	Stable markets	Emerging markets
New Delhi, Kolkata, Mumbai, Goa	Noida, Gurgaon, Lucknow	Bengaluru, Pune, Jaipur, Ahmedabad

Source The Global Serviced Apartments Industry Report (2015–16)

According to the GSAIR, an approximate size to cover fixed marketing/ commission costs in Serviced Apartments in a major commercial center works out to a minimum of 30 keys (Table 9.6).

9.11 Medical Tourism—The Market Beyond Corporates

Medical tourists prefer Serviced Apartments over hotels for a few, very solid reasons. First, they are more cost-effective than hotels, offering private homes, where families can cook, relax, and stay under one roof, for a reasonable price (Vaishna, 2013).

Second, most of them are professionally managed, with 24-hour concierge and emergency assistance which are vital especially for patients who come from other countries. Finally, apartments for patients must be planned well, with lifts and all amenities. Hygiene is important, and rooms must be periodically cleaned and linen changed. All this is a part of the Serviced Apartment contract. Typically, Serviced Apartment costs for medical tourists are different from what is offered for short stay corporate clients.

9.12 Emerging Online Models

Online booking portals and global distribution systems are making online booking easier and more convenient for Serviced Apartment users. Portals such as Booking.com, Expedia, and others are managing real-time inventories of hotels and are also offering useful reviews for guests to help making their decision making process easier. The adoption even by smaller chains has been constructive, and approximately, about 35% of all Serviced Apartment rooms are available on GDS.

Airbnb is offering leisure (and some corporate) travelers overnight accommodation in privately owned houses for less than the cost of a hotel and mainstream serviced apartments. A recent valuation has placed the Airbnb's worth slightly above that of Hyatt international—a 50-year-old hotel chain. In 2014, Airbnb was among the fastest growing accommodation for corporate. Concur, a popular software provider on expense management for 20,000 corporations has reported that their clients' use of Airbnb has quadrupled every year since 2010.

RoomLion.com, an online portal run by Scrappy Ventures, provides its customers to search and book Serviced Apartments online in India. This portal offers Google street view, 360° virtual tour of the apartments with basic furnishings and

other mandatory facility like housekeeping. This portal has 7,800 Serviced Apartments across nine cities registered under its portal. The owners of residences can register free, and the company earns revenue based on bookings through the site. Over a period of time, the apartment owners shall pay a registration fee. The company aims to earn around Rs. 5 crore by the end of the year 2015. Apart from metro cities of India, the company will also expand its services abroad. In the future, RoomLion.com is also planning to run a chain of its own Serviced Apartments apart from expansion through franchising (Vasumitra Adarsh, 2014).

There are companies such as Alacruiity that take care of the entire pre- and post-hospitalization services for both Indian and global patients. Among the services offered long-term accommodation, which Alacruiity does through Serviced Apartments. They explore the options based on budget as well as requirements, offer best terms, as the services are pre-qualified by Alacruiity and they pre-negotiate with service providers, thereby saving a lot of stress for the patient. In turn, they charge a 15% commission.

9.13 The Indicators of Internationalization of SAs in India

Ascott Ltd., the global leader in this industry, has begun its second project in Gurgaon, which is its eighth in India and has a size of more than 1,400 apartments. It shall also be expanding its operations across Delhi, Pune, and Mumbai. Ascott has partnered with Puri Constructions to manage Serviced Apartments.

StayWell Hospitality Group and VSR Infratech have signed a management contract for a Serviced Apartment's venture in Gurgaon's sector 68. BridgeStreet Global Hospitality is partnering with JNP Group and Homestead on a 20-year tri-party agreement. BridgeStreet shall be providing asset and facilities management services for Homestead's upcoming new luxury serviced residences in Gurgaon called *Michael Schumacher World Tower* and *Ballet by Sharapova*. BridgeStreet and Everlike Buildcon Private Ltd., a (division of Silverglades) have also signed a franchise agreement for 10 years, for a 2.75 acre Merchant Plaza that includes commercial, retail, and Serviced Apartments in an area of 2.5 million square feet. In Feb 2015, an online accommodation portal Stayzilla has brought in about Rs. 124 crore led by Nexus Venture Partners and also contributed by their prevailing investors—Matrix Partners (Sell, 2014).

The funds will be used primarily to expand the niche alternative stays market in India that largely includes lodges, cottages, home stays, unstructured ones like secondary homes turned Serviced Apartments, and bed-and-breakfasts, among others. These developments indicate increasing attention and investment by international brands and investors in the Serviced Apartments sector have marked the initiation of internationalization process in the industry. The bare fact is that the industry is still in its infancy, with the big branded hotels dominating the scenario, followed by property developers, with their eyes set on the booming numbers of business travelers due to the thriving multinationals in the country.

9.14 Serviced Apartment Scenario in Chennai

Chennai has about eight organized operators, with an inventory of 450 rooms. Some key players include Seasons, Ascott, Lotus, Blossoms, and Star City.

In 2012, Somerset Greenways came in with 187 rooms, while Shangri-La Hotel planned to launch 52 apartments.

The Ascott Limited, which manages the Somerset Greenways in Chennai, has reported occupancies of about 75% with CEOs and other top executives of several companies checking into the serviced residences.

In Chennai, rents are low, when compared to other metros of the country averaging from Rs. 2,200 to Rs. 3,200 per day, although there is a niche, upscale segment serviced by companies such as Somerset Greenways. Hence, Chennai has been purposively chosen for this study.

9.15 Challenges and Issues

Being an emerging industry, there are several issues and challenges facing the Serviced Apartments industry (Table 9.7).

Table 9.7 Barriers to greater use of Serviced Apartments

Corporates		Travelers		Agents	
Shortage of apartments in required locations	72%	Inconsistent quality	75%	Shortage of apartments in required locations	80%
Inconsistent levels of guest amenities and services	86%	Inconsistent levels of guest amenities and services	70.60%	Inconsistent quality	72.60%
Inconsistent quality of serviced apartments	63.60%	Shortage of apartments in required locations	67.20%	Inconsistent levels of guest amenities and services	72.60%
Booking process takes too long	58.20%	Booking process takes too long	57.60%	Inconsistency in agency remuneration	62.20%
Lack of recognized brands in the sector	57.80%	Lack of recognized brands in the sector	50%	Lack of recognized brands in the sector	61%

Source The Global Serviced Apartments Industry Report (2015–16)

9.16 Segmentation Targeting and Positioning Dilemmas

Serviced residences substantially concentrate on corporate customers including expatriates, business, and domestic travelers. Serviced residences are gaining popularity with transit, short stay, and leisure travelers because of its convenience and comfort at par with the luxuries of a hotel.

There emerges a challenge, when these apartments look away from their core client base of long stay travelers and start to target the transit guests for quicker revenues. But the requirements of short stay and long stay guests are different.

When Serviced Apartments begin to concentrate on the transit customers, they have to increase their man power, facilities like restaurants, in-room dining, concierge, has to be present and they begin to duplicate the operations of a regular hotel.

It shall endanger the model as the duration is shortened to just a couple of days, occupancies become low; tariffs have to be competitive with those of the hotels, despite providing a larger space. Thus, the yield per sq. ft shall make it unattractive in terms of profits. Facilities like restaurants, fitness centers, salon, and spa can be provided by the Serviced Apartment providers on the basis of partnership.

9.17 Right Location

In India, the destinations like Chennai, Bengaluru, Hyderabad, Mumbai are experiencing growth in Serviced Apartments in the recent past. Also, Gurgaon and Noida in the Delhi NCR are the upcoming destinations and have started to attract the real estate developers for serviced residences.

Nevertheless, there are barriers in the hospitality sector viz. tariffs, price sensitivity, and the prohibitive land prices. But due to its flexible nature, the Serviced Apartment model shall be able to adapt to the place where it is located. In popular areas, people are also converting their property's top floors as Serviced Apartments, whereas the bottom portion continues as a traditional hotel.

A standalone Serviced Apartment is unique because of its ability to provide the essence of a serviced residence along with the traditional ways. Experience provided by these serviced residence is homely, and they provide a warm atmosphere. The basis of operation of these apartments is determined by the land value if it is feasible at the right market and target segment.

9.18 Best Practices from the Industry Association in the UK

Though across the globe, predominantly Serviced Apartments are yet to gain a formal recognition; it is evolving as a recognized sector in the UK. Private equity funds have entered the UK Serviced Apartments market largely through the creation of new owner-operated brands. This entry of private equity funds and rising levels of committed resources means that the expansion of the sector shall be significant. The association of Serviced Apartments providers (ASAP) is a not-for-profit association started in 2002 to represent Serviced Apartment operators in the United Kingdom (UK) and Ireland. Founded in 2002, it has 94 members, 27 sponsor partners, and 11 agents. Over 14,000 properties are owned and operated by its members across the major cities of UK and Ireland. Serviced residence operators, as well as Serviced Apartment agencies, are the members of this organization.

9.19 Membership

ASAP offers three categories of membership—member, quality accredited member, and partner, where the member (operating at least 6 SAs), who graduates to become a QA Member upon accreditation and the partner can be a supplier or a BDS provider, looking for business opportunities with the members.

Every accredited member is expected to operate and abide by the association's code of conduct and should have proven capabilities in gaining a minimum level of standard and the quality are assessed by the Quality Assessment program.

9.20 Membership Benefits

See Table [9.8](#).

9.21 The ASAP Accreditation

ASAP has introduced a centralized quality assessment processes in order to ensure legal, health, and safety requirements and good practices with regard to quality. Each operator wishing to become a quality accredited member of ASAP is required to participate in the Quality Assessment program and successfully achieve accreditation. The accreditation program focuses on core requirements and measures the success of delivery. The process is given below:

Table 9.8 Benefits for ASAP members

Business development	Quality improvement	Support	Networking	Training
<ul style="list-style-type: none"> • The member company and property locations can be featured with its profile on ASAP Website • Benefit from the ASAP press release program • Participate in the business travel show at specially negotiated rates 	<ul style="list-style-type: none"> • Quality assessment program and accreditation • Monthly occupancy data analysis to measure the member’s business performance vis-à-vis competitors and the sector overall • Immediate fraud alert notification 	<ul style="list-style-type: none"> • Free HR advice by ASAP sponsored partner • Free health and safety advice line—through ASAP sponsor partner—common sense compliance 	<ul style="list-style-type: none"> • Participate in quarterly, general, regional, and networking meetings to put forth current issues and network with the members • About 75% discount at the ASAP conference and exhibition conducted every year in the month of December, which is attended by more than 300 participants from all areas of the Serviced Apartment sector each year 	<ul style="list-style-type: none"> • Participate in educational seminars, and meeting various suppliers at the exhibition • Participate in the training program conducted annually, by offering courses concentrating in Serviced Apartment sector

Source Joyce Cawthorpe, Association of Serviced Apartment Providers (2015)

- Each operator will undergo a sample site visit, overnight quality assessment, and a complete review of the core requirements and business practices annually.
- Every year, the assessor will experience the guest’s journey (guest cycle) from: apartment selection, reservation and booking, arrival and check-in formalities, an entire night’s stay and departure. Every aspect of this experience will be measured and compared to ASAP’s quality, safety, and security standards.
- In addition to the overnight stay, a minimum sample of 10% of the operator’s portfolio will also be assessed in order to ensure consistency throughout the portfolio and accuracy of any marketing collateral.
- The assessment will also draw on an Internet review mechanism to validate guest’s satisfaction as well as any internal processes used to capture guest feedback. It is important that a cross section of data is used to ensure an accurate and true reflection of the product offered.

On successful completion, an operator will be entitled to use the ASAP quality accredited marque which will indicate full membership.

9.22 Lessons for India from ASAP

As the Serviced Apartment sector in its infancy, it is essential to build an industry association of a similar kind and offers the services of business development, quality improvement, support, networking, and training, which shall help the industry to a guided growth phase.

With increasing international customers and investors to the sector, it becomes an important requirement for building a strong industry association to guide and support individuals, start-ups, and MSMEs, who shall otherwise find it difficult to compete with the spin-offs from the star hotels.

With the vast experience of India in promoting MSME clusters, development of this sector can be effectively catalyzed by promoting the industry association which shall serve as a Cluster Development Agent for supporting the MSME players who are emerging. Such an association can also play a vital role in framing a suitable policy framework for governing this sector, since there is a complete policy vacuum for the sector which has high growth potential.

9.23 Highlights of the Survey Findings

The highlights of findings of the survey conducted with 30 Serviced Apartments in Chennai have been presented below:

- Among the respondents, 78% of them are individual players, whereas 22% are branded in this industry.
- About 73% of the Serviced Apartments do not have a proper Website. This is the biggest drawback and this would create a communication or a follow-up gap with the customers. This shows that they lack in the usage of technologies.
- About 87% of the properties have less than 10 keys. Whereas, the GSAIR indicates that at least 30 keys are required for viability.
- The number of employees in operational is less than 2, and support is less than 4 in number. The number of employees should be adequate to provide services for the existing inventories.
- The average occupancy of these apartments showed a positive sign. Most of the properties were occupied more than 80%, which shows that there is a demand for this sector.
- The rates offered by them were affordable when compared to hotels, where the standard rooms were less than Rs. 2,000; Double rooms were less than Rs. 3,000 and suite rooms were below Rs. 8,000. Since the inventories were less, few even offered full property for Rs. 25,000
- The major types of customers were corporate, among whom 70% were domestic travelers and the rest catering to expatriates. The number of women travelers utilizing the SAs was found less when compared to men.

- The SAs primarily targeted the working professionals 70%. The share of students 5% and medical tourists 25% shows that the major target group is working professionals, whereas medical tourists belong the emerging category.
- While the working professionals rented the SAs on yearly, half yearly, and quarterly basis, the medical tourists stayed on a weekly basis which is basically the period of follow up after their treatment. The students stayed on quarterly basis (during their project period and final semesters).
- The average percentage of repeat customers was found a little more than 60%.
- All the apartments offered Wi-Fi facility. About 80% of them offered cab services. About 82% of them offered complimentary breakfast for the guests. About 58% had restaurants attached to them and 24% of the apartments offered health center facilities.
- About 96% of the apartments used discounts and special services as models to retain the customers.
- Sources of the distribution channel for these apartments were 97% through corporate discounts, 80% through travel agent, 70% from third-party online vendors, 40% through GDS, and 27% through hospitals.
- From the SA perspective, the factors influencing customer preference especially in categories of education and medical tourism were dominated by tariff, location followed by facilities, safety, and services.
- In consonance with the above findings, the respondent-SAs ranked pricing followed by the location as the major strength of the competitor while service quality and brand reputation scored the bottom ranks. This indicates the necessity to sensitize on maintaining quality standards to achieve competitive advantage.
- The major challenges faced by the Serviced Apartments are summarized in Table 9.9.

The survey findings clearly indicate that the industry is emerging with activity; there is an ambiguity in STP, lack of awareness about maintaining quality standards, price being the major differentiator; thereby increasing the pressure on cost, lack of funding sources, licensing issues, etc. It reflects the trends of emerging industry with the emerging entities and spin-offs playing in an uneven field, eyeing the same market; but, their preparedness to harness the recent development of internationalization process of the industry appears to be low.

9.24 Recommendations

Based on the above analysis, the following recommendations are made as follows:

- The room inventories for these apartments can be increased, as there is a lot of demand for it. Moreover, GSAIR states that the viable operation size for the SAs is more than 30 inventories.

Table 9.9 Challenges faced

Easy	Less challenging	Moderately challenging	Somewhat challenging	Very challenging
Ensuring quality of supplies—50%	Retention of man power—30%	Reaching out to customers—40%	Availability of man power—63%	Retaining customers—40%
–	–	Customer expectations in terms of price—43%	Quality of man power—60%	Customer expectations in terms of quality—37%
–	–	Negotiating supplier contracts—60%	Obtaining loan from banks—43%	Salary cost—40%
–	–	–	Loans from formal other sources—50%	Obtaining certification/license—43%

Source Authors’ findings using rating scale

- Improving the online presence and advertising online is essential for the Serviced Apartments to harness the emerging market.
- The Serviced Apartment operators can increase the number of employees, especially in operational and support levels, as they are the ones who play a major role in these kinds of accommodation to provide the quality service experience.
- Quality of the services can be improved by introducing accreditation through industry associations.
- There is lack of availability of man power in this industry. Creating awareness and training will help them to understand the industry’s growth level.
- Medical tourism is an upcoming trend in India. So the service providers can also concentrate on this sector by having tie up with hospitals accredited for medical tourism.
- In order to retain the customers, these apartments can also opt for loyalty programs. Frequent follow ups with them will also help to retain them.
- Apart from the location, the service providers can also concentrate on safety issues and facilities they provide to customers and offer friendly service.
- Government can also take initiative in providing license or certification as almost all of service providers find difficulty in obtaining them, and few are not aware on the process.
- Linking up the SAs with the new wave financing institutions like VCs, private equity firms, crowd funding shall help to handle the issues of funding. Banking sector should certainly be sensitized for working capital financing of this sector.
- The emerging business models like RoomLion.com, Alacruity have to be replicated, scaled up, and integrated into the mainstream for activating more start-ups to utilize the emerging opportunity.

- Above all, a strong industry association like ASAP is required to guide and support individuals, start-ups, and MSMEs, who shall otherwise find it difficult to compete with the spin-offs from the star hotels. Apart from advocacy, this association should also provide the services of policy advocacy, business development, quality improvement, support, networking, and training, which shall help the industry to a guided growth phase.

9.25 Discussion

Global trends in Serviced Apartments industry have shown a noticeable growth in a majority of countries. However, the rate of growth has not been uniform with 5.3 Serviced Apartment units per 1,000 business travelers available in Asia, while London has 1.6 per 1,000, and New York has 5.7 per 1,000 (Giraud, 2014). The Serviced Apartments industry is facing few challenges which are great barriers for its growth. Understanding the difference between a hotel and a serviced apartment is a key challenge. This can be overcome by educating travelers and by positioning Serviced Apartments appropriately in the market vis-à-vis hotels. This might become slightly problematic as the line dividing the two—Serviced Apartments and hotels—is not clearly apparent. As Serviced Apartments add more and more services, there is also an emerging trend among certain hotel chains which are working toward the concept of “budget stay” at the same time. Apart from this, the other important challenge is branding. The branding of a Serviced Apartment should reflect its quality. The UK Serviced Apartment industry, which is monitored by the ASAP, has set standards for the industry and works toward the quality for the growth of the sector (Giraud, 2014). However, given the growth prospects of the region that India is located in, much needs to be done in the country to monitor and regulate the service delivery in this sector.

9.26 Conclusion

India as an emerging destination for this industry can look up to these kinds of service providers and can raise the industry standards. This study shows that the industry in India has a long way to go to cope with other leading nations. The awareness among the individual market players should be created so that they understand the positioning of their product in the industry. With increasing international customers and investors to the sector, it becomes an important requirement for building a strong industry association to guide and support individuals, start-ups, and MSMEs, who shall otherwise find it difficult to compete with the spin-offs from the star hotels. With the vast experience of India in promoting MSME clusters, development of this sector can be effectively catalyzed by promoting the industry association which shall serve as a

Cluster Development Agent for supporting the MSME players who are emerging. Such an association can also play a vital role in framing a suitable policy framework for governing this sector, since there is a complete policy vacuum for the sector which has high growth potential.

Appendix

Serviced Apartments Industry in India: A Study on Issues, Growth Prospects and Best Practices for Internationalization

Questionnaire

Dear Respondent, this is a Research study to analyze Serviced Apartments Industry in India: A Study on Issues, Growth Prospects and Best Practices for Internationalization.

The Questionnaire is designed to collect required information from the selected reputed Serviced Apartments in Chennai only. The details collected for the study shall be used only for academic research purposes.

Name and Type of the Accommodation	
Year of Establishment	
Are you registered? If Yes, state the year of registration	
Website	
Year of Incorporation in Chennai	
Are you a part of any Business group? If Yes, name the group	
Type of Property	Owned / Managed / Franchised
Certifications obtained, if any	
No. of Rooms	
No. of Employees in your organization	Managerial ___ Operational ___ Support ___
Level of Office Automation	Manual / Semi Automated
Name and designation of the Respondent	
Email Id/Contact No.	

1. Average occupancy percentage annually

0 - 25

26 - 50

51 - 75

76 – 100

2. Type of room and tariff structure (if available in website, need not be mentioned)

Standard room Rs. _____ Double room Rs. _____

Suite Rs. _____ Others, Specify _____

3. Type of clientele (in percentage)

Expatriate _____ Domestic _____

4. Targeted Clientele in Percentage

Working Professionals _____ Students _____ Medical Tourists _____

5. Duration of Stay

Working Professionals	<input type="checkbox"/> Yearly	<input type="checkbox"/> Half yearly
	<input type="checkbox"/> Quarterly	<input type="checkbox"/> Monthly
	<input type="checkbox"/> Weekly	<input type="checkbox"/> Day basis
Students	<input type="checkbox"/> Yearly	<input type="checkbox"/> Half yearly
	<input type="checkbox"/> Quarterly	<input type="checkbox"/> Monthly
	<input type="checkbox"/> Weekly	<input type="checkbox"/> Day basis
Medical Tourists	<input type="checkbox"/> Yearly	<input type="checkbox"/> Half yearly
	<input type="checkbox"/> Quarterly	<input type="checkbox"/> Monthly
	<input type="checkbox"/> Weekly	<input type="checkbox"/> Day basis

6. Proportion of Clientele in Percentage

Onetime	<input type="checkbox"/> Less than 20	<input type="checkbox"/> 20-40
	<input type="checkbox"/> 41-60	<input type="checkbox"/> 61-80
	<input type="checkbox"/> Above 80	
Repeat Short stay	<input type="checkbox"/> Less than 20	<input type="checkbox"/> 20-40
	<input type="checkbox"/> 41-60	<input type="checkbox"/> 61-80
	<input type="checkbox"/> Above 80	
Long stay	<input type="checkbox"/> Less than 20	<input type="checkbox"/> 20-40
	<input type="checkbox"/> 41-60	<input type="checkbox"/> 61-80
	<input type="checkbox"/> Above 80	

7. Services offered (Please ✓ the following)

Services	Owned	Outsourced
Restaurant		
Provision for Self- Cooking		

Laundry		
Mess		
Travel Desk		
Cab Services		
Housekeeping Services		
Wi-Fi		

Others, specify _____

8. Percentage of Repeat Customers

- 0 - 25 26 - 50 51 - 75 76 – 100

9. Safety Systems and Procedures adopted

- CCTV circuits 24hrs Security Services Visitors Monitoring Others, specify_____

10. Methods deployed to retain Customers

- Discounts Special services Others, specify_____

11. What are the other sources of Distribution Channels to bring in Tourist/Guest?

- Travel Agents / Tour Operators Global Distribution Systems (GDS)
 Third Party Online vendors Corporate discounts
 Hospitals Social Media
 Others, Specify_____

12. Reasons for preference by customers (please rank from 1 to 7)

Location (proximity)	
Ambience	
Facilities	
Tariff	
Safety	
Brand	
Friendly Service	

13. Competition Landscape

Landscapes	No. of Competitors
When you started	
At Present	

14. Major Competitors (top three)

Name of the Competitor	Major Strength (Score out of 10)						
	Location (proximity)	Ambience	Facilities	Tariff	Safety	Brand	Friendly Service

15. Rate the following with reference to the Business challenges faced by you

Factors	Easy					Difficult				
Reaching out to Guests	1	2	3	4	5	1	2	3	4	5
Retaining Guests	1	2	3	4	5	1	2	3	4	5
Managing the Guests	1	2	3	4	5	1	2	3	4	5
Meeting Guests expectations in terms of Quality	1	2	3	4	5	1	2	3	4	5
Meeting Guests expectations in terms of Tariff	1	2	3	4	5	1	2	3	4	5
Availability of man power	1	2	3	4	5	1	2	3	4	5
Quality of man power	1	2	3	4	5	1	2	3	4	5
Retention of Employees	1	2	3	4	5	1	2	3	4	5
Employee salary cost	1	2	3	4	5	1	2	3	4	5
Obtaining Loan from Banks	1	2	3	4	5	1	2	3	4	5
Obtaining Loan from other sources	1	2	3	4	5	1	2	3	4	5
Negotiating supplier contracts	1	2	3	4	5	1	2	3	4	5
Ensuring Quality of Supplies	1	2	3	4	5	1	2	3	4	5

16. Are you planning to expand the Operations?

Yes No

17. If Yes, Which will be your target group for expansion?

- Working Professionals Students Medical Tourists Others, Specify

18. What will be the future challenges for your business expansion?

Challenges	Rank from 1 to 5
Raising Capital	
Increase in competitors	
Increasing Customer Expectation	
Maintenance Cost	
Rent Fixation	

Others, Specify _____

Thanks for your valuable time!!!

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Chapter 10

Motives, Drivers, and Barriers for Internationalization: A Study of SMEs in Andhra Pradesh



Kalagadda Prasanthi and M. Bhaskara Rao

10.1 Introduction

Small and medium enterprises (SMEs) contribute nearly 40% of the gross industrial value and are the backbone for Indian economy playing an important role in the growth of GDP, exports, and employment generation. In fact, SMEs are closely associated with performance of the country (Chittithaworn, 2011). Overall, thirteen million SMEs in India having an approximate share of 45% of manufacturing output are employing 41 million people, contributing to 40% of exports, producing more than eight thousand products and contribute to 35% of gross industrial exports. The processes of liberalization and WTO regime have thrown the industries open to many opportunities and challenges (Ashtankar, 2012; Sonia, 2009). SME definition varies from country to country. Egypt considers SMEs as companies which employ more than 5 and fewer than 50 employees, and in Vietnam number of employees are between 10 and 300 (Pandya, 2012).

In India, SMEs are classified on the basis of investment in plant and machinery. The classification in manufacturing sector is based on the investment in plant and machinery, and in services sector it is based on the investment in equipment. The classification of enterprises according to the MSME Act 2006 is as follows (Table 10.1).

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Table 10.1 Classification of SMEs in India

Enterprise	Manufacturing sector	Service sector
	Investment in plant and machinery	Investment in equipment
Micro	Does not exceed twenty five lakh rupees	Does not exceed ten lakh rupees
Small	More than twenty five lakh rupees but does not exceed five crore rupees	More than ten lakh rupees but does not exceed two crore rupees
Medium	More than five crore rupees but does not exceed ten core rupees	More than two crore rupees but does not exceed five core rupees

Source The MSME Development Act (2006), Government of India

Small Scale Industries (SSI) have been renamed as Micro, Small and Medium Enterprises (MSME) since the formation of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 (Sankara Rao, 2014). Organizations such as Entrepreneurship Development Institute of India, District Industries Centres, Small Industries Development Bank of India, Small Industry Development Corporations, and State Trading Corporations established by the Central or the State Governments contribute to development and growth of SMEs in India. Small firms are contributing 25–35% of world's export of manufactured products, and one-fifth of the manufacturing firms receive 10–40% of cross-border activities (Andersson, Gabrielsson, & Wictor, 2004).

The process of internationalization is not only studied by many scholars, academics, but also by governments (Francionii, 2013). SMEs are key source for innovation which not only includes new products and services, but also new improved designs and processes and adaption of new technologies (Ummu, 2012). Internationalization leads to many changes in the market and competitive environment. SMEs which are facing tough competition in both domestic and in foreign markets can use the internationalization as a strategy to overcome the resource barriers. New ways are to be developed for SMEs as the previous strategies of differentiation of product and price have no more value for competitive advantage.

10.2 Literature Review

Internationalization is the process which involves flow of goods and services from various economies of the world without any hurdles, technology, capital, and human capital. Internationalization involves export and import activities, foreign investment, international subcontracting, and international cooperation (Sauti, 2014). Innovative companies try to create their own niche markets, and they create a global focus (Kumar, 2012). Indian market was open to foreign market since 1991 (Kiran, 2013) which provides an opportunity for SMEs as they are more flexible and innovative than large firms (Reddy, 2010). Indeed, innovation and internationalization are sources for SME growth in the foreign markets (Melia, 2010). Many studies proved the relationship between the innovation and

internationalization. SMEs may adapt innovation to strengthen their international business activities (Rammer, 2008) and increase their operations in the international markets following specific development strategies. Advancement of technology and improvement in communication infrastructure (Bell, 2010) accelerated the entry of SMEs in foreign markets. SMEs have to differentiate themselves from other enterprises with uniqueness to gain competitive advantage. Some of the studies also proved that SMEs involved in internationalization process result in the enhancement of quality and productivity (Tallothikar, 2013). SMEs also play a prominent role in eradication of poverty (Phulpoto, 2006).

The term internationalization means to make the company involve in international operations or go globally or expand geographically leading to enterprise's growth. International entrepreneurship is the "process of creatively discovering and exploiting opportunities that lie outside a firm's domestic market in the pursuit of domestic market" (Zahra & George, 2002). According to Hitt et al. (1997), internationalization is "expansion across the borders of global regions and countries into different geographic locations, or markets." Welch and Luostarinen (1988) defined internationalization as "a process of increasing involvement in international market." Internationalization is "a measure of the perceived difference between foreign market and home market space along economic, cultural, political, and market-strategic dimensions" (Nieminen, 2011). Globalization signifies the process of internationalization and liberalization of Indian economy since 1991 which resulted in heavy competition (Sonia, 2009). Generally, the nations around the globe are facing tough competition. Globalization refers to the integration of world into huge market. Globalization of economy and competition around the world is pushing the business to take new ways for sustaining. In order to achieve long-term profitability and remain competitive, not only SMEs, but also large enterprises should undergo internationalization (Kubickova, 2014). "Globalization means free movement of capital, goods, technology, ideas, and people. Any globalization that omits the last one is partial and not sustainable" (Datt, 2014). In order to achieve long-term profit and competitive success, internationalization is the major source. Internationalization is an on-going process in the firms operations like exports, sub-contracting (Sayee, 2003), mergers and acquisitions, foreign investment, strategic alliances, licensing, joint ventures (Kirby, 2001) and financial crisis (He, 2011), firm's innovative products, services (Coviello, 1999) and processes also enable it to involve in internationalization.

Countries like Japan, Korea, Thailand, Malaysia, Kenya, France, Columbia, India, and UK are in the process of developing their SMEs for their economic growth (Ricupero, 2001). Size does not matter in the performance of the firm (Ruzzier, 2007a, b). There are many financial institutions which assist the SMEs. Several studies have concluded that SMEs are capable enough when compared to large firms as they are less affected by external factors vis-à-vis large firms, able to adapt prices to market conditions, flexible and willing to take greater risks.

The countries involved in international activities with more than two countries are given in Fig. 10.1. The process of internationalization is mainly based on entry mode. According to Kotler and Armstrong, there are five stages of entry mode.

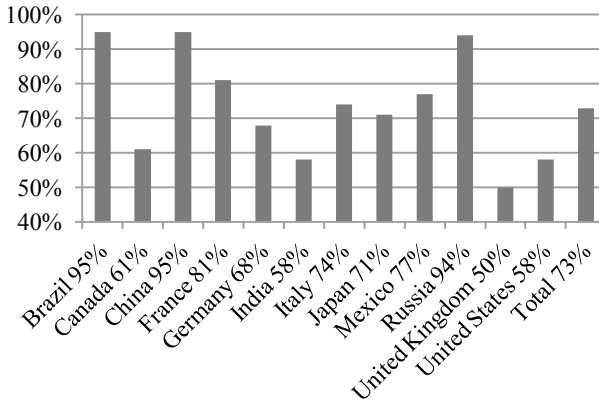


Fig. 10.1 Percentage of international business activity. *Source* IHS Survey 2012

They are deciding—to internationalize or not, which market to enter, how to enter, on global marketing programs and on global marketing organizations (Gustavsson, 2006). Each entry mode has its own limitations and risk as well as control and potentials. The company needs to check whether to go international or not. Next, they have to verify the risk and opportunities. Then, it has to identify the international markets to enter and decide on the objectives and policies. Usually, every company selects only one or few companies and establishes a deep relationship. Through the entry modes like mergers and acquisitions, foreign direct investments or strategic alliances, it takes the entry. Next, it has to decide whether to adapt marketing mix adjusted to each market or use standardized marketing mix. The next stage is to decide on the global marketing program and integrate national marketing program to international program. The final stage is global marketing organization, which the firm has to decide upon.

Most of the companies commence internationalization process with the establishment of export department. According to Hollensen (1998), entry strategies for international markets are the key strategic issues for the companies. Root (1994) states that the entry strategies help firms to set the objectives, goals, deploy resources, and implement policies which help in international business activities and help in achieving sustainable growth in the international market.

There is no best way to enter a new market because each country has different regulations, policies, strategies, and cultures. The top management and the entrepreneur involve and take the decisions pertaining to the organization (Acedo, 2006; Fernandez-Ortiz, 2009). Managerial factors like education, experience, foreign exposure, positive influence to internationalization process, family management, and human capital also affect the process of internationalization (Ruzzier, 2007a, b; Cerrato, 2010; Rutihinda, 2008). The factors affecting the entrepreneurial perception and internationalization are competition, marketing, global value chains, open networking (Chiarvesio, 2010), strategic orientation, technology, and government support (Bhatti, 2012). The critical factors in the international cooperation are

growth (Lu, 2006), knowledge-related motives, and external environment of SMEs (Volchek, 2013). The international activities in the SMEs like enterprise size/age, technology level of the enterprise (Hamill, 1997), CEO age, formal planning processes, and industry environment also act as a determinant factor for the internationalization (Andersson et al., 2004). A study on 105 US small manufacturing firms concluded that entrepreneurial effort toward the enterprise, international growth of customers, opportunity recognition, innovative thinking, creativity, and risk taking positively influences the enterprise in internationalization.

An enterprise's level or extent of international diversification reflects the degree of internationalization. It is reflected in the markets in which the firm operates their importance to the firm and the percentage of foreign sales to total sales (Preece, Miles, & Baetz, 1999). Diversification into international markets provides opportunities for the firms to increase the returns by leveraging the existing products, competencies across multiple markets with higher performance, and reduced risk, offer economies of scale and scope, diversified markets that increase the likelihood of innovation which will satisfy the customer needs, and help the firm to maximize the firm resources across different markets (Radulovich, 2008).

10.3 Internationalization Theories

There are many theories like Uppsala model, innovation-related model, network model, and international entrepreneurship model, which show the patterns of internationalization. But all these theories could not explain the process of internationalization for all the firms since each theory has its own drawbacks. The underlying assumptions of these theories are enterprises that internationalize in an incremental, stepwise, and gradual process of gaining knowledge (culture, language, policies, political systems) (Sommer, 2010) and avoidance of risk factors. The SMEs internationalize gradually by their age and size (Liesch, 1999). Uppsala model (U-model), developed by Johansson and Wiedersheim-Paul in 1975, suggests the enterprise to proceed in a logical way in acquisition of knowledge in market (Toulova, 2015; Kubickova, 2014) and implication in market operations and market (Yener, 2014). This ultimately results in market commitment. This model is criticized by Mtigwe (2006), Anderson (1993), and many other scholars. The U-model explains the enterprises only in the early stages, and it could not explain the born global firms and large multinational firms. They argue how the knowledge affects the commitment. International new ventures (INVs) and network theory had criticized Uppsala model. Many of the SMEs are going global through INVs.

10.3.1 Innovation-Related Theory (I-Model)

According to Rogers, Gankema, and others, innovation-related theory is the process which occurs in series of steps like adoption of new product or process (Laghzaoui 2004). According to Gankema (2000), Gemser (2004), and Le (2004), all the products and processes must enter into the stage of innovation before internationalization.

10.3.2 Network-Related Model

According to Johanson and Mattson, through network the companies are dependent on resources which are controlled by other firms (Lasse, 2012; Zizah, 2011) through a position within the framework they can enter into the foreign market. Many people had studied on these network-related models like Mtigwe (2006), Emerson (1981), and Lindblom (1959). Uppsala model is challenged by network-related model. According to Mtigwe (2006), modern high-tech firms usually involve in the process of internationalization by their experience and resources of network patterns (Musteen, 2014). Every firm in the market is related or linked with their suppliers, customers, sub-contractors and other players in the market thereby the business relationship is established between them through the network, the market knowledge, technology (Buckley, 1997) and other resources are shared among them. However, the newborn company takes the challenges in entering this sort of networks. Born globals do not need any sort of network for the process of internationalization (Masum, 2008; Yener, 2014; Madsen, 1997).

10.3.3 International Entrepreneurship Theory

According to Zahra and George (2002), international entrepreneurship was first developed by Morrow (1988) who suggested that by enhancing with the latest updated technology and declining the cultural barriers to promote the cultural awareness makes all the companies to open the foreign market. McDougall and Oviatt (2005) gave a more widely accepted definition for international entrepreneurship as “a combination of innovative, proactive, and risk-seeking behavior that crosses the national border and is intended to create a value in organization.” High technology, cost effective, and easy ways to access the information and efficient communication between the countries help the countries to move globally. According to this theory, the main player in internationalization is the “Entrepreneur.” It is totally based on his/her skills and opportunities to measure the information in the market, relationship with government, media, suppliers, retailers, and with other firms. Unlike, large enterprises SMEs are also facing many

barriers and hurdles which obstruct in the process of internationalization (Kubickova, 2014). In order to overcome these barriers, there are motives and drivers to accelerate the process of industrialization.

In the process of internationalization of SMEs, there are many motives, drivers, and barriers (Lester, 2008). SMEs face many barriers in the process of internationalization (Crick, 2007; Toulouva, 2015) to succeed in foreign markets. The motives, drivers, and barriers are firm specific because they are having many goals other than these goals. The strategy for SME growth makes it to overcome these barriers. There are several factors, internal and external, which influence the process of internationalization. The enterprise-specific characteristics, management, products and services (Tan, 2008), customers and markets, resources and finance, strategy (Spence, 2003), and external environmental factors act as the motives and drivers for the process of internationalization. Motives and drivers in the enterprise make and enable it to evolve in internationalization.

10.4 Motives for Internationalization

The motives in the internationalization process are examined as a competitive strategy (Pett, 2008). The environmental conditions, firm performance, and competitive strategy influence the internationalization motives. Motives are defined as connotation of action (Kwan, 2006). Many motives induce and force the firm to internationalize which includes growth and risk management strategies (Lis, 2012).

According to Dunning (1994), there are four motives which result in foreign investment, viz., natural resource seeking, market seeking, efficiency seeking, and strategic asset seeking. First three motives make the firm to exploit the assets in the host country, and the last motive helps to improve firm capabilities through learning from foreign country. Some of the motives are niche market selection, market entry, market development strategies, personal resources, attractiveness of the host country (foreign travel and experience from abroad), international appeal, unsolicited proposals from distributors, government, clients, and technology (Yi-Long Jaw, 2006), competition, trade access to large markets, formal planning, industry environment, government policies and support, commitment, vision, survival, domestic market (Senik, 2010), profit-making opportunities, competitive advantage, and increasing shareholder value. Oseh (2013) concluded that the motivation for setting up international business and training and conducting workshops for managers in international business (Etemad, 1999), training of employees, following an international networking strategy, expansion strategy (Hutchinson, 2005; Chong, 2013) and adaptation of new technology would give better results (Oseh, 2013). Virtual R&D teams (Nummela, 2004) are also motive channel for internationalization.

10.5 Drivers for Internationalization

Global and local competitive pressures are most powerful drivers (Kadrolkar, 2011). Drivers of internationalization could be internal or external or both. Internal drivers are the factors which affect inside the firm, and external drivers are the factors which affect outside the firm (European Commission, 2003). The driving forces of SMEs which result in internationalization are new business opportunities in foreign markets, unique organizational competencies, existence of idle operating capacity, pressure from domestic competitors, prior international experience, foreign travel, communication skills, reputation (brand image, goodwill, loyalty), information and communication technology, firm size, corporate growth, new market opportunities, international orientation, international networks (Rutihinda, 2008), international opportunity, improved sales, advancement of technology, business partners, short product life cycle, high cost of R&D, e-commerce (Ewa, 2013), born global, firm CEO or entrepreneur age, and timing of market entry. SMEs internationalization is also facilitated by international networks and foreign market knowledge.

At the industry level, there are four types of drivers for setting up of global strategy, viz., market driver, cost driver, government driver, and competitive driver. Market driver includes finding customers globally, customer behavior, and distribution channel. Cost drivers include potential sourcing efficiencies, cost differentials, skills availability, and realizing the overall economies of scale and scope. Government drivers are the trade and industry policies, and compatibility of technical standards or common marketing regulations. Competitive drivers are the activities of the competitors. The push and pull factors determine the approach for these drivers. Push factors are those which depend on the firm-specific resources, domestic competition, and product cycle. Pull factors are globalization, liberalization of global markets, information and communication technology, foreign resources and partners, needs of the current buyers, and international presence of supplier. The firm characteristics determine which of these two approaches is adapted in the internationalization process. The interaction among the four drivers results in the process of internationalization (Onkelinx, 2008; Etemad, 2004). Technology drives the efficiency, economies of scale and scope, increases competence in difficult markets, and explores new edge innovative technologies (European Commission, 2007) (Table 10.2).

10.6 Barriers for SME Internationalization

There are two types of barriers, viz., external and internal (Leonidou, 2004). External barriers are those which are present outside the organization and affect the process of internationalization. External barriers can be classified as the following:

Table 10.2 Drivers of SME internationalization

Country	Motive/stimulus	Author
Australia	Grow market, control supply chain, reduce cost	EFIC (2008)
Belgium, France, Germany, Greece, Italy, the Netherlands, Poland, Spain, Sweden, and UK	Market position; knowledge and relationship search	Kocker and Buhl (2007)
Canada	Growth market capacity factors, social capital, immigrant links, R&D investment, firm size/age/experience, limited domestic market	Orser et al. (2008)
Ireland and India	Knowledge resources	Garvey and Brennan (2006)
Portugal (Azores Islands)	Social networks/ties	Camara and Simoes (2008)
Spain	Managers previous international experience, firm size/age; regional location; country/regional image	Lopez (2007)
Spain (catalan region)	Managers previous international experience, growth, and profit, expectations, social and business networks, and domestic market saturation/stagnation	Stoian (2006)
Sweden	Growth, managers previous international experience, unique product/technology, limited domestic market	Rundh (2007)
UK	Growth, profits, market size	Barnes et al. (2006)
UK	Growth, profits, to reduce dependence on a single or smaller number of markets	Reynolds (2007)
USA	Profits	UPS (2007)
USA	Weak dollar, immigrant links, Internet global reach	Iwata (2008), USA Today (2008)
USA	Global trade infrastructure	USA Today (2008)
Chile	Firm-specific factors (technology content and size) and sector	Milesi et al. (2007)
Indonesia	Firm size/resource base, sector-level export intensity, presence of foreign buyers, and firm export orientation	Wengel and Rodrigue (2006)

Source OECD (2009)

Procedural barriers: Transactions and operations with the foreign country. This is caused due to lack of knowledge and familiarity with the new procedures, technologies and communication failures;

Government barriers: Include support for potential exporters, incentives, and tariff and nontariff barriers;

Task barriers: Hurdles in foreign markets faced by firms due to customers and competitors;

Environment barriers: Legal, political, economic, social, and cultural environment of the foreign markets.

Internal barriers are those which are present inside the organization and act as a barrier for the process of internationalization. Classification of internal barriers is given below:

Informational barriers: Information inefficiencies, such as lack of information on foreign business opportunities, lack of foreign market data and customers, can lead to problems in identification, selection, and contacting in international markets.

Functional barriers: Factors such as inadequate trained workforce and insufficient working capital refer to the functional barriers. These barriers may relate to organizational functions, viz., human resource, finance, marketing, production.

Marketing barriers: Firms operating in international markets face barriers related to products, pricing, distribution channels, and promotional activities. However, innovation reduces the possible economies of scale in exporting.

SMEs may also face problems related to social and cultural value systems, organization, supply of raw materials, environment, technology, availability and development of suitable manpower, quality, marketing, exports, and finance (Baporikar, 2013).

Various barriers faced by the SMEs are foreign cultures, different business rules, risks, lack of strategic resources, operational barriers, information barriers, process-based restrictions, difficulty in expansion (for high cost of coordinating international operations), and difficulty in foreignness (because of different rules, norms, policies, culture, language); difficulty in size (because of having small size, it has fewer financial resources, lack of knowledge about the market, lack of human resource and technology); difficulty in newness (compared to old firms) they experience disadvantage due to lack of experience in foreign transactions and certain resources in market. Survival, identifying foreign business, shortage of working capital, limited information to locate/analyze market, inability to contact the foreign customers, lack of managerial skills, inadequate and untrained personnel, transportation costs, lack of home government assistance in foreign country, tariff and non-tariff trade barriers, legal issues (Hajela & Akbar, n.d.), infrastructure, regulations, political instability, lack of finance, product/process quality, and obstacles in strategy, operations, logistics, information and processes. According to Anderson, Havila, and Salmi (2001), the main challenges for internationalization are three—(i) whether to, when and where to operate in overseas, (ii) long-term planning and business processes, and (iii) business operational systems to cope up with the situations. Among the many challenges faced by the SMEs, survival is one of the biggest challenges for SMEs in internationalization (Lee, 2012) (Table 10.3).

Table 10.3 Barriers for SMEs internationalization

Country	Barrier	Author/s
Australia	1, 3	EFIC (2008)
Canada	1	Riding et al. (2007)
Finland	1, 5	Ojala and Tyrväinen (2007)
Ireland and India	1	Terjesan O’Gorman and Acs (2008)
Korea	5	Suh et al. (2008)
Spain	1	Lopez (2007)
Sweden	1	Rundh (2007)
Turkey	1, 4	Ozkanli et al. (2006)
UK	4	Barnes et al. (2006)
UK	4, 5	Crick (2007)
UK	4	Kneller and Pisu (2007)
USA & Canada	5	UPS (2007)
China	1	Zhang et al. (2008)
India and USA	5	Smith et al. (2006)
India	5	Vivekanandan and Rajendran (2006)
Indonesia	1	Wengel and Rodriguez (2006)
Russia	1, 4, 5	IBF/GDSI (2008)
South Africa	1, 5	AMSCO (2006)

Source OECD (2009)

Where the numbers 1–5 represent—(1) shortage of working capital to finance exports; (2) identifying foreign business opportunities; (3) limited information to locate/analyze markets; (4) inability to contact potential overseas customers; and (5) lack of managerial time, skills, and knowledge (OECD, 2009).

10.7 Research Setting

Vijayawada is the second largest city in the newly formed state of Andhra Pradesh (AP) in India (after Visakhapatnam) and is closely located to the new capital Amravati. The population of Vijayawada stood at 1,039,518 (Census 2011). The city is a nodal commercial and transport center of the State, owing to its favorable demographics due to which the city has witnessed major economic, cultural, and administrative development over the last few years. The Autonagar estate in Vijayawada is a base for several automobile spare part manufacturing companies, engaged in manufacturing of items such as wheel bolts, cylinder liners, U-clamps, leaf springs, brake drums, oil filters, body building, gaskets, and automobile workshops. In the near future, this sector in Vijayawada is expected to benefit from the growing industrialization and infrastructure development inclusive of SEZ and industrial corridors. In view of the expected rapid development of Vijayawada in

the wake of proximity to State capital in general and the Autonagar estate in particular, the study was undertaken.

10.8 Objectives

The objectives of the study include the following:

- (a) To identify the variables that are responsible for internationalization of SMEs;
- (b) To determine the motives, drivers, and barriers for internationalization of SMEs in Vijayawada; and
- (c) To suggest ways to accelerate the process of internationalization of SMEs from the Vijayawada region.

10.9 Research Methodology

This is a descriptive research design. The population for the study included 300 SMEs in the Autonagar cluster of Vijayawada. Sampling frame is an operational SME of the cluster. Sampling unit is the individual enterprise. Sample size is 100, i.e., 33% of the population. The promoter and/or the authorized officer of the SME was/were the respondent. The selection of SME is done using simple random sampling method. A questionnaire was designed for conducting the study. Primary data was collected using survey method. Secondary data was collected from Vijayawada Industrial Estate Manufacturer's Association, Automobile Technician's Association, The Andhra Pradesh State Manufacturer's Association, and other published sources.

10.10 Pilot Study

A pilot study was conducted initially with a sample size of 30 to validate the research instrument. The data collected was checked for its reliability. The questionnaire was modified based on the feedback received from respondents. The final questionnaire was used for collection of primary data. Partial list of items from the questionnaire is presented in Appendix 1.

10.11 Data Collection and Analysis

The survey was respondent administered. The questionnaire was circulated to the promoter of the SME and collected subsequently. In certain instances, the promoter has delegated the responsibility of filling the questionnaire to a senior officer. The questionnaire included variables related to motives, drivers, and barriers, apart from company and respondent profile. All the 100 responses were valid. The data collected was codified and tabulated in IBM SPSS 20 for further analysis.

10.11.1 Reliability of Scale Items

The questionnaire included 12 items on Likert scale. For these items, Cronbach’s alpha quotient is 0.844 reflecting good internal reliability (Table 10.4).

10.12 Analysis and Findings

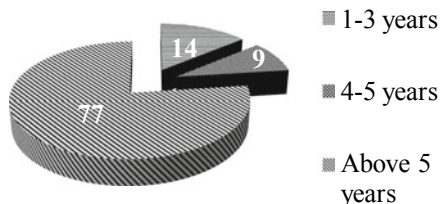
10.12.1 Time Spent in the Company

Seventy-seven percent of the respondents have more than 5 years of experience in the organization. Only 14% spent between 1 and 3 years and 9% spent 4–5 years (Fig. 10.2).

Table 10.4 Reliability statistics

Cronbach’s alpha	No. of items
0.844	12

Fig. 10.2 No. of years spent in the company



10.12.2 Nature of Business

The nature of business of SMEs is much diversified and includes manufacturing and servicing sectors. However, majority of the SMEs are engaged in automobile industry as the cluster is identified for development of automobile ancillaries. The SMEs are involved in automobile engineering, automobile spare parts, body building, tinkering and painting activities. SMEs are also involved in plastic molding, rubber, manufacturing of aluminum and steel utensils, wood works and mechanical works, manufacturing of paper, and other works (Table 10.5).

10.12.3 Type of Enterprise

All the SMEs in the region are private proprietorship enterprises. None of them have tie-ups or collaborations.

10.12.4 Employee Strength

The SMEs in the region are relatively small, and majority of them employ less than 20 persons (Fig. 10.3). However, there are enterprises which have 20–249

Table 10.5 Nature of business enterprises

Nature of business	Frequency
Auto fabrication works	8
Electrical works	8
Steel utensils	8
Body building of automobiles	6
Furniture works	4
Rubber works	4
Castings	4
Welding works	2
Plastic molders	2
Food industry	2
Packages	2
Auto, lorry mechanical works	1
Chemical adhesives	1
Automobile spare parts	1
Rubber products	1
Retreading works	1
Others	45
Total	100

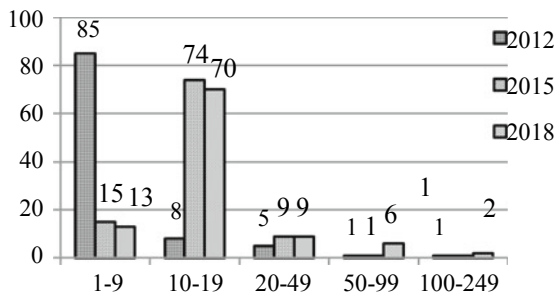


Fig. 10.3 No. of employees in the enterprise

employees, although the number is small. From the projected number of employees for the year 2018, one can conclude that small companies are planning to grow to slightly bigger size. There is no significant improvement in the projected number of employees in the medium-sized enterprises for the next three years.

10.12.5 Annual Growth

The annual growth rate of the enterprises from 2012 to 2015 is on actual, and for the period 2016 and 2017 it is projected. Most of enterprises are registering a moderate growth rate of less than 10%. Very few companies are registering growth rate in excess of 10% (Fig. 10.4).

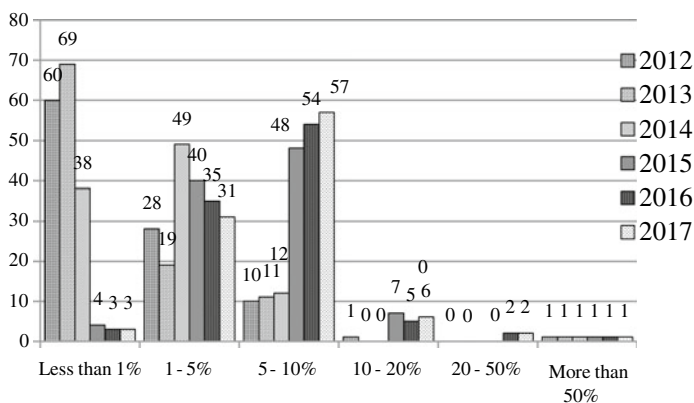


Fig. 10.4 Annual growth rate in revenue

10.12.6 *Offices Outside the Country*

Only three companies are having the international activities and have set up offices outside India. These offices are used to conduct export and import activities and to facilitate local production.

10.12.7 *Most Profit-Making Opportunity*

Most respondents converge on the idea that internationalization is the most profit-making opportunity through introduction of new products in niche markets and expanding the successful products to the global markets.

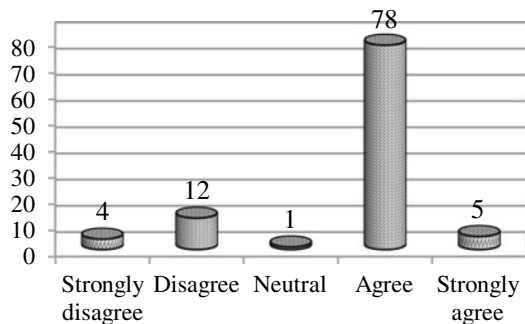
10.12.8 *Use of E-commerce*

All SMEs have confirmed existence of their Web site for conducting online business transactions (Fig. 10.5). The portal includes information on availability of products for sale, placement of orders, and provisions for receiving payment in certain cases.

10.12.9 *Vision, Mission, and Strategy*

Almost all the respondents stated that their company vision, mission, and strategy reflect the aspiration for internationalization. While this is so at the highest leadership level, it does not percolate down to other levels.

Fig. 10.5 SMEs having own Web site



10.12.10 Action Plan for Internationalization

Only about 90% of the companies have thought about an action plan for starting their internationalization process effective from the year 2015–16.

10.12.11 Awareness on Government Support Programs

A quarter of the respondents are unaware of the government support programs such as financial support, incentives for internationalization (Fig. 10.6). About 70% of the respondents are aware of the support programs, but they lack expertise in exploiting such programs and facilities. Consequently, most of the SME players are unable to benefit from the government support programs.

Lack of exposure: Almost all the SMEs covered are not being involved in any international business activity such as import or export.

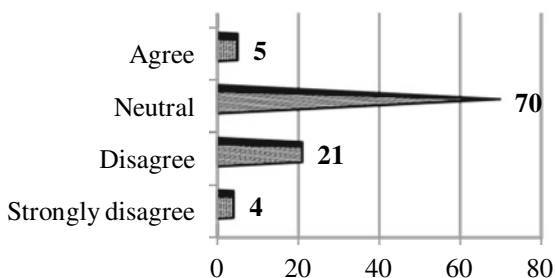
Research and development: Only 5% of the enterprises are pursuing research and development activities. These companies are pursuing innovation as strategy for their internationalization.

10.12.12 Foreign Investment

Barring one company, all other companies do not have any investment directly from their foreign counterparts. Only two companies have distributor/agent arrangements abroad.

Internationalization in this region is at a nascent stage is reflected by the fact that 11% of respondents are involved in cooperating with their foreign partners. Only 83% of the respondents are attempting to trade through their e-commerce portal. This means the remaining 17% are completely excluded from perceiving themselves to be globally connected.

Fig. 10.6 Awareness on government support programs



10.12.13 Training Interventions by Government

Interestingly, 92% of the respondents considered workshops and training programs conducted by the government for promoting internationalization of their enterprises, not very helpful.

Most of the SMEs covered under the study do not have any other cooperation even with companies nationally for promoting their businesses.

The study has empirically explored the motives, drivers, and barriers for internationalization of SMEs, which is crucial for their sustainability, profitability, and growth. The SMEs which are R&D and innovation driven are the ones which are geared up for internationalization. Other organizations have to take measures to overcome barriers and work toward creating drivers for expanding their businesses overseas.

10.13 Discussion

Majority of the SMEs (88%) are aspiring for internationalization of their business. The motives, drivers, and barriers for internationalization are examined in the SMEs in Vijayawada in the following framework:

Motives	Drivers	Barriers
Growth	Niche markets	Competition
Profit	Unique organizational competencies	Exports
Formal planning	International networks	Technology
Vision, mission, and strategy	E-commerce	Efficient and sufficient resources
Training and development	Government policies	Different cultures
	Intermediary products	Different policies

The SMEs in the region are keen for faster growth than the existing moderate growth rate of less than 10% and consequently increase their profitability. The promoters have well thought out vision and mission, but they lack strategy for internationalization. The SMEs cannot afford organizing their own training programs. The training and development programs by the government lack credibility; 70% of them are indifferent to the government training programs, although 92% of them feel the need for training in internationalization. The SMEs have the motivation and aspiration, but lack strategy and training for converting their vision into tangible action and goal achievement.

On the drivers' dimension, 95% of SMEs have poor research and development focus and thus do not have niche products for catering to global markets. In fact, SMEs have not lack unique organizational competencies and do not have the wherewithal for creating international networks for sustainable international operations due to resource constraints. While 83% of SMEs are gearing up for e-commerce, still they are way behind compared to their corporate counterparts. The pro-SME policies of government are not percolating down, and there is a need to close this gap.

On the barriers dimension, Indian SMEs continue to face unhealthy competition, lack of export culture, and suffer from obsolete technologies. Lack of competitiveness results in poor export performance and culture by these firms. Most of the SMEs reportedly depend on resources that are neither efficient nor sufficient. Due to resource constraints, SMEs have difficulty in dealing with different cultures and policies across nations. Hence, SMEs are unable to break the barriers and internationalize their operations.

10.14 Limitations

The study was conducted in Autonagar of Vijayawada, a cluster for setting up of auto ancillary SMEs. Over a period of time, SMEs of other businesses have also been set up here as the auto ancillaries were not viable. Conducting a study of this nature in a single cluster has its limitations. Extending this study to more versatile SMEs would yield better results.

10.15 Conclusions

While internationalization of SMEs is critical to the economic growth, employment generation, and cross-border trade, it is a long way before the country realizes this goal. The empirical data collected and the personal interactions with the promoters of these SMEs demonstrate that the aspiration to go global is driven more by profit motive than creating products and services for serving the discerning customer. Only such SMEs which have their vision and mission backed by execution capabilities would be able to meet the requirements of internationalization and sail across the shore.

Appendix 1

Questionnaire Respondent Profile

1. Name of the company:
2. Respondent name:
3. Respondent designation:
4. Department:
5. No. of years spent in the company:

Less than one year

1 – 3 years

4 – 5years

Above 5 years

6. Present legal status of the enterprise:

Sole Proprietorship

Partnership Company

Private Limited Company

Public Limited Company

Other, please specify:

7. Year of incorporation of the enterprise:

8. Employees of the company (on an average):

#	Period	1–9	10–19	20–49	50–99	100–249
(i)	2012					
(ii)	2015					
(iii)	2018 (projected)					

9. Types of activities are done in or from the establishment of your enterprise outside India?

a) Representative office

b) Sales office

c) Purchasing office

d) Local production facility
(of products or service)

e) Others, please specify:

10. Does the firm's vision, mission, and strategy follow the internationalization policy?

- i. Strongly agree
- ii. Agree
- iii. Undecided
- iv. Disagree
- v. Strongly disagree

11. Workshops and training by the government to the employees are helpful for internationalization of business.

- i. Not at all use full
- ii. Use full to some extent
- iii. This is the only way
- iv. Help full for few companies

12. Do you agree that the R&D and innovation process is involved in the internationalization of products?

- i. Strongly agree
- ii. Agree
- iii. Undecided
- iv. Disagree
- v. Strongly disagree

13. Does your enterprise have its own Web site?

- i. Yes
- ii. No

14. Which form of e-commerce does your enterprise use? (Please tick appropriately)

- i. To disseminate information on products and services online
- ii. To sell catalogued products and services online without transacting Payments online
- iii. To sell catalogued products and services on-line and also receive payments on-line
- iv. Do not pursue online sales and services

15. Please rank these barriers for your international business activities?

- i. Knowledge of foreign languages
- ii. Lack of sufficiently qualified personnel
- iii. Quality of our products and/or services
- iv. Conformity of our products and/or services to national technical standards in those markets
- v. Price of our products and/or services
- vi. Lack of adequate market information
- vii. Lack of adequate public support
- viii. Difficult paperwork, bureaucratic procedures (administrative costs)
- ix. Transport costs
- x. Tariffs or quota for foreign markets
- xi. Other laws and regulations in foreign countries
- xii. Different business cultures in foreign markets
- xiii. Lack of financing
- xiv. Payment risks
- xv. Political risk
- xvi. Other barriers, please specify

16. In your opinion, what makes you more competitive than your peers when exporting? Select the top 3 responses and rank them top down.

- i. Innovation
- ii. Design
- iii. Quality of product/service
- iv. Price
- v. Lower cost base
- vi. Responsiveness to changing markets
- vii. Logistics (e.g. speed to market)
- viii. Uniqueness of the product/service
- ix. Strength of customer relationship
- x. Others, please specify

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Part III
Ecosystem for Internationalization

Chapter 11

Institutional Voids and Their Impact on Transnational Entrepreneurship: A Study of Sri Lankan Entrepreneurs



Rondy de Silva

11.1 Introduction

Emerging markets that are experiencing rapid economic change and development have been of scholarly interest over the past few decades due not only to the unparalleled growth they demonstrate but also because they are changing the global economic map in terms of power structures. It is recognized that the academic theories that have largely emerged from the West may not be directly applicable to these markets (Young, Peng, Ahlstrom, & Bruton, 2002) due to the differing market structures, business systems, and forms of capitalism. Further, it also becomes crucial to extend our understanding as to how these economies are developing and the challenges that hinder their development. Worker migration patterns show that developing countries are symptomatic of brain drain where a much needed skilled labor force leave their developing home countries for better opportunities in host economies. However, with the rise of the new economic growth poles emerging in Asia, scholars have identified that diaspora entrepreneurship has been a great contributor to these developmental changes. Policymakers from developing nations are looking for new ways to attract this type of investment (Riddle, Hrivnak, & Nielsen, 2010) as emerging markets are shown to benefit from the business skills and technological expertise of such transnational entrepreneurs especially in the development of high-technology industries (Wright, Liu, Buck, & Filatotchev, 2008).

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11.2 Relevant Literature

11.2.1 *Conceptualizing the Transnational Entrepreneur*

Described as an alternative form of immigrant economic adaptation (Portes, Guarnizo, & Landolt, 2002), transnational entrepreneurship overlaps the lines between international entrepreneurship and ethnic entrepreneurship.

Transnational entrepreneurship is still very much an emergent field of study which is characterized by the lack of a concrete definition that encompasses the nuances of the transnational entrepreneur's distinct position among entrepreneurship literature. This is unsurprising given that despite the burgeoning volume of literature that has been published to date on the topic, there still is a general lack of a consensus with regard to even the definition of the term "entrepreneur" (Gartner, 1998).

All transnational entrepreneurs, however, are categorized by a common personal history of migration, most often from that of a less developed native country to a more developed host country (Drori, Honig, & Wright, 2009). Transnational entrepreneurship studies to date are characterized by two distinct types of entrepreneurs: studies of opportunity-driven transnational entrepreneurs who are the highly skilled, educated, and well-established elites as portrayed by Saxenian (2002, 2006) and Portes et al. (2002), and the necessity-driven transnational entrepreneurs as in the studies of Rouse (1991) and Landolt (2001). The former demonstrates a means for ethnic empowerment while the latter transnationalism is a response from those who are finding means for survival both in the country of destination and origin (Lin & Tao, 2012).

In this research, however, it is recognized that a transnational entrepreneur (TE) operates within at least two different economic fields that of a country of origin (COO) and a host country. Typically, the transnational entrepreneur migrates from the COO for the purposes of study and/or work and then also engages in business ventures that link both the home and the host country. Honig, Drori, and Carmichael (2010) provide a useful definition of transnational entrepreneurs as "social actors who enact networks, ideas, information, and practices for the purpose of seeking business opportunities or maintaining businesses within dual social fields, which in turn force them to engage in varied strategies of action to promote their entrepreneurial activities and societal changes" (p. 17).

Research on transnational entrepreneurship has gained momentum in recent years predominantly due to the positive economic impacts it has shown to have on developing economies (Drori, Honig, & Ginsberg 2006; Portes et al., 2002). The works of Saxenian (2002, 2006), Saxenian and Hsu (2001), Yeung (2002), and Portes, Guarnizo, and Landolt (1999) show that transnational entrepreneurs create knowledge transfers, skills development, and new industries through cross-border migrant economic activity. Therefore, this research is focused on the TE classed as the "educated elite" who offer the greatest potential for positive economic impact in their home country.

Rising to the challenge of engaging in simultaneous cross-border activities requires the TE to be able to control their resources, strategically manage the business and create and exploit the opportunities in both country contexts (Yeung, 2002). Transnational entrepreneurship research therefore can provide unique insight into if and how these entrepreneurs work across multiple national contexts. This is particularly important as research shows that transnational entrepreneurs are successful because of their ability to leverage resources and capabilities across dual contexts and maintain a dual institutional view (Patel & Conklin, 2009). This bifocality is crucial when it comes to the TE making sense of and acting in the differing institutional contexts (Drori et al., 2006), particularly when the institutional contexts are vastly different from each other. Therefore, a TE’s actions and strategies can be seen as particularly dependent on the institutional environments they encounter in their business ventures.

Figure 11.1 illustrates that the TE is embedded in two institutional contexts (home and host country) and benefits not only from the unique insights and knowledge of the two contexts but also from the networks and capital they have in the two contexts. The circular migration as represented by the arrows enables their current knowledge and comparative view of the contexts.

Applying Bourdieu’s (1977) theory of practice to transnational entrepreneurs would suggest that the notion of habitus is more complex from the TE’s perspective as they operate in more than one context. If habitus is “the way society becomes deposited in persons in the forms of lasting dispositions, or trained capacities and structured propensities to think, feel and act in determinant ways, which then guide them” (Wacquant, 2005, p. 316, cited in Navarro, 2006, p. 16), how do the transnational entrepreneurs process the differing information from their dual fields of operation? The theory of practice in this instance is a key tool that can be used to explain transnational entrepreneurs’ understanding of their environments and their actions in cross-national domains (Honig et al., 2010). The notion of “field” as proposed by Bourdieu (1990) serves as the domain in which the constructed rules and patterns operate. Therefore, the entrepreneurial habitus is represented as the “dispositional component of the social world, the field essentially represents the

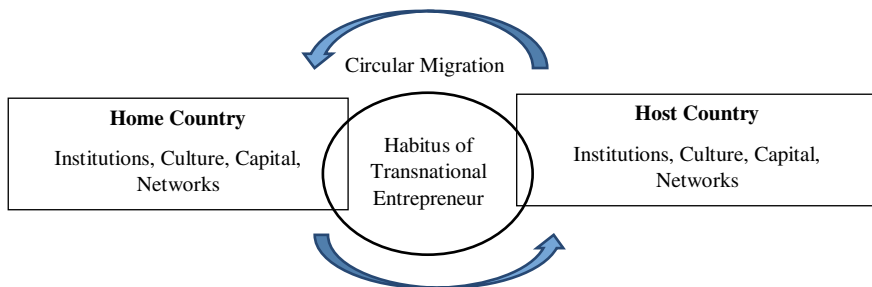


Fig. 11.1 Conceptualizing bifocality and the transnational entrepreneur. *Source* Author’s own work

relational component, each operating in dialectical context” (Honig et al., 2010, p. 9). This research, similar to the works of Terjesen and Elam (2009) uses the theory of practice as a sensitizing framework for understanding and explaining the TE’s perceptions and behavior. The research contributes to the debates that TEs possess unique abilities in assessing their environment, particularly in relation to the institutions in their dual contexts of operation and are able to enjoy economic gains as a result of this.

11.2.2 Institutional Environments and Institutional Voids

North’s (1990) definition of institutions as the “rules of the game” (p. 3) has proven to be a popular explanation of institutions in institutional economic theory. It provides clear demarcations between the formal and informal structures that exist in a societal and national context that determine the norms that dictate behavior and action. Because the institutional environment determines the structure of the available political, social, and economic incentives, they also determine the strategic choices that have to be made by individuals and organizations (DiMaggio & Powell, 1983; Scott, 1995).

Institutions can be regulatory, normative, or cognitive in nature (North, 1990; Scott, 1995). Regulatory institutions are the formal structures, codes that can be enforced. Formal institutions include regulations, property rights, laws, codes of conduct, which create defined boundaries for economic and social activity (North, 1990, 1991). Normative institutions are less formal but are typically manifested as standards or conventions arising from professional bodies or trade associations. Cognitive institutions on the other hand are the informal rules that are particular to a culture or community that are based on expected standards of behavior learned through social interaction. Informal institutions include customs, taboos, and cultural conventions and similar to formal institutions they too can provide a structure for governing actions albeit as informal mechanisms (Esterin & Preverzer, 2011; Peng & Heath, 1996). Informal institutions are also shown to be more established and harder to change than formal institutions as they are “much more impervious to deliberate policies” (North, 1990, p. 6) due to the fact that they are steeped in tradition and culture. North (1990) further proposes that most often formal institutions are established in line with the informal institutions that exist in a country.

As the “humanly devised constraints that govern human behavior” (North, 1991, p. 97), these institutions can hinder or assist business activities. Formal institutions can give rise to barriers to business activities by way of the regulatory framework through taxes, policy changes, legislative changes, etc. Informal barriers on the other hand can arise via corruption, unfair practices, and competition (Aidis, 2005; Smallbone & Welter, 2012).

Recent research on institutions has also brought to the forefront the notion of “institutional voids” (Khanna & Palepu, 1997, 2010; Mair & Martí, 2009; Mair, Martí, & Ventresca, 2012). An institutional void is created when there is a lack of

adequate or well-developed formal institutions or structures to serve the market requirements of a country. For example, institutional voids can hamper bringing buyers and sellers together through the lack of legal frameworks, contract-enforcing mechanisms, payment systems, etc. These voids can create an unstable economic environment and structural challenges for businesses (Khanna & Palepu, 1997). Institutional voids can often give way to the creation of informal or even illegal institutions as a response to the lack of formal mechanisms required by the market. For example, the lack of formal lending institutions could lead to the creation of informal lending systems that engage in unfair practices.

Emerging economies are shown to be characterized by more voids in comparison with those in developed economies with better established formal institutional structures. Rodrigues (2013) suggests that “Voids become salient particularly when economic growth advances faster than social and institutional structures, as it is difficult for the latter to anticipate or follow market dynamics” (p. 14). Further, it is argued that the uncertainty risk faced by entrepreneurs in emerging or transition economies are greater than those in more developed economies due to these voids (Puffer, McCarthy, & Boisot, 2010). It is also proposed that in some instances entrepreneurs can actually capitalize of these voids by bringing in mechanisms to address these voids (Khanna & Palepu, 1997, 2010), for example, through the provision of international payment systems and online services.

It is agreed that a country’s attitude to doing business and its economic performance is largely shaped by its institutions (Furubotn & Richter, 2000). This would mean that TEs face the additional challenge of dealing with multiple institutional contexts that vary in behavior and attitudes to business. Research recognizes that TEs operating in both the developed institutional context of their home country and that of a less developed one of their host country display an ability to seamlessly move between two contrasting institutional environments (Riddle et al., 2010). They can capitalize on their knowledge of both these institutional contexts in order to successfully engage in both arenas while avoiding the liability of foreignness often experienced by others who are less familiar. They are also able to mitigate the costs of doing business abroad because of this familiarity with both their environments.

Given that psychologists have shown that cognitive dissonance can occur in those faced with conflicting attitudes and beliefs (Cooper, 2007); founding and operating a transnational venture should be more complex as the TEs are operating concurrently in at least two different countries. Patel and Conklin (2009) maintain that transnational entrepreneurs actually enjoy increased gain by exploiting institutional differences and opportunities in two different working contexts rather than a single set of economic, social, and political regimes. The literature identifies that the TE adopts bifocality when navigating the two institutional settings. Bifocality refers to the ability of the entrepreneur to operate in two different environments, and their success depends on home and host country ties (Drori et al., 2006). These ties include their access to networks and capital which is complimented by their dual institutional perspective. This can be related back to Bourdieu’s theory that individuals use their own interpretation and understanding of the contextual setting to

identify the existing opportunities. The argument is that what may be viewed as an institutional void to some, may instead be viewed as an opportunity by the TE. Therefore, this paper will focus on evaluating the formal institutional voids that impact transnational entrepreneurial activity as well as explain how the TE overcomes these voids and seeks to contribute to the debate that they do indeed benefit from their ability to access the two contexts.

11.3 The Case of Sri Lanka

Situated in the Indian Ocean and separated only by 40 miles of water from its neighbor India, Sri Lanka is a small island nation that is currently enjoying rapid economic growth and change. This change has been so rapid that Sri Lanka is presently recognized as one of the fastest growing nations in South Asia and is ranked highly in the ease of doing business ranking in South Asia (Asian Development Bank, 2015a, b).

With the end of a three-decade-long civil war that ended in 2009, and a stable government in place, the country entered a growth phase that saw improvements not only in income levels but also in areas of human development (World Bank, 2015).

In 2010, the Dow Jones classified Sri Lanka as an emerging market and the country was also ranked at number 65 out of 148 countries surveyed in the Global Competitiveness report published by the World Economic Forum in 2014. The same report also describes the Sri Lankan economy as transitioning from the factor-driven stage to the efficiency-driven stage.

Despite being a small country of 21 million people, its geographical location enables it to serve a market of 1.6 billion and it is the gateway to the Indian market via the South Asia trade agreements (UKTI, 2014).

During the civil war, there was large-scale migration of skilled workers, particularly in the ethnic minorities. With the end of the war, the ensuing period of peace and development made the country more attractive for economic investment as evidenced by the rates of growth in the island in past few years. The main reason for the growth is associated with the investment-led model that was adopted by the government after the end of the civil war (World Bank, 2015). Statistical data and internationally published research on entrepreneurs in Sri Lanka are extremely limited, and virtually no data on transnational entrepreneurs was encountered in the literature search. This dearth of data highlights the additional need for this study in order to address this gap.

11.4 Methodology

Much of the published literature to date on transnational entrepreneurs has been conducted by sampling TEs in their host country context and ethnic communities within the host country. This research focused on identifying TEs operating in a single home country context and varying host country contexts. Given the specific definition of a TE, it was decided to adopt a purposive sampling method as “the logic and power of purposive sampling lies in selecting information-rich cases for study in depth” (Patton, 2000). The initial identification of participants was made through a personal contact who was the editor of a premier business magazine in Sri Lanka. This contact was able to provide a list of names of people who could potentially be categorized as TEs. Secondary data on the participants was then gathered in order to evaluate the suitability of the participants. Preliminary inquiries were conducted in order to ascertain clearly that they were transnational entrepreneurs and to assess that they would be in their home country at the interview dates. The cross-national mobility associated with TEs was apparent when arranging interview dates as their travel schedules made it difficult to arrange concrete interview dates far in advance. After the initial participants were identified, the snowball sampling method was adopted to extend the research sample. In addition to ten in-depth face-to-face interviews in-country with high-profile TEs, interviews were also conducted with three local entrepreneurs, five international entrepreneurs, and two policy advisers. The extension of the participants to non-TEs allowed the identification of common institutional challenges encountered by all participants. It also provided a comparative view in the subsequent analysis of how the various parties perceived the voids and helped identify the unique view points of the TEs.

The interviews lasted between one and two hours and followed a semistructured format of questioning. Further follow-up questioning also took place via Skype in order to further probe on the institutional challenges and to cross-check the information.

11.5 Analysis and Findings

A thematic analysis was adopted as “Thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data. It minimally organizes and describes the data set in (rich) detail” (Braun & Clarke, 2006, p. 77), and frequently, it does more than this by enabling interpretation of the various aspects of the research topic. The data was open coded using NVivo software and the coding was both theoretical and inductive in nature as an initial set of codes were identified from the common themes in the literature followed by the emergent themes that were subsequently refined.

Table 11.1 Key findings

Theme	Summary of findings
Bifocality	<ul style="list-style-type: none"> • TEs are able to identify the institutional differences and differentiate their learning experiences from their home and host countries • While recognizing the institutional voids in Sri Lanka, the TEs are not deterred by these voids
Funding and support for start-ups	<ul style="list-style-type: none"> • TEs mobilize their financial resources in the home and host country to set up their ventures • TEs recognize that there is limited financial support from lenders in Sri Lanka for start-up and nontraditional industries • TEs are acting as angel investors to other entrepreneurs
Institutional corruption	<ul style="list-style-type: none"> • Bribery, bureaucracy, and administrative wastage are rife within government institutions • Political and social influence impacts business practices
Capitalizing on institutional voids	<ul style="list-style-type: none"> • TEs are providing services that address some of the existing institutional voids • TEs are identifying and pursuing opportunities in other emerging economies with similar institutional voids to Sri Lanka
Regulatory framework	<ul style="list-style-type: none"> • TEs highlight the inefficiencies of the regulatory system in Sri Lanka in comparison with their host countries • Intellectual property rights are seen as a key deficiency, and TEs choose international patenting options
Citizenship and property rights	<ul style="list-style-type: none"> • The suspension of dual citizenship creates dilemmas with regard to owning property and ease of travel for TEs • Sri Lanka is not seen as investor-friendly to the diaspora community because of the controversy surrounding dual citizenship rights
The education system	<ul style="list-style-type: none"> • TEs recognize that they have access to staff with good technical abilities but require more soft skills training • TEs fear that the cost advantage of labor in Sri Lanka is eroding due to the training that they need to provide staff in order to perform at international standards

As presented in Table 11.1, seven key themes from the data are identified for discussion in the space of this paper. The subsequent discussion will elaborate on the summary of key findings provided in Table 11.1.

Speaking to the transnational entrepreneurs, it was apparent that they all had a shared sense of community and identity of being Sri Lankan, no matter what their current citizenship status or length of domicile was in their host countries. Despite their host countries varying from being the USA, Australia, Canada, UK, or New Zealand, their sense of community is reminiscent of ethnic entrepreneurs operating within their own enclaves, many echoed sentiments of patriotism and belief in the potential of the country.

You know as Sri Lankans we are very unique, we are very enterprising. The country is really a paradise on earth. The moment I went abroad I was thinking about when could come back (TE1)

There is this great communal attitude when it comes to work, the people are not afraid of hard work and not worried about always looking after number 1. I have 200 people doing the jobs that would require 800 in the West (TE5)

Despite their strong sense of nationalism, the TEs were not reluctant to share their views on the areas they thought needed improvement and they were highly critical of the existing institutional structures in Sri Lanka.

11.5.1 Adopting Bifocality

When queried as to why they would choose to set up a business in an emerging economy when they are clearly able to see the challenges in relation to their developed host country, all the TEs were dismissive of the view that the host countries were actually “better” or less challenging to operate in.

The most pertinent revelation in terms of what they particularly gained from the overseas experience was not the fact that they worked in large companies but that they were actually able to see how start-ups get off the ground and flourish. One entrepreneur who was headhunted into Microsoft for a high-level post then resigned to start a very successful transnational enterprise stated of his work experience there,

I was more influenced to see start-ups there. I observed things. I see people opening franchises, how seed funding is working. Those things. That is what I was gaining. You won't believe how many of my cubicle friends at Microsoft admire what I do, how I jumped out of the well (TE1)

And many of the other TEs echoed the same sentiment that being exposed to environments where they could see how other entrepreneurs and small businesses were flourishing, inspired them more than any skills they received.

I think the biggest difference I saw is our ability to think big, when you are in those countries and when you talk to start ups there and how you envision the future, they try to develop products that serve the whole world. Our thinking here (Sri Lanka) is also small as an island (TE2)

The TEs highlight the dearth of role models in the COO who they could look up to and aspire to be like. They were more deeply impacted by the possibilities of what they could achieve, by being inspired by the successes of entrepreneurs they witnessed while they were in their host countries. The very notion of entrepreneurship goes against the grain of traditionally risk averse and culturally conditioned nations, where the mind-set of what it is to be successful is deemed by profession.

When I was growing up in Sri Lanka I was always told I had to be a doctor or a lawyer. Nobody told me any different in or out of school. The possibility that I could have any career I wanted and be anything I wanted to be, I only encountered when I left Sri Lanka (TE5)

Here people don't understand the value of equity or sweat equity is not understood here. When I was starting up here (Sri Lanka) people don't get the idea of working for equity or the chance at glory. Whereas in Silicon Valley, that's what it's all about. You guard equity with all your life, you don't give it away. When you hit the one that does, it's massive and here people don't understand what you can get out of equity so they want to sell. So straight away you discourage people from thinking I will work for the idea, you know the idea becomes successful then I will become successful. It's a very short term level of thinking. And I think that's just generally encouraged from a young age to get these recognized professions, not be break out and do you own thing. There is a lot of cultural conditioning. You are told to get a job in these field, these are successful jobs, so taking a risk is not encouraged (TE9)

The TEs also acknowledged that it was their exposure overseas that helped them develop their own soft skills and knowledge of what constitutes excellence in product and service standards.

Without having the exposure the intuitive understanding of what is something that is nice and what is not so nice, you can't do stuff. Local companies have a lot of technical capacity but they don't have the maturity to understand what the market wants and how it should behave. The exposure helps you to mature (TE6)

One TE elaborated about how he learned to communicate with others from different cultural backgrounds and what is deemed appropriate and not among varying cultures.

I value the four to five year experience I actually had on campus more than the paper degree I had. Because the college I went to in New Jersey was one of the most diverse to the point where I don't think there was any majority. There were Indians, blacks, whites, Koreans, Chinese, every single neck of the woods, there was a Hispanic population. A huge Eastern and Western European population (TE4)

11.5.2 Locating Funding and Support for Start-Ups

One of the fundamental voids that were identified as hindering entrepreneurial development was the lack of promotion, funding, and governmental support for business ventures. The TEs interviewed all recognized that while their horizons expanded in their host countries, they would encounter specific challenges in relation to gaining funding for their enterprises from the COO. The research shows that all the entrepreneurs interviewed from the sample found that it was extremely difficult to obtain funding from lending institutions. Banks were seen as favorable to lending to those only operating in traditional domains and holding large amounts of equity.

When we pitched our mobile technology idea, we were commended for our enthusiasm but were told that we should come back with a proposal to build a supermarket or something (TE2)

explains one TE who eventually secured funding through family members.

Funding for seed entrepreneurship, particularly for new technology enterprises, was recognized as being scarce or nonexistent in Sri Lanka. The TEs were well aware that they would not secure funding for new technology enterprises in their home country. Many used their social or business networks in the host country to secure their start-up capital. This acts as an example of how entrepreneurs mobilize their resources in order to deal with institutional voids (Baker & Nelson, 2013).

The owner of Sri Lanka's pioneer games developing company who also used personal wealth for funding states that

The banks did not even know what the games industry was about here, the potential of a 60 billion dollar industry, they did not know what I was talking about, nobody was interested (TE9)

This is also supported by a TE who is the owner of a clinical waste management company who secured funding from a Korean investor.

In Sri Lanka the banks are very traditional, they will not support an outside the box idea (TE10)

The TEs show that they are able to cleverly mobilize their resources, most often funding their businesses from the wages earned in their host countries knowing that they will find it a challenge to secure funding from their home countries. The TEs were all cognizant of the fact that there were no formal institutions that would be able to support them financially or otherwise in the COO. While some of the TEs secured grants from their host countries, several TEs actually secured funding for their ventures from countries that they deemed were more investor-friendly, like Singapore or Korea. A direct benefit that is visible in Sri Lanka is that the TEs in return are now acting as angel investors. They are operating support networks and creating their own funding bodies in order to foster entrepreneurship in Sri Lanka. All the TEs that were interviewed are engaged in some sort of funding or philanthropic activity. They are attempting to fill the gap and foster more entrepreneurship in their home countries, largely due to their own experiences. This type of angel investment though important does not, however, completely fill the void created in the need to foster entrepreneurial engagement on a national scale.

11.5.3 Dealing with Institutional Corruption

Another great source of frustration for all the entrepreneurs interviewed were the levels of corruption in the formal governmental institutions.

The thing is whether you like it or not. If you want your product to enter the market in Sri Lanka, the way it is to go through that registration process. The thing is you need to go up the registration desk, you need to make friends with the peon, the you got to make friends with the pharmacist, then you got to make friends with the technician, then make friends with the director so he knows what's happening. 150 files and if you want your files to be picked out of that 150 you've got to have that connection (TE4)

Mid-level connections matter a lot, sometimes more than the political connections. I have heard numerous stories, and I have experienced it. The top guy says I will support your project but the mid-level person who is supporting another horse purposely stalls it or sabotages it. Sends it in another direction then you are at a loss (TE6)

Anyway when you have to work through the government bodies they call it actually 'profit sharing' (Laughs) so it's like kind of an expected thing. If you want something done then you need to give something. Even if it is getting a payment out they can decide whether they pay it within a month or one year (TE2)

While the local entrepreneurs were almost fatalist in their attitude toward the institutions, the TEs were more pragmatic in their view in that they were aware that corruption exists in most nations but stated that it had a greater visibility in the home country.

Wherever you go in the world you will find corruption, it's just more obvious here. You also need to know how to deal with it. If your business model is dependent on favors and political influence then you are putting yourself in a very vulnerable position and that's not being savvy (TE5)

This comparative view enabled them to highlight the inefficiencies and wastage that occurs due to corrupt business practices such as bribery or unnecessary governmental administrative procedures. The TEs recognize that while an outsider coming into the country to work in such a context would find it particularly challenging, they themselves are able to adapt their mind-set to the contexts they are in. This is because they do not have the same expectations for each context, and they are able to view both the potential and the faults of both contexts. This evidences their bifocal world view.

The TEs also highlighted the fact that a lot of business is conducted on personal relationships and that connections and well-positioned contacts can be useful in furthering a business idea and overcoming regulatory red tape. This was in fact echoed by all the participants who were interviewed. What was clearly apparent through this research was that the TEs were well-connected both socially and politically and indeed some have managed to rise to the ranks of the corporate elite in Sri Lanka. Their networks have enabled them to enter the market with fewer restrictions and this is consistent with the literature that shows that the TEs leverage their social networks in order to operate in markets with less developed formal institutions (Honig et al., 2010; Bagwell, 2014). Their ranking as corporate elites, however, is not as a result of their networks but rather through the success of their business ventures. Many of the TEs interviewed receive wide local media coverage in Sri Lanka for the impact they have had on the economy in terms of the industries they have built as well as the employment opportunities they have created in the country. Many of them now serve as the aspirational role models they themselves found lacking in the country previously.

11.5.4 Capitalizing on Institutional Voids

The most interesting outcome of the research was that it was evident that having become successful in such a challenging institutional environment, many of the TEs are now looking to serve markets with similar institutional voids. Using the same business models adopted in Sri Lanka, the TEs were moving to markets in Bangladesh, Pakistan, and even African markets which they see as being similar to Sri Lanka's position a few years back. The confidence of succeeding in a country despite the constraints of the institutional voids makes the TEs keen to pursue markets that others might be more wary of. As one TE explains,

The level of corruption is like oxygen, without it my business won't succeed (TE1)

His service provision succeeded only because of the general mistrust of dealing with governmental bodies. Individuals choose his service because it offers a means of importing goods without having to deal with the importing authorities and payment of bribes.

When you buy from my global shop, you pay the duty online and you don't have to deal with a corrupt customs officer to get your items (TE1)

With parallel markets we feel that we are in a good position, we have been to Nepal we have been to Bangladesh and so on, so comparatively SL is a quite a few years ahead, I would say almost 20 years ahead. So those markets we can deploy our learnings over there...we can become innovators in those markets we understand the pain points, we know what works and what doesn't so there's a lot (TE2)

11.5.5 Contending with the Regulatory Framework

Literature shows that migrant economic activity is particularly useful in bringing new technology and industries to developing economies. On the flip side, the research demonstrates that the formal institutions are incapable of dealing with the new regulatory challenges brought with the advent of technological innovations. In the case of Sri Lanka, all the TEs expressed concern about the lack of effective intellectual property protection laws and enforcement mechanisms. They highlight the difficulty in protecting patents due to the lax systems in the patents office. Copyright and piracy laws were also deemed as lax by the TEs.

When I started 10 years ago in Sri Lanka, the banks couldn't give me a merchant gateway because they didn't know what it was (TE1)

The company registration system, does not even have an e-commerce category (TE5)

We are the people that come up with these ideas and the first person we have to approach is the operator because we need their connectivity. The moment we present and after they make us tell all the technical details and they get us to spill it all out. Then after a couple of months we see that these services are available on their network after they have developed

it in house. I myself have gone couple of times trying to talk to lawyers and they say no you still don't have the rights protection for your ideas and things like that (TE2)

These all evidence that despite the nation having made great strides technologically, the formal institutions are far from sophisticated in their abilities to grapple with the demands of the new economic environment. This was echoed by both the TEs, international entrepreneurs and local entrepreneurs.

For us it's harder, what we try to do is to build in security measures. Copyrighting, patenting and IPR is lagging behind here (TE8)

says a local entrepreneur of a technology start-up.

With TEs choosing to patent their products outside the country, it also serves as a blow for innovation at the country of origin.

We don't have any patents registered in Sri Lanka. All our patents are out of the country and we make sure our IP is better protected elsewhere (TE6)

There were also examples of inadequacy in terms of policing mechanisms to prevent and punish cyber-crimes.

Due to cyber fraud I have 1.2 million stolen and nobody could do anything about it, there was no one to report it to, the police did not know what to do (TE5)

It is apparent that regulation, policing, and punitive measures are needed to manage the new types of businesses that are emerging in the market.

11.5.6 Contending with Citizenship and Property Rights

Having previously discussed that the nature of the TE is based on their ability to be mobile and work within multiple contexts, the biggest challenge that the TEs were encountering in relation to this was the prevailing citizenship regulations and the property rights regulations. These are two of the fundamental institutions that had the potential to impact the TE most. While many of the TEs held citizenship in their host countries, the withholding of dual citizenship regulations that came into place in 2012 not only has the potential to greatly impact on a TE's travel between the countries but also can affect the TE's ability to own assets and property in Sri Lanka. Some TEs were retaining Sri Lankan citizenship and passports purely for this reason despite it being advantageous to hold certain Western passports for ease of international travel. These regulations were deemed as the most detrimental to their activities, and it also appeared to create an air of unease in the diaspora community. The citizenship and property rights issues certainly were the harder aspects for the TEs to navigate. One of the policy advisers interviewed also highlighted that potential restrictions on property ownership would give a negative impression of the country to international investors. The logic being that the curbing of ownership of assets would deter foreign investment.

11.5.7 Managing the Inadequacies of the Education System

The TEs interviewed recognized that they are able to reap the cost advantage of hiring well-qualified state university graduates from Sri Lanka. However, the TEs also feared the loss in this cost advantage due to the level of training that is required for staff that they hire locally. They highlight that while the graduate recruits have hard skills, they lack the necessary soft skills to attain international standards, for example, high levels of customer service, communication skills, and overall understanding the differentiation between what is adequate and what is excellent.

Here people fall into the, 'it's good enough' mentality. And the persistence to really polish and excel and to stand out in a really over competitive world is sort of missing here. I definitely gained because I was there, so I you know, when you are in a really large world capital like New York you have to perform at that level and when you come here to a much smaller economy people are much more isolated from what's happening with digital dissolving borders (TE9)

I think the most difficult problem that we are facing as a company is trying to locate the right human resources. The good people are always looking to migrate. It is especially hard to find people who can express themselves well in English. It is easy to find people with good technical know-how but challenging to find those who also have the ability to deal professionally with customers face to face. Eighty percent of the time we have to settle for people who are technically sound, but are not able to present themselves well or converse with a customer (TE10)

The transnational entrepreneurs stated that their preference was to always hire individuals who had worked overseas and had international exposure wherever possible to minimize the costs of training.

11.6 Conclusion and Recommendations

This research shows that in the case of Sri Lanka, the transnational entrepreneurs interviewed are similar to the new Argonauts described by Saxenian (2002, 2006), in that they bring with them new technologies, industries, skills, and knowledge that can benefit their home countries (Wei & Balasubramanyam, 2006). The transnational entrepreneurs interviewed are particularly active in the IT sector which has enabled the creation of new products and services not only for the local market but also in the country's ability to service the world. In terms of their response to institutional voids, it is clear that in the first instance they are able to recognize the voids but not see them as impediments to their business. Their bifocality appears to contribute to their ability to work with the existing challenges and in some instances actually bring about institutional change. This adds to the existing literature that bifocality is an important aspect not only in terms of strategy selection but also for success in a transnational enterprise. There is also evidence to demonstrate that their experience of working in a context with many institutional voids has given them the

confidence to explore markets with similar voids so that they are able to capitalize on their knowledge for economic gain.

While acknowledging that a single country context study is limiting in its generalizability, Sri Lanka shares much in common with other developing nations in South Asia and is currently in a position where less developed countries would aspire to be. The sample size is small; however, the focus on this qualitative research was to capture “rich, thick, descriptions” and provides views of TE operating from different host countries that illuminate on their understanding of their home country institutional environment. This paper extends the geographical coverage of transnational entrepreneurship research.

Sri Lanka serves as a classic example of an emerging economy that is experiencing rapid economic growth in South Asia. This growth, however, is not mirrored in the development of its formal institutions. It is apparent while diaspora entrepreneurship from transnational entrepreneurs can contribute greatly to economic development, it is crucial that measures be taken to address the deficiencies in the formal institutions in the country. In this chapter, two critical areas that have been identified in terms of policy development required to attract further investment from TEs. Firstly, reinstating dual citizenship and the property rights associated with citizenship should be one of the main priorities of the new government in Sri Lanka. Secondly, regulatory frameworks to deal with new technologies as well as complementary support systems will also need to be created. Further recommendations for policymakers include addressing issues of widespread corruption and administrative wastage within government institutions. It is also clearly apparent that there should be more effort to promote entrepreneurship and provide more accessible funding for start-ups in nontraditional industries. Policymakers would also do well widen the education agenda to include the provision of soft skills to enhance the quality of the labor pool in Sri Lanka in order to maintain global competitiveness.

Further analysis of the data will take place in order to assess the impact of culture and informal institutions on the business activities and strategies of TEs. It is also intended to use the data to further profile the characteristics, motivations, and drivers of the TEs in order to contribute to the greater understanding of the phenomenon. Future research should investigate the roles of transnational entrepreneurs as agents of institutional change in emerging economies and highlight the key economic opportunities that come with policy changes that foster investment from the diaspora.

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Chapter 12

SME Performance and Access to Export Markets: The Role of Institutional Credit



Deepa Raju and A. Thillai Rajan

12.1 Introduction

Small and medium enterprises (SMEs) play an important role in economic growth. Apart from catalyzing innovation, SMEs play a key role in employment creation, particularly in developing economies. A common growth strategy that many SMEs consider is to export their products. Internationalization is also considered as an essential strategic choice for SMEs for pursuing growth (Wennekers & Thurik, 1999; Skrt & Antoncic, 2004). While internationalization includes various activities such as setting up of branch offices, sources from overseas supplier, licensing of technology in foreign markets, creation of joint ventures with foreign partners, it is exporting that is the most common among SMEs.

Exports, however, create additional pressure for the SMEs because of the nature of the export market. For example, exports involve additional costs in transportation. Therefore, average order sizes need to be higher so that the additional overhead costs such as transportation can be allocated to more number of units in order to keep the unit costs under control. The cash cycle of business is also longer for exports, given the additional time it takes for the physical delivery and collection. In addition, since many SMEs may not have the financial wherewithal to have their

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local presence in the export markets, they would have to rely on a chain of intermediaries for order fulfillment and collection of revenues. All of these create the need for additional capital for those SMEs pursuing an export-oriented growth strategy.

External financing of SMEs is characterized by information asymmetry problems (Serrasqueiro, Nunes, & Leitao, 2011; Oliveira & Fortunato, 2006; Moreno & Casillas, 2007). This problem is more acute in the case of young firms with little or no credit history. Capital providers and investors realize this and factor these while pricing the loans. This results in a higher cost of borrowing for many SMEs. Therefore, many SMEs rely as much as possible on internal sources of funding. However, SMEs pursuing export-led growth would need external funding because of the significant capital needed to support the export activity. This study analyzes the impact of external funding on two fronts: export and overall performance of SMEs.

The remainder of this chapter is structured as follows. The second section provides a brief overview of the literature. The third section identifies the research gaps to build hypothesis and a conceptual model based on theory. The fourth section provides the description of data, its sources, and the methods of analysis. The results and findings of the study are discussed in the fifth section. Finally, the last section summarizes and concludes while highlighting the policy implications, limitations, and scope for future work.

12.2 Literature Review

Literature on the export barriers faced by firms indicates that the topic has attracted the interest of researchers for a long time. Barriers to exports have been broadly classified as follows: market access barriers (Mejri & Umemoto, 2010; Musteen, Datta, & Butts, 2014); managerial barriers (Ruzzier, Hisrich, & Antoncic, 2006; Freeman & Cavusgil, 2007; Sommer, 2010); industry-specific barriers (Lee, Kelley, Lee, & Lee, 2012); firm-specific barriers (Xiaobao, Wei, & Yuzhen, 2013); and financial barriers (Oliveira & Fortunato, 2006; Minetti & Zhu, 2011). In almost all the classifications, it has been implicitly acknowledged that financial barriers remain an important category of barriers for exports. In this review, we concentrate on the literature on financial barriers.

Firms which are financially strong shall always have the initiative to export (Minetti & Zhu, 2011). Financial constraints impact firm growth, which shall be relatively more severe for small and young firms (Oliveira & Fortunato, 2006). Sufficient financial resources are also required for SMEs to absorb the additional cost associated with internationalization (Loane, Bell, & McNaughton, 2007; Pinho, 2007). Das, Roberts, and Tybout (2007) also mention that the higher entry cost associated with internationalization shall allow only firms with higher liquidity to export. Shaw and Darroch (2004) argued that exporters and likely exporters consider that finance and cost-related factors are the crucial factors hampering internationalization. Access to credit is a significant factor that determines an SME's export behavior (Hobdari, Gregoric, & Sinani, 2011; Gashi, Hashi, & Pugh, 2014). External financial support is required at each stage of growth of SMEs since

most SMEs would be unable to fund growth from internal or retained earnings. Halilem, Amara, and Landry (2014) found that financial supports have a significant and positive effect on the probability of SMEs engaging in innovation process and in exporting to distant markets. The firms having financial constraints may also restrict themselves to export to a particular key region, a strategy usually not without risk (Brouthers, Nakos, Hadjimarcou, & Brouthers, 2009; Cieslik, Kaciak, & Welsh, 2012). These findings indicate the significance of credit availability in supporting exports.

We now look at the appropriateness of different sources of funding in meeting the requirements of exporting firms. It is commonly argued that SMEs rely on internal sources (retained earnings) for their diversification and growth (Becchetti & Trovato, 2002; Ou & Haynes, 2006; Vos, Yeh, Carter, & Tagg, 2007; Ughetto, 2008; Gonzalez & Gonzalez, 2012). Firms with higher profits finance their investments through retained earnings rather than raising debt (Degryse, de Goeij, & Kappert, 2012). Moreover, SMEs also find raising external capital difficult because of limited track record, information opacity, and so on (Lokhande, 2011). However, internal finance alone may not be sufficient to accomplish their targets, since many of the SMEs do not have strong profit margin. Jarvis (2000) argued that when SMEs require external funds they do not attempt to get funds from external sources other than the bank as they fear to lose their independence. Bank loans are considered as important source of formal finance (Abe, Troilo, & Batsaikhan, 2015). Availability of formal source of finance is very essential for SMEs and Ayyagari, Demirgüç-Kunt, and Maksimovic (2010) showed that firms using informal external finance sources do not grow as fast or have high productivity growth when compared to those firms financed by banks. These findings form the basis for this paper. The objective of this paper is to understand the effect of different sources of funding on the export and financial performance of SMEs.

12.3 Hypotheses and Model Development

Growth of SMEs is often seen as a measure of their performance (Wiklund, 1999; Markman, Balkin, & Baron, 2002). There are various dimensions in which growth can be measured (Delmar, Davidsson, & Gartner, 2003). For example, growth can be measured in terms of sales, asset, productivity, number of employees, and so on. In our study, we measure growth in terms of sales revenues and in assets (e.g., Lu & Beamish, 2006). Indeed, production is rewarded through growth in sales, and growth in asset would mean its overall business expansion. This study conceptualizes that growth of SMEs leads to better performance and efficiency and is likely to disprove the following null hypothesis:

H1: There is no significant impact of growth on performance of Indian SMEs.

H2: There is no significant impact of growth on efficiency of Indian SMEs.

SMEs' sustainable growth depends on the availability of finance at the appropriate time. Access to capital decreases the barriers to the firms' growth (Beck, Demirgüç-Kunt, & Levine, 2005), whereas financial constraints have a negative

impact on their growth (Oliveira & Fortunato, 2006). Researchers had long since been arguing as to the type of finance that could augment SMEs' growth. Abor and Biekpe (2007) found evidence that pursuing growth puts a strain on retained earnings and pushes the SMEs to borrow from external sources. In comparison to low-growth firms, high-growth firms depend more on external sources of capital to support their growth. Ayyagari et al. (2010) emphasized that bank finance enables the growth of SMEs as compared to any other source of informal external financing. All these arguments suggest the need for a deeper understanding of the impact of different sources of finance on SME growth. Thus, the hypothesis:

H3: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on growth of Indian SMEs.

Financing sources have also been argued as important factors influencing performance and efficiency of SMEs. Financially constrained firms are expected to be characterized by low performance and efficiency levels. SMEs meet their funding requirements from different sources depending upon their ability to access these sources. The presence of information asymmetry makes internal finance as the most preferred financing source for SMEs (Serrasqueiro et al., 2011). On the contrary, Rocca, Rocca, and Cariola (2011) argue that debt is fundamental to business activities in the early stages but when firms mature they rebalance the capital structure to include more internal finance. Another argument is SMEs that generate significant cash flows from operations prefer internal finance to other sources of finance (Ughetto, 2008; Degryse et al., 2012; Gonzalez & Gonzalez, 2012). Bank finance is considered as the most important formal source of finance (Abe et al., 2015). Trade credit is the most sought after short-term credit by firms with inadequate liquidity (Basseey, Arene, & Okpukpara, 2014; Giannetti, Burkart, & Ellingsen, 2011).

H4: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on the performance of Indian SMEs.

H5: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on the efficiency of Indian SMEs.

Firm-specific characteristics such as age, collateral, exports, and size establish the firms' competence in deciding the funding sources, its growth, and performance. Age and size of firms as factors that have an impact on financing sources (Gilchrist & Zakrajsek, 1995). Due to risk factors, smaller enterprises encounter greater difficulties in accessing bank credit (Aryeetey, Baah-Nuakoh, Duggleby, Hettige, & Steel, 1994). The bank-debt ratio of SMEs and firm size have been predicted to share a positive relationship. Longer years of operational track record lead to greater availability of information and increase the capacity of business to get more debt (Abor & Biekpe, 2007). As opposed to this, Diamond (1991) and Ooi (2000) found a negative relation between size and bank-debt ratio, which could be explained by the pecking order theory. The growth pattern of a firm is also related to its age and size (Wiklund, Davidsson, & Delmar, 2003). Fitzsimmons, Steffens, and Douglas (2005) found that firms with high growth rates were younger on

average. Selecting the most profitable investments is done more efficiently by younger firms (Kang & Heshmati, 2008). However, older SMEs have more persistent profitability in comparison with their younger counterparts (Nunes, Viveiros, & Serrasqueiro, 2012). Smaller SMEs tend to have higher and more variable growth rates as compared to larger firms (Becchetti & Trovato, 2002; Santarelli & Vivarelli, 2002). The requirement of finance is more in case of exporting firms than in case of non-exporting firms. Greenaway, Guariglia, and Kneller (2007) have shown evidence that the firms’ financial health improves through participation in export markets while the converse may not always hold true. Exporting activity impacts growth positively but has a negative impact on profitability (Lu & Beamish, 2006). Collateral assets enable the firms suffering from informational asymmetry to get external debt easily. Michaelas, Chittenden, and Poutziouris (1999), Lopez-Gracia and Sogorb-Mira (2008) show that access to debt depends on the collateral SMEs have. Collaterals in manufacturing firms would also imply more fixed asset to increase its productivity and performance. The model developed would include both the direct and indirect influence of firm-specific characteristics on performance and efficiency by influencing financing sources and growth variables.

H6: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on financing sources of Indian SMEs.

H7: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on growth of Indian SMEs.

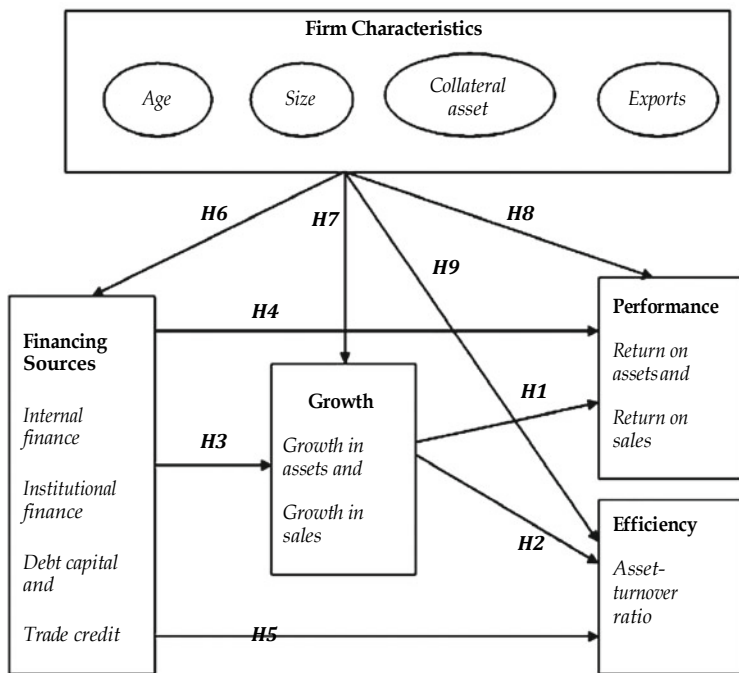


Fig. 12.1 Proposed conceptual model

H8: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on performance of Indian SMEs.

H9: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on efficiency of Indian SMEs.

Based on the theoretical background discussed, the proposed conceptual model is shown in Fig. 12.1.

12.4 Research Methodology

12.4.1 Sources of Data and Period of Study

The study is based on secondary data, which were collected from Centre for Monitoring Indian Economy (CMIE) Prowess package for a period of 6 years on year-to-year basis ranging from 2006–2007 to 2011–2012. All the SMEs involved in ‘manufacturing activities,’ which were in need of significant funds to grow and expand, were included in the sample. Manufacturing firms face higher obstacles to financing while service firms are less affected by all obstacles (Beck et al., 2005). Finance is more often sought by manufacturing firms than by service firms or other businesses (Mina, Lahr, & Hughes, 2013). Hence, it would be right to include those firms for a study on the financing sources.

According to Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, the manufacturing firms having investment in plant and machinery under USD 2 million¹ are considered as micro, small, or medium enterprises (MSMEs). The same criteria have been applied in this study and the firms with plant and machinery below USD 2 million for all the 6 years were included.

These were further reduced based on availability of data in all respect, and the final sample constitutes 323 firms from Indian manufacturing sector. Table 12.1 shows the description of exogenous and endogenous variables.

12.4.2 Research Methods for Analysis

To empirically test the robustness of the conceptual model (see Fig. 12.1), structural equation modeling technique (i.e., path model) was used. Path model helps to propose a model and tests it to find the interrelationship between variables in a multivariate setting. The path model also accounts for covariance among variables within the model. The final model (see Fig. 12.2) includes paths after incrementally rebuilding the model to include the underlying causal paths revealing the variables influencing performance and efficiency of SMEs. The dependent variables include return on asset (P_TASS) and return on sales (P_SAL) as measures of performance of the firms. Efficiency of SMEs

¹USD = United States Dollar

Table 12.1 Description of the variables

Variables	Term	Description
<i>Performance</i>		
Return on assets	<i>P_TASS</i>	PBITD/total asset
Return on sales	<i>P_SAL</i>	PBITD/sales
<i>Efficiency</i>		
Asset turn over	<i>ASS_TN_OV</i>	Sales/total asset
<i>Growth variables</i>		
Asset growth	<i>ASS_GW</i>	CAGR of fixed asset
Sales growth	<i>SAL_GW</i>	CAGE of sales
<i>Financing sources</i>		
Debt capital	<i>DB_CAP</i>	Debt capital/total liability
Internal finance	<i>INT_FIN</i>	Retained earnings/total liability
Institutional finance	<i>INST_FIN</i>	Institutional borrowings/total liability
Trade credit	<i>TD_CR</i>	Trade credit/total liability
<i>Firm-specific variables</i>		
Age	<i>AGE</i>	Years in business since incorporation
Size	<i>SIZE</i>	Log of sales (in millions)
Collateral assets	<i>COLL_ASS</i>	Fixed asset/total asset
Export proportion	<i>EX_PRO</i>	Exports/sales

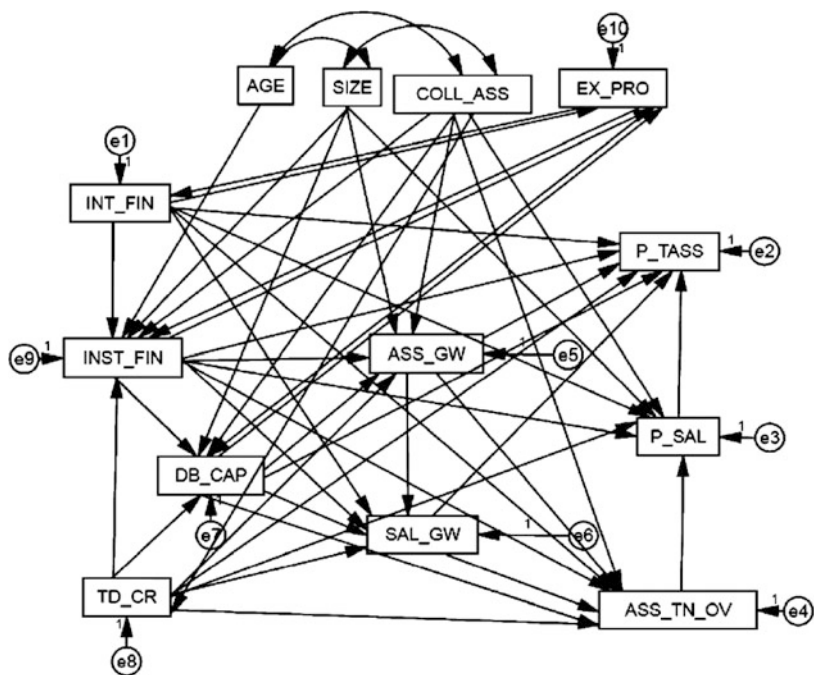


Fig. 12.2 Resultant path model

is measured in terms of asset turnover ratio (ASS_TN_OV) which shows the productivity (in terms of turnover) for the assets invested.

12.5 Results and Discussion

Path analysis allows the researcher to assess the relative strengths of each variable and brings out their relationship with the dependent variables. AMOS software package provides modification indices that enable to identify the underlying paths not included in the conceptual framework and that may have significant influence

Table 12.2 Significant results of path model rejecting the null hypotheses

Path	Standardized coefficient	P-value
<i>H1: There is no significant impact of growth on performance of Indian SMEs</i>		
P_TASS ← ASS_GW	0.074	0.037**
P_TASS ← SAL_GW	0.104	0.003***
<i>H2: There is no significant impact of growth on efficiency of Indian SMEs</i>		
ASS_TN_OV ← SAL_GW	0.16	0.002***
<i>H3: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on growth of Indian SMEs</i>		
ASS_GW ← TD_CR	0.138	0.029**
<i>H4: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on performance of Indian SMEs</i>		
P_TASS ← INT_FIN	0.945	***
P_TASS ← INST_FIN	0.633	***
P_TASS ← DB_CAP	-0.188	0.033**
P_TASS ← TD_CR	-0.197	***
P_SAL ← INT_FIN	0.559	***
P_SAL ← INST_FIN	0.425	***
P_SAL ← TD_CR	-0.094	0.061*
<i>H5: There is no significant impact of financing sources (internal finance, institutional finance, debt capital and trade credit) on efficiency of Indian SMEs</i>		
ASS_TN_OV ← INT_FIN	0.138	0.02**
ASS_TN_OV ← INST_FIN	0.86	***
ASS_TN_OV ← DB_CAP	-0.763	***
ASS_TN_OV ← TD_CR	-0.389	***
<i>H6: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on</i>		
INST_FIN ← SIZE	-0.125	0.072*
DB_CAP ← SIZE	-0.06	0.014***
INST_FIN ← AGE	0.137	0.03**
DB_CAP ← COLL_ASS	-0.066	0.007***

(continued)

Table 12.2 (continued)

Path	Standardized coefficient	P-value
TD_CR ← COLL_ASS	-0.111	0.045**
INST_FIN ← EX_PRO	0.577	0.086*
DB_CAP ← EX_PRO	0.088	0.02**
<i>H7: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on</i>		
ASS_GW ← SIZE	0.321	***
ASS_GW ← COLL_ASS	0.186	0.002***
<i>H8: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on performance of Indian SMEs</i>		
P_SAL ← SIZE	-0.176	***
<i>H9: There is no significant impact of firm-specific characteristics (size, age, collateral and exports) on efficiency of Indian SMEs</i>		
ASS_TN_OV ← COLL_ASS	-0.248	***

Note ***Significant at 1% level; **significant at 5% level; *significant at 10% level

Source Computed results based on compiled data collected from CMIE proress Pvt. Ltd.

Table 12.3 Significant results of path model showing intertwined relationship among variables

Path	Standardized coefficient	P-value
DB_CAP ← INST_FIN	0.973	***
INST_FIN ← TD_CR	0.242	***
DB_CAP ← TD_CR	-0.238	***
SAL_GW ← ASS_GW	0.181	***
EX_PRO ← INT_FIN	-0.859	0.079*
EX_PRO ← DB_CAP	-0.743	0.056*
P_TASS ← P_SAL	-0.113	0.004***

Note ***Significant at 1% level; **significant at 5% level; *significant at 10% level

Source Computed results based on compiled data collected from CMIE proress Pvt. Ltd.

on the desired outcome. The final model includes some rebuild path in line with the modification indices not assumed under the hypotheses revealing new insights. Significant results alone are presented in Tables 12.2 and 12.3.

12.5.1 Growth, Performance, and Efficiency

The growth and survival of SMEs have long since been a matter of concern for both academic researchers and policy makers. The growth of SMEs is looked upon as a means to foster the country's economic growth. To achieve growth, the SMEs must

be able to increase their performance and efficiency. The results show that (see Table 12.2) *ASS_GW* and *SAL_GW* significantly influence *P_TASS* indicating that growth in assets and sales increases the return on assets. This implies that SMEs are capable of increasing profitability through additional investment in assets. This disproves the general perception that SMEs' performance dwindles when they intend to expand their business. *SAL_GW* increases the performance and efficiency of the firms. With every unit increase in *SAL_GW*, there is 0.104 raise in *P_TASS* and 0.16 raise in *ASS_TN_OV*. Widening the market or increasing reach in the present market will also be helpful to strengthen the performance of SMEs to a certain level. Nevertheless, growth has to be backed with sufficient finance.

12.5.2 Financing Sources and Growth

Analyzing the impact of financing sources on growth reveals no significant impact except for *TD_CR*. Availability of sufficient finance alone is not enough to encourage SMEs to grow and expand. Not all small business managers have the goal to expand their business (Orser, Hogarth-Scott, & Wright, 1998; Wiklund et al., 2003). The growth of the SMEs may be looked upon as an inner instinct rather than an externally influenced factor. SMEs are usually molded and shaped in tune with the intentions and goals of their owners. Wiklund and Shepherd (2003) also found a linkage between the growth aspirations of small business owners and company growth. Thus, availability of finance showed no significant impact on its growth. However, *TD_CR* significantly influences *ASS_GW* positively. With every one unit increase in *TD_CR*, there is 0.138 times increase in *ASS_GW*. This may suggest the existence of financial constraints that hinder growth. SMEs operating primarily on tight money get a space to grow when they get sufficient short-term debt (Petersen & Rajan, 1997; Tsuruta, 2008; Giannetti et al., 2011; Ogawa, Sterken, & Tokutsu, 2013). The other reason for using *TD_CR* is that it is the cheapest form of credit having little problem of informational asymmetry. This also exhibits the tendency of use short-term finance for investment in assets, which may lead to liquidity risk.

12.5.3 Financing Sources Impact on Performance and Efficiency

Though financing sources cannot be seen as contributing to the growth of SMEs, financing sources significantly contribute toward performance and efficiency of the firms. This is in line with Jovanovic's (1982) argument that the primary goal of

young SMEs is to reach the minimum scale of efficiency required for its survival. INT_FIN and INST_FIN contribute positively to P_TASS and P_SAL. With every one unit increase in INT_FIN, there would be 0.945 times increase in P_TASS and 0.559 times increase in P_SAL. The contribution of INST_FIN is comparatively lesser. With every unit increase in INST_FIN, P_TASS increases by 0.633 and P_SAL increases by 0.425. This showcases INT_FIN as the most important source of finance to enhance its performance followed by INST_FIN. DB_CAP and TD_CR exhibit significant negative impact on P_TASS. Such negative impact shall be due to the reason that external debts other than INST_FIN are not intended to serve the needs of well-performing firms. Ayyagari et al. (2010) also found that firms relying on sources of informal external financing have lower profit reinvestment rates and do not grow faster than those firms which are financed by banks. These sources are usually considered as an alternate financing choice by firms having less access to INST_FIN due to their poor accomplishment record.

12.5.4 Firm-Specific Characteristics Impact on Financing Sources

Firm-specific characteristics are the influential factors which help in resolving the decision of financing choice. Financial constraints do not preface all SMEs. Newer, younger, and less established firms suffer from such infirmities. Due to risk factors, smaller enterprises have greater problems with bank credit (Aryeetey et al., 1994; Abor and Biekpe 2007). Financing sources consider such flaws while extending credit. They remain the decisive criterion for lenders. Analyzing the firms' characteristic impact on financing sources, we find that SIZE has significant negative coefficient with INST_FIN (-0.125) and DB_CAP (-0.06). This implies that large size firms have lesser dependence on external finance. Rocca et al. (2011) argued that re-balancing of capital structure takes place as firms grow larger, as they gradually substitute debt for internal capital. This also goes in hand with the pecking order theory. AGE has significant positive coefficient (0.137) with INST_FIN. AGE serves as a proxy for firms' reputation (Ang, 1991). It hinders young firms from accessing INST_FIN (Muller & Zimmermann, 2009; Mina et al., 2013). Banks are also inclined to lend to older firms having credit history and established relationship with banks (Lee, 2014). COLL_ASS has significant negative coefficient with DB_CAP (-0.066) and TD_CR (-0.111). A negative relation of COLL_ASS with TD_CR is understandable, as this short-term credit passes on at lesser cost from the supplier to the firms well-known to them. A significant negative impact of COLL_ASS on DB_CAP would mean that the sample firms are either self-reliant or firms with low growth. Only firms intending to grow seek external debt (Degryse et al., 2012; Gonzalez & Gonzalez, 2012). However, this result cannot be generalized to all SMEs without proof that the firms are self-reliant. The negative impact can also be interpreted that the availability of collateral enables

them to avail formal credit. However, the impact of COLL_ASS on INST_FIN, a formal credit source, is not significant which reason shall be attributed to availability of collateral-less credit in the country.

12.5.5 Firm-Specific Characteristics Impact on Growth, Performance, and Efficiency

The analysis shows that SIZE (0.321) and COLL_ASS (0.186) have significant positive impact on ASS_GW. Larger firms invest more in assets. The other dimension of the result is to be interpreted to get a deeper insight. The positive significant coefficient (0.181) of ASS_GW on SAL_GW shows that any additional investment in asset is associated with growth in sales. Being manufacturing firms, the growth is largely linked to ASS_GW. SIZE (-0.176) has significant negative impact on P_SAL which shows that as the sales size increases the firms maintain a lower profit margin. A low-profit margin is typically an indicator of either a highly competitive market or an ineffectively run business. As a lower profit margin is associated with a larger scale size, we can construe that these firms can typically benefit from the economies of scale in a highly competitive market environment. COLL_ASS (-0.243) has highly significant negative influence on ASS_TN_OV which implies that the firm's additional investment on asset is not productive enough. This contradicts the earlier finding that ASS_GW increases SAL_GW and P_TASS. This suggests that additional investment in asset does increase sales and profitability. However, such increase is not proportionate to the investment made. Thus, SMEs' efficiency reduces with additional investments proving its inefficiency to operate as larger organization.

12.5.6 Exports Impact on Financing Sources, Growth, Performance, and Efficiency

While export activities incur additional expenses, beyond those required for domestic operations (Minetti & Zhu, 2011), they also enhance a firm's capabilities and managerial skills and facilitate better performance (Katsikeas & Skarmas, 2003). Results show that EX_PRO has significant positive influence on INST_FIN (0.577) and DB_CAP (0.088). Thus, exporting firms have to rely on external finance to meet out additional expenses needed for its international activities. For each unit increase in INST_FIN, EX_PRO increases by 0.577 indicating the crucial role played by formal credit in encouraging exports. However, DB_CAP (-0.743) has a significant negative influence on EX_PRO. This inverse relation suggests that financing export activities through external sources other than INST_FIN are unfavorable. There also exists significant negative impact of INT_FIN (-0.859) on

EX_PRO as a proof that INT_FIN is also not that effective in boosting EX_PRO. EX_PRO is not found to be a significant determinant of growth and performance and is removed from the model.

12.5.7 *Interrelations Among Variables*

Path model also helped to identify some unassumed relationships among the variables (see Table 12.3). INST_FIN holds significant positive coefficient (0.973) with DB_CAP as it holds a major share of the external credit of the firms. TD_CR also has significant positive coefficient with INST_FIN. TD_CR is considered as an alternate to bank credit-constrained SMEs that have little access to sources of external funding (Biais & Gollier, 1997; Petersen & Rajan, 1997; Ogawa et al., 2013). These studies suggest a negative relation between these INST_FIN and TD_CR. TD_CR usually favors SMEs in critical situation as a source of ‘financing of last resort’ (Fisman & Love, 2003). TD_CR is from suppliers who know their customers and their ability and provides extended credit periods to enable them recover from the crisis. These also form a guarantee for further borrowing from banks when the firms are particularly young and have no credit history. Thus, there exists positive relation between the two. TD_CR has significant negative coefficient (−0.238) with DB_CAP. SMEs have the tendency to prioritize external fund requirement with TD_CR. TD_CR is treated as the second-largest source of funding for SMEs, after banks and private lenders. P_SAL also has significant negative coefficient (−0.113) with P_TASS which also implies that the firm’s additional investment on asset is not productive enough. The goodness of fit indices indicates that the model is a perfect model revealing relationship among variables (see Table 12.4). The chi-square value is not significant which means that the observed

Table 12.4 Goodness of fit indexes

<i>Goodness of fit indexes</i>	
Chi-square	24.374
Degrees of freedom	29
Probability level	0.710
CMIN/df	0.840
GFI	0.988
AGFI	0.964
CFI	1.000
RMSEA	0.000
PCLOSE	0.997

Source Computed results based on compiled data collected from CMIE prowess Pvt. Ltd.

model is similar to that of the predicted model. The goodness of fit index (GFI) and comparative fit index (CFI) are close to one indicating that the model fit is good.

Root mean square error of approximation (RMSEA) and CFI show how close the model corresponds with the data. Since the RMSEA value is less than 0.05, we can consider that the estimation is acceptable and suits the sample data.

12.6 Summary and Implications

In this study, the impact of funding sources on the financial and export performance of SMEs has been analyzed. Firm performance was measured in terms of profitability, return on assets, and asset turnover. Export performance was measured as a ratio of exports to total sales. Data from 323 manufacturing firms for the years 2007–2012 have been used for the analysis. Structural equation modeling technique was used to understand the relationship between funding sources and variables of interest. Our results indicated that source of funding is strongly associated with its performance. However, the effect differed between financial performance (profitability, return on asset, and asset turnover) and export performance.

It was seen that both internal finance and institutional finance had a positive impact on profitability, return on assets, and asset turnover. However, the impact of internal finance was higher in case of return on assets and profitability. The impact of institutional finance was higher in case of asset turnover, which showed that firms with institutional credit were more efficient in deploying their investment, though they might not be very profitable. An interesting result was observed in the case of total debt capital and trade credit. Total debt, which included funding from non-institutional sources also, had a negative effect on return on assets and asset turnover. This showed that obtaining credit from informal sources did not benefit the SMEs. If we assume that firms resort to obtaining credit from informal sources only when they are unable to secure credit from banks and institutions, our results underline the need for enhancing the availability of bank credit to SME sector. The effect of trade credit was also negative on all firm performance indicators, though the coefficient was positive for growth. This showed that while trade credit might be a quick fix solution to achieve growth, it does not make a significant contribution to the long-term performance of the SMEs. Availability of long-term capital is therefore critical in enhancing the performance of SMEs.

Our results indicate a positive relationship between institutional funding and exports. Firms with higher ratio of export revenues are characterized by a higher ratio of institutional funding. We, therefore, conclude that SME firms pursuing an exports strategy prefer to avail bank or institutional credit since such credit benefits the SME firm in some way to achieve better export performance. This has a clear implication for policy making. If the policy imperative is to stimulate exports, then access to credit from banks and institutions to the SMEs would have to be ensured. Our results also show that increasing ratio of export sales is also associated with higher total debt ratios, but the coefficient is not as high as what was obtained in the

case of institutional finance since total debt ratios include all other sources of debt in addition to institutional finance. We, therefore, conclude that higher proportion of export revenues is associated with the higher levels of institutional credit as compared to debt from other sources. Further studies need to be done on understanding the causal pathway of how institutional or bank finance has a positive impact on exports.

Analysis of the intertwined relationship between internal finance and proportion of exports shows that firms that rely significantly on internal finance do not have a very high proportion of export revenues. The negative coefficient from the path model predicates such a relationship. Interestingly, a high debt ratio is predicted to have a negative relationship with the proportion of export revenues. This may seem contradictory to the earlier finding that higher ratio of export revenues is associated with a higher proportion of debt. In fact, the size of the coefficient indicates that the negative effect of debt on export revenues dominates the positive relationship between export revenues and debt. Our inference is that while bank or institutional finance is associated with a positive impact on export performance, debt from informal or other non-institutional sources has a negative impact on export performance. Additional studies are needed to understand the role of debt capital in export performance.

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Chapter 13

Internationalization of Auto-Component MSMEs: A Study on the Role of Institutional Networks



N. Madhumithaa and M. K. Badri Narayanan

13.1 Introduction

13.1.1 Background

In recent years, the economic and social importance of small- and medium-sized enterprises (SMEs) has been a major focus of emphasis regarding its enormous impacts in building and revitalizing the economy and in India, especially the Indian auto-component industry has become the nation's manufacturing powerhouse over the past two decades. Especially small- to medium-size auto-component manufacturing units account for over 95% of all auto-component enterprises in India and which generates employment for about 30 million people. Investment of around Rs. 25–30 billion is expected in the next 2 years. An increasing presence of global original equipment manufacturers (OEMs) is providing opportunity for internationalization to the Indian auto-component manufacturers. Many auto-component Micro, Small, and Medium Enterprises (MSMEs) in particular have realized the enormous impact of outward international expansion as a means for creating and maintaining innovative capacity and resource generation (Green & Mole, 2006; Zain & Ng, 2006). However, SMEs face particular difficulties which in the view of globalization, chiefly consist of barriers to successful internationalization (Torkkeli, Savitskaya, & Salmi, 2010).

SMEs internationalization can be grouped into internal and external barriers (Fillis, 2000) whereby internal barriers include but not limited to inadequacies in human capital, financial resources, expertise know-how and foreign market expo-

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sure, and production capacity and/or machineries; while external obstacles include, e.g., government policies and trade barriers, lack of awareness about foreign market opportunities, no connections with potential foreign business contacts, hostile competition from multinational enterprises (MNEs), little or no internationalization support services, lack of credit facilities, market uncertainty and lack of protection from economic and political uncertainties, competing with local competitors by means of price and most importantly, non-connectedness with relevant support networks (Fillis, 2000; Leonidou, 2000; Smallbone & Welter, 2001; Fliess & Busquets, 2006; Ruzzier, Antoncic, Hisrich, & Konecnik, 2007; Torkkeli et al., 2010). On the other hand, MNEs have more financial and human resource capabilities as compared to SMEs and more vast in network relationships with both public and private institutions. Therefore, with their gigantic resource advantage combined with extensive network relationships, MNEs are more capable to leverage internationalization opportunities to their own advantage. Thus, this unique advantage situation gives some MNEs greater edge or possibility to influence the foreign market environment at both the policy level and the industry and business outcome. To overcome this scenario, institutional support is the most important parameter which works for SME and industry specific.

13.1.2 Problem Discussion

The small businesses' resource constraint as an increasing impediment on their path to internationalizing their activities frontiers has attracted research interest in this area. For example, earlier studies have mostly concentrated on examining how SMEs internationalization process utilizes and is influenced by: social networks (Velásquez 2010), regional and domestic networks (Lin & Chaney, 2007), personal and family ties (McGee & Peterson, 2000), specific inter-firm networks (Zimmerman et al., 2009); and numerous other studies in one way or the other focusing on general network relationships such as Bell (1995), Coviello and Munro (1997), Ellis (2000), Zain and Ng (2006), Ojala (2009).

Even though there has been extensive research on "Internationalization process of SMEs," there exists a dearth of studies to show how institutional network relationships interplay with outward internationalization process of industry-specific MSMEs, especially in the auto-component sector. This study is an attempt to fill the gap in literature.

13.1.3 Research Question

Based on the above discussion, it is clear that the importance of how networks influence SMEs internationalization process cannot be over-emphasized. In this

case, the focal interest of this study is to investigate the following research questions concerning what role institutional networks play in the internationalization process of SMEs:

- *What are the various international activities carried on among auto-component SMEs?*
- *What is the influence of institutional networks on auto-component SMEs' internationalization process?*
- *How do auto-component SMEs access and utilize institutional networks during the internationalization process?*

These research questions have been studied from both the “providers” and the “network member” perspectives.

13.1.4 Purpose

The purpose of the current study is to examine the role of support institutions on the internationalization process of auto-component MSMEs and observe how their awareness, access, and usage of resources of institutional networks/support institutions have influenced their internationalization process. This study attempts to elicit evidence of the influence of support institutions in the internationalization process of ACMs. Why this knowledge is needed and for whom, shall be described in detail in the section dealing with the managerial and academic implications of this study.

13.2 Literature Review

13.2.1 SME Internationalization and Resource Dependency

SME internationalization is crucial for economic development and advancement of innovation and for the growth it depends on the external process for its success, which has been quoted by authors and in various research studies and moreover it is evident in auto-component industry where its growth potential is hidden in innovation and technology. Boter and Lundström (2005), Fliess and Busquets (2006), Ruzzier et al. (2007), and Torkkeli et al. (2010) agree that SME's scarce resource constitutes a major barrier to their foreign market expansion prospects; thus, small businesses cannot compete on the same level as larger entities on the international stage.

Oviatt and McDougall (2005) discussed small business internationalization through the lens of international entrepreneurship framework, thereby focusing on the speed of SMEs foreign market expansion. Arbaugh, Camp, and Cox (2008)

discuss the implicate tendencies that hinder SMEs from internationalizing. Their study suggests that perceptual and experiential factors such as perceived risks, knowledge, and cultural differences are the major factors in determining the internationalization propensity of entrepreneurial firms.

The above discussion implies that even though SME firms are disadvantaged by their resource capacity, however, given the dynamics of network-resource-access, the firm's size limitations might no longer be an issue impeding the firm's internationalization prospects (Calof, 1993; Arbaugh et al. 2008, p. 375). But SMEs rely heavily on diverse external channels to gather both cultural and commercial awareness regarding international opportunities, and to mitigate resource inadequacies—especially in the early phase of internationalization process.

13.2.2 The Role of Institutional Environment

Firm's foreign direct investment strategy and speed is affected by different types of institutional pressures prevalent in both home and host country environment (Francis et al. 2009). Research findings have pointed toward government's policy implications in facilitating the establishment of active institutional networks for promoting SME's outward internationalization (Hessels & Terjeson, 2010, p. 217). Leonidou (2004) has well documented classification of external environmental barriers affecting SMEs international performance—among these are: unfavorable home government rules, regulation and policies, lack of incentives/government assistance programs, political instability in either home or foreign market, fluctuating currency exchange rate, and high tariff and non-tariff barriers, etc.

13.2.3 Benefits of Institutional Networks to Auto Component Sme

Many auto-component SMEs are mostly fast-paced entrepreneurial and often innovation-driven firms, which increase the likelihood of their attractiveness to international markets. These traits might be positively related to commercial success in non-domestic markets; however, the OECD report (2013) on the “*Trade Barriers in SME Internationalization*” and ACMA annual report (2014) on “Export of Auto component” argue that these same characteristics combined with resource constraints put small- to medium-size firms in a particular vulnerable situation (Fliess & Busquets, 2006, p. 16). Thus, SMEs overcome these limitations through integration in external frameworks such as government intervention programs and institutional associations that facilitate SME entrepreneurial capacity-building and internationalization propensity (Fliess & Busquets, 2006, p. 13).

13.3 Industry Overview

The Indian auto-component industry is a sunrise industry which has grown from a docile domestic supplier of components to a global hub for auto-components supply. Today, the vehicles of General Motors, Toyota, Ford, and Volkswagen are essentially assembled with the high-value and critical components made in India.

The Indian auto-component industry is already a proven model for the recent “Make in India” campaign by the Government of India. With its pioneering successes, the industry has contributed 2.40% of our GDP in FY12, generating an employment (direct and indirect) for 19 million people. Several initiatives are regularly taken to achieve the vision of automotive mission plan (AMP) 2006–2016 (Table 13.1).

Product range

The chart indicates the major product categories manufactured in India. These categories have served as a base for choosing the firms for the current study (Fig. 13.1).

13.3.1 Current State of Internationalization

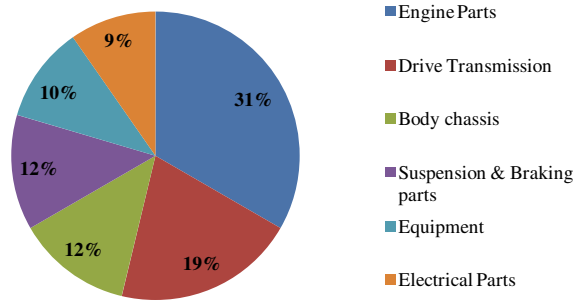
Out of the 71 auto-component manufactures in Chennai, 64 are engaged in international activity through any of the methods like supplying to MNC OEM’s, export or after market, at least technological collaboration. This indicates a high level of internationalization.

Table 13.1 Industry overview

Indian auto-component industry		
Classification	Organized	Unorganized
Major market served	Original equipment manufacturers (OEMs)	Aftermarket
Product category	High-value precision instruments	Low-valued products
Industry turnover	Expected to achieve a turnover of US\$66 billion by FY 15–16 under favorable conditions, the industry is likely to achieve a turnover US\$115 billion by financial year 20–21	
Exports	In 2013, exports grew by 4.4% and reached the value of USD9.69 billion, and it is estimated to reach USD 30 billion by the financial year 20–21	
Geographical spread	70% of the firms are situated in either the northern (NCR/Delhi) or western (Pune) regions. Apart from this Chennai–Bengaluru also is an important cluster	

Source Indian auto component industry overview from Indian brand equity foundation report and Nashik 2013 report retrieved from <http://www.ibef.org/industry/autocomponentsindia.aspx> and <http://59.160.19.131/Nashik2013/PDF/IndustryOverview.pdf>

Fig. 13.1 Sales as per product category



13.3.2 Challenges Faced by the Industry in the Process of Internationalization

With the increasing domestic and export growth prospects, the players in the industry have to invest more to expand operations to harness the emerging opportunities. However, the firms shall have to face several challenges facing the industry, as listed below:

- Increasing demand for technical precision and quality standards by global firms
- Increasing prices of raw materials
- Global economic slowdown
- Weak bargaining power of supplier firms to OEMs
- Fragmented nature of the industry giving rise to increasing rivalry among existing firms
- Increasing import of cheaper substitutes
- Infrastructure bottlenecks
- Dominated by small firms and their inability to heavily invest in R&D, product innovation, and quality testing.
- Issues in raising finance for current operations and growth plans.

Given the nature of the auto-component industry, which is fragmented and dominated by small firms, many of the above challenges cannot be met at the level of individual firms. There is a felt-need for a pro-active role by industry associations and networks which shall act as cluster development agents and facilitate the process of internationalization.

13.4 Methodology

13.4.1 Research Approach

The study is descriptive and is qualitative in nature. The broad purposes of the study were to understand the subject in depth, to map the internationalization process, and analyze the role institutional network in the same.

A multiple case-study approach has been adopted for the study and a comparison between the case-firms has been done in order to arrive at a conclusion.

13.4.2 Research Paradigm

Both deductive and inductive logic have been combined to analyze this multiple case study-based research paper in order to arrive at a most credible end result. To make this study objective researchable, the problem propositions were converted into two research questions to enable us to observe. The logical sequence is developed for ease of analyzing the data which is represented in Fig. 13.2.

13.4.3 Data Collection Method

As mentioned before, the qualitative research methodology is the approach chosen for the study. Interview method has been used to gather primary data. Semi-structured interviews were conducted and the interview guide was designed considering the research problem and subsequent conceptual framework.

13.4.4 Sampling

Non-probability, purposive sampling has been used as the main sampling method to select the companies that fit the set criteria of the study.

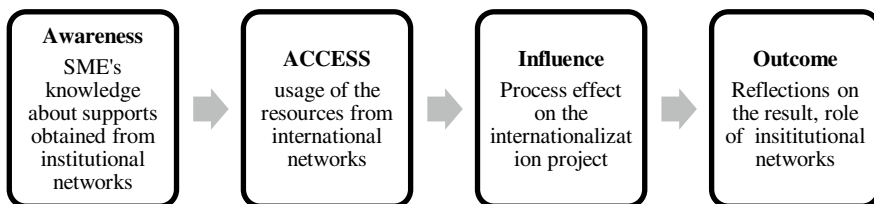


Fig. 13.2 Probabilistic logical sequence of SME's and institutional network relationship

Table 13.2 Criteria for sample selection

Criteria	
Criteria for companies	Criteria for respondents
<ul style="list-style-type: none"> • SMEs are internationalized or in the process to expand their markets and had or are having help from public support networks • Companies are selected based on the product range of auto component industry. Totally, six product range, so six companies are selected 	<ul style="list-style-type: none"> • Participation in a key role during internationalization process of the company • Present in-charge for sales or export activities of the company

Out of the 71 auto component manufactures in Chennai, 64 are engaged in international activity with one or more MNC-OEMs through export or after market or technological collaboration. About ten percent of the total 64 firms, which work out to approximately 6, was fixed as the sample for this study.

Based on the major product categories manufactured in India (Fig. 13.1), six firms were chosen purposively for the current study. These firms show specialization in specific product category.

Two-step criteria were used to select interviewees. Firstly, the SMEs' sample population was selected using the purposive technique which defined the desired characteristics of the companies which is depicted in the below diagram, so that the studied companies can bring valuable information for the research. Secondly, after the companies were selected through the purposive sampling, the respondents that we wanted to talk (interview) in the company were then selected based on their responsibility, knowledge, or experience in foreign market entry operations; thus, the focal people interviewed were required to fulfill certain pre-requisite characteristics about the specific firm's internationalization activities, in order to provide relevant information about the case-company's internationalization process experience (Table 13.2).

13.4.5 Data Analysis

For analyzing the data, research purpose and conceptual framework developed to organize the data collected in order to reach the expected results (Yin, 2009) were taken into consideration. In order to obtain the most important information to realize the analysis, transcripts of all interviews were done. As mentioned before, the use of the theoretical framework to do the analyses provides the needed tools to select the appropriate data from the transcripts.

13.5 Analysis of Findings

The analysis section is sequenced with the set of variable, which is the base for the study. Those more specifically consist of the SME's *awareness, utilization, process impact, and results/outcomes* of institutional network-based resources for and during the process of internationalization. These variables are well connected to the research questions and research objective, and the second part consists of findings which are for secondary objective i.e., to know about the type of international activity carried on and its relationship with products manufactured by the case-firms.

13.5.1 Association with Institutional Networks

This part of the investigation is related to the awareness aspect of the research problem. First, the SMEs were asked to discuss the various forms of networks (if any) which they might use for the purpose of international expansion. The aim is, (1) to see how many of the types of network relationships in the process will fit into the description of institutional networking in the context of the current study, that is, without asking directly about institutional networks. (2) The second aspect directly concerns their level of awareness about the different types of help or support available through institutional networks which they could benefit especially from a view of the resource demands for international expansion processes (Fillis, 2000; Ruzzier et al., 2007; Hutchinson & Fleck, 2009).

According to the inserted extracts as mentioned in Table 13.3, it is evident that IF-01 has association with three institutional support organizations (ACMA, ECGC, and EEPC) which perfectly fit our definition of institutional networks, except one which was mentioned as "supply-on software" because it is the support provided from supplier end. Therefore, the response signifies a fair level of awareness about institutional networking possibilities. The level of institutional networks awareness depicted above is quite consistent with comments from the other case-firms. For example, IF-02 mentioned: AIMA as a prominent support due to their proximity and support received on day-to day-activity and rest other four firms also mentioned ACMA, MSME, ECGC, EEPC. Altogether, these responses indicate a certain level of awareness. A total of ten institutional network support organizations were mentioned by the SMEs in this category without the interviewers asking directly for institutions.

The finding suggests that each case-firm on average has associations with about three different types of institutional network centers. The above analysis has identified a fair level of SMEs association with certain types of institutional networks. ACMA and ECGC were the most mentioned, this could be due to the fact that these case-firms are members of these two institutions and in fact referred the

Table 13.3 Association with institutional network

S. No.	Association with institutional networks
IF-01	“We are a division of great business giant ‘The Bombay Burmah trading corporation limited,’ so we were not looking for incubator for finance at our initial stages. We are networking with ACMA, ECGC and network support provided from host country (Supplier) for software”
IF-02	“AIEMA is the door which we tap first, for network help, because it is the local and immediately accessible. We approach them for basic infrastructural facilities like power, licensing, liaison with government, and even for some operational issues. We are focusing more on domestic market and we are suppliers to international OEMs”
IF-03	“During our initial stages, we were looking for export finance support through various governmental schemes. Since finance is the major problem for small firms, we look for institutional support packages, but they cannot be easily availed because of several regulatory criteria and conditions. For such issues, we get in touch with ECGC and MSME for guidance”
IF -04	“We concentrate more offering quality products and customize them as per customer requirement. So we take the support of ACMA Centre for Technology for Manufacturing Excellence (ACT-ME). As we concentrate on exports, we constantly work with ECGC and EEPC. We also turn to MSME for support”
IF-05	“We look for more training programs in terms of technology advancement, and to clear/get idea about export and internationalization business related formalities and procedures. For this, we depend on MSME, ACMA, and AIEMA. Currently, we are networking with Tata AutoComp Systems (TACO) which is a global supplier of products and services in the field of automotive components, for sourcing new opportunities from international entities”
IF-06	“MSME, ACMA, and AIEMA are the basic institutional networks which provide support for our day-to-day operations and business development”

authors to them. AIEMA (only for the firms located in Ambathur Industrial Estate) was the next most popular among respondents.

13.5.2 Creating Awareness of Institutional-Based Network Resources

This aspect is analyzed to understand how the case-firms got to know about the various institutional supports they have been associated with as they mentioned in the preceding discussions. Also, it was intended to find out how easy or difficult it was for SMEs to become aware of such institutional networks (Table 13.4).

From the responses, it is evident that the level of awareness about the institutional network was fairly good across the respondent SMEs. Regarding the ease of awareness, three of the case-firms said it was really easy to find this type of institutions, whereas other three firms have mentioned it was easy to access the resources which are generic/open to all, but to avail special schemes certain conditions had to be met with, especially for financial assistance. It is important to note

Table 13.4 SME's awareness level of institutional network and resource accessibility

S. No.	Awareness of institutional support	Ease of accessibility to resources provided by networks
IF-01	"From our inception days, we are associated with networks. My predecessor shall be aware of the beginnings, as I have recently moved from production to EXIM"	"Yes, it is very easy for us to contact and access their resources as a member"
IF-02	"Accessing AIEEMA has not been difficult because it is located nearby and provides generalized services. Access to other networks was easy but awareness about their specific schemes was a problem—we didn't have a clear and detail idea about them"	"Business needs pushed us to look for help from these networks and information provided by them was easily accessible as its member. For ECGC schemes, we needed to meet certain requirements like experience and profitable track record"
IF-03	"We were in need of their support and looked for them. They were easy to approach. It was great as they helped me in securing finance by making me aware of what I didn't know"	"It was pretty easy to approach them. Market analysis details are open to all and members can avail it very easily. But to get financial help, certain criteria have to be fulfilled"
IF-04	"We are associated with ACMA from the beginning and through them some market research firms approached us. If they found us potential, it progressed further through our personal networking and industrial meetings. The initiation happened there"	"Of course general information is easily accessible, but, to avail certain schemes we need to fulfill certain conditions"
IF-05	"I am not aware of earlier days because it is quite an old organization. But at present we continue our networking with older networks. We get updates on new schemes and our business networking builds through these institutional networks"	"The common facilities provided by these networks are easily accessible. Only for financial assistance and to avail special schemes certain conditions have to be fulfilled"
IF-06	"It differs from each institutional network AIEEMA and ACMA are core institutional network. As far as my experience goes, they contact us and offer their services"	"Yes, it is very easy to contact them and they are constantly in contact to create awareness about the resources/schemes available to us"

that the awareness patterns differed slightly according to each institution's outreach strategies.

At this point, it is important to analyze the way that SMEs contact institutional network, Table 13.5 explains on it.

Institutions have confirmed that SMEs' principal way of contact was *through email, phone calls, in our office, meetings and awareness programs* (IN-01 to IN-05). The SMEs use of email as the preferred method for contacting the institutions is not surprising in this digital era. It further illustrates the erosion of the

Table 13.5 SME's mode of contact

S. No.	Institution	SME's mode of contact
IN-01	ACMA	Usually, the SMEs approached their office directly, through personal networks; invariably, we are present in the market for the past 50 years
IN-02	AIEMA	Compulsory membership for the industries located in this area, peer groups, and business networks
IN-03	MSME	Meetings and awareness camps are conducted among SME sectors, through meetings organized by associations, through exhibitions or seminars. Generates interest as a credible and a well-established body
IN-04	ECGC	Since it is a statutory body, the SMEs approached them directly, for those exporters who fulfill the requirements credit is provided, awareness about schemes are spread through their networks (ACMA, MSME, AIEMA)
IN-05	EEPC	Accessed directly through walk-ins, emails, and phone calls Awareness comparably low in the past, but now their specific associations spread awareness about the services provided by EEPC

previous expectation and/or conception that important formal contacts are made personally by phone or through physical visits. All-in-all, the evidence indicates that SMEs have easy access to the institutional network centers.

13.5.3 Support of Institutional Networks in Facing Challenges

This aspect is related to both research questions, that is (a) the influence and (b) the usage of institutional networks for internationalization of SMEs. In this line of enquiry, the questions were focused to gain insights about what type(s) of resources the firms actually seek for and utilize from the possibilities provided by the institutions. It is essential to understand the actual institutional network-based resources utilized by the SMEs and the main benefits of such resource utilization during internationalization which will eventually reveal the impact/ influence in the internationalization process. Hence, obtaining this key information shall ultimately point toward answering the overall research problem, which is to examine the role of institutional networks in the internationalization process of SMEs, the challenges faced by SMEs, and role of institutional networks in the internationalization process. The excerpts are furnished in Table 13.6.

From the data, we could see that the main reasons why SMEs network with institutional providers were to supplement their own insufficient resource pool, gain market knowledge, build contacts, and define the most suitable entry strategy for each foreign market. There are a few critical issues as that of finance, legal, and other challenges, in which the network institutions confine their role to lobbying and advocacy.

Table 13.6 Utilization and main benefits from institutional networks

Challenges faced	Role of the institutional network
<i>Maintaining the image as a destination for quality</i>	
To maintain the image as a quality-manufacturing destination	Institutions like ACMA, MSME, and AIEMA are providing quality accreditation through training and certification. They are promoting the MSMEs by advertising the products manufactured by listing out in overseas markets. Along with these, EEPC and ECGC are providing specific schemes to SMEs to increase the export which will enable to reach the product out to the overseas customers, thereby paving way for internationalization
<i>Right source and right price for raw materials</i>	
There are increasing challenges faced in the front of raw materials – Delays in identifying the right supplier – Increasing prices of raw materials, – Price discrimination adopted by foreign vendors	Institutions play significantly very less role in solving this issue. They act as an interface between industry and government to solve these issues and EEPC recommends the policy to the government to overcome these issues. Hence, their role is limited pre-dominantly to advocacy
<i>Competition</i>	
Increasing competition from South East Asian firms	Each institutional network plays varieties of roles in order to counter this issue. Some services offered include providing support to explore new international markets, advocacy with regulatory agencies for policy changes and providing assistance in securing finance, and framing new schemes
<i>Absence of dedicated R&D, testing, and design facilities</i>	
Tier-I suppliers insist on in-house designing and testing capability to be qualified as a direct supplier	ACMA Centre for Technology for Manufacturing Excellence (ACT-ME) plays an active role and there are schemes from Schemes of the National Manufacturing Competitiveness Council and Ministry of MSME can be utilized to fund the setting up of such facilities. The sample firms are observed to lack awareness about such possibilities
<i>Finance related issues</i>	
Absence of cheaper sources of financing for technology upgradation and expansion is a major challenge for auto component manufacturers in the SME sector. Assessing buyer credit worthiness, duty drawback and incentives, currency fluctuations are few other challenges faced	There is a less role played by the institutional network in terms of finance, they assist in obtaining financial resource but they don't do that directly. Schemes like international expos' subsidies are provided for technology upgradation and international market exposure. ECGC provides details of buyers' credit worthiness; they also represent it to the government to when there are issues

(continued)

Table 13.6 (continued)

Challenges faced	Role of the institutional network
<i>Legal issues</i>	
Major issues faced by Indian auto component SMEs are buyers lack of trust in Indian arbitration system, documentation for export	EEPC and ECGC are trying to decrease its procedures for obtaining finance to insuring the consignment. Awareness program on export documentation and procedures is actively done by MSME along with the other two institutional networks. EEPC is trying to build good relationship with buyer and supplier to avoid any issues, and ECGC also facilitates the regulatory aspects of exports. But these institutions could recommend government to establish independent arbitration center for creating trust among the stakeholders
<i>Exposure to international markets</i>	
The main challenges are creating awareness about product and services abroad, expensive buyer–seller meets and international events/expos and availability of market intelligence	ACMA advertises its member’s products in its buyers guide but it is mainly used in domestic market EEPC lists its members’ products to overseas market Expensive buyer-seller meet and expos are taken care by almost by 3 out of 5 institutions by subsidizing the international trips ACMA provides platform for sharing experience and knowledge in their networking sessions organized for the members
<i>Manpower/human resource related issues</i>	
Due to emerging employment opportunities in new manufacturing units and service industry, retention of skilled manpower is proving to be a challenge Labor laws are more favorable for workers which foster poor work attitude among employees	ACMA and AIEMA are taking care of providing training for skill enhancement which indirectly acts as a motivation factor for workers. But other two challenges are not handled by institutional networks. They have just represented these issues to the government
<i>Infrastructure bottlenecks</i>	
Infrastructure bottlenecks such as inadequate power supply, poor maintenance of road, and ports affecting logistics lead to higher manufacturing cost for SMEs	As an institutional network, AIEMA and ACMA have represented these issues to the government and especially the SMEs located in Ambattur area have got such issues resolved by AIEMA
<i>Other challenges</i>	
Special concessions are being provided to SEZ-based manufactures which create a competitive disadvantage for other firms. Also setting up greenfield projects is expensive and time consuming, it involves coordination with multiple offices for documentation and follow longer procedures	Export-related activities are taken care as a single-window operation by ECGC and EEPC and other three institutions supporting the process, whereas the other issues has to be resolved with the help of the government. Help can be secured from host country for setting up greenfield projects

13.5.4 Outcomes and Significance of the Relationship

This part of the enquiry sought to gain insight about how the SMEs perceive their relationship with the institutions, and also how the relationships have been maintained or put away after they have been used for a particular phase of the internationalization process. The respondents were also asked to reflect on their association with the institutions—What was the essence of such linkage? Can it be measured or quantified? What did it cost the firms to obtain such connections (if any)? What is the cost versus benefit ratio? This probing was made to relate it to the research question “the significance of the institutional network relationship to the SMEs.”

In this regard, first the SMEs were asked to describe their current relationship with the institutional centers, and again the interviewees were further probed about how important it was for them to have the relationships with institutional network centers. From the responses, it could be inferred that institutional networks had a positive influence on the international expansion process of SMEs. All case-firms said that they recommend the various institutional network support centers to other SMEs and entrepreneurs who might need the same resource benefits. The fact that the case-firms are willing to recommend other firms to the institutional support organizations could be an indication of their positive experience with the institutions. Hence, the findings have shown that the SMEs actually get resource help through institutional networking which then augments their resource incapacity and as a result fosters rapid internationalization.

Furthermore, when both the SMEs and the institutions were asked about which stage of the internationalization process the firms needed critical help, it was found that while the institutions preferred to be involved with the projects at early stages, the SMEs required institutional support at different stages but most preferably at the market entry stage (Fig. 13.3).

The above model reflects the actual information contained in the data gathered from both SMEs and institutions perspectives. And it is evident that the SME—institutional network relationship—starts with the awareness of the internationalizing firm about the resources and types of helps available through the institutions. The awareness then leads to establishing a connection, after which there will be a decision to utilize certain types of support on offer, and this support means actual institutional resource flow to the internationalization process. At the end, the combined impact of institutional network resource utilization reflects on the internationalization process as a whole.

And this model adheres to the logical sequence of SME—institutional network relationship to make the findings much precise for better comprehension. The process is graphically illustrated in Fig. 13.4.

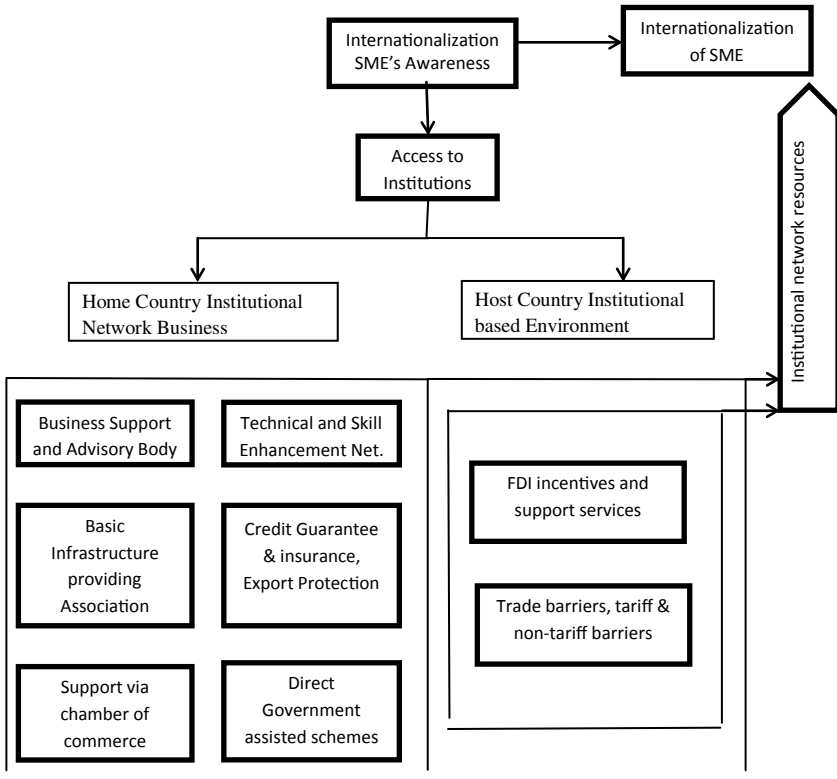


Fig. 13.3 Framework of institutional resource influence on SME internationalization process

From this figure, it is important to note that institutional network connections have been a part and parcel of every aspect of the internationalization process of the case SME. Most importantly, it has to be noted that the institutional network resources not only act as an input, the value of actual help is reflected in the onward choice that it leads to, which is the next phase in the focal firm’s process of internationalization.

13.5.5 Product- and Market-Specific Internationalization Method

The discussion with the SME auto-component manufacturers reveals that, India offers certain competitive advantages for the industry which differs from market to market based on location. The preferred method of internationalization also varied across markets depending upon the product category as listed in Table 13.7.

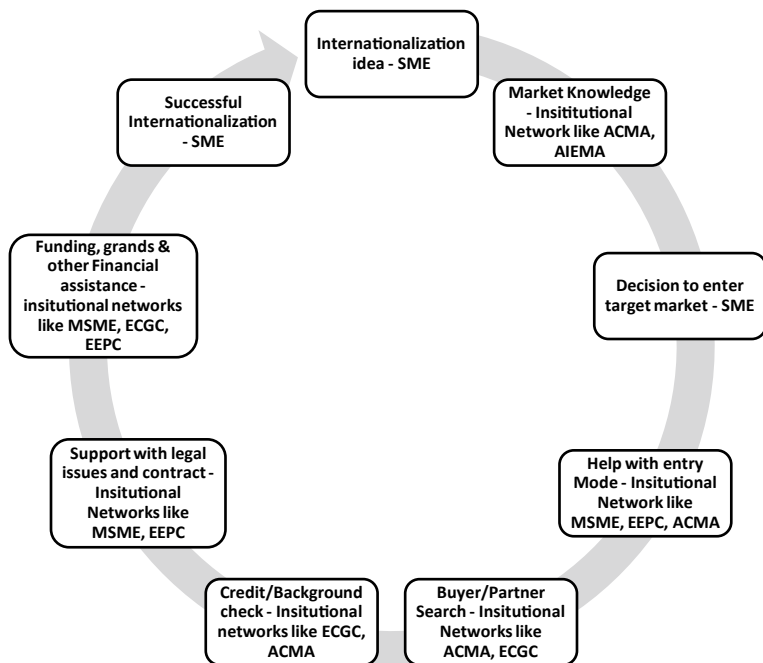


Fig. 13.4 Institutional network resource influence on SME internationalization process

13.6 Conclusion, Contribution, and Policy Implications

13.6.1 Main Research Findings and Conclusion

The current study was set out to examine the “*Internationalization of Auto-component SME’s and Institutions Role in the process.*” To make this topic researchable, the stated research problem was further narrowed down to three research questions as mentioned in the introductory part.

In order to fulfill the research objective, a qualitative study was designed aimed to gain insights on the SMEs awareness, access, usages, and results of institutional networks-based resources for the purpose of internationalization process.

The findings indicated that the institutional network relationships had positive impact on the internationalization process of SMEs. The institutional network resources influenced the internationalization process and are intertwined in the different stages of the internationalization. However, the so-called institutional network resource influence cannot be pinpointed as being more evident at any particular phase of the international activities, and thus, the role of institutional networks is holistically seen in the overall success or failure of the internationalization project.

The analysis has also shown that there are different types/preferred modes of internationalization among auto-component SMEs which is based on their product category.

Table 13.7 Product-specific internationalization process

Particulars	Engine components	Drive transmission and steering components	Suspension and braking components	Body chassis components	Electrical component	Others
Competitive advantage	<ul style="list-style-type: none"> 1. Low labor costs 2. Overall cost advantage 3. Competitive price 4. Preference by OEMs in USA and Europe 	<ul style="list-style-type: none"> • Access to technology • Local production capability • Skills • Ability to supply complete assemblies • Design capabilities • Competitive price 	<ul style="list-style-type: none"> • Skilled manpower • Quality • Increased outsourcing due to low cost 	<ul style="list-style-type: none"> • Skilled manpower • Quality 	<ul style="list-style-type: none"> • High volumes • Low labor costs 	<ul style="list-style-type: none"> • High volumes • Low labor costs
Target markets	UK, USA, Europe, France, Brazil	USA, Denmark	Europe, Africa, North and South America	Europe and U. S. Market	USA, France, Asia-Pacific	Germany, Italy
Preferred mode on internationalization	<ul style="list-style-type: none"> • Supply to international OEM's • Export • After market • Joint venture 	<ul style="list-style-type: none"> • Supply to international OEM • Export • Technology collaboration 	<ul style="list-style-type: none"> • Export • International OEM Supplier 	<ul style="list-style-type: none"> • After market • International OEM suppliers 	<ul style="list-style-type: none"> • Export • After market 	<ul style="list-style-type: none"> • After market

Table 13.8 Summary of findings

Case-firms code	Institutional networks connected to	Awareness	Access and influence	Outcome
IF-01	BBTCL, ACMA, ECGC, Supply-on(from supplier side)	Associated since inception	Market analysis, foreign trips in subsidy price, legal, and business contact	Facilitates the internationalization process
IF-02	AIEMA and ACMA	Proximity	It is common	Know-how, professional help
IF-03	EEPC, ECGC, ACMA	Business needs made us to know about institution	Financial support, market intelligence	Reduces the challenges
IF-04	ACMA technology center and MSME	Through business networks	Market information, technology upgradation	Knowledge sharing and encouragement
IF-05	MSME, ACMA, and ECGC	Since inception	Advisory body, regulatory procedures	Speeds up the process
IF-06	ACMA, AIEMA, ECGS	They got in touch with us	Market data, business opportunity/enquiries	Reduces the risk

Another significant point to be noted from the study is that presence of institutional network in India was much earlier before internationalization, which has helped in better positioning of India as a destination for auto-component manufacturing hub and subsequently setting up of OEM's and for which their presence and activities have been catalytic (Table 13.8).

Hence, it could be evidently concluded that SME's awareness and actual utilization of institutional network-based resources induce rapid and successful internationalization.

13.6.2 Discussion of Main Contribution

13.6.2.1 Theoretical Contribution

Various research studies have suggested that the resources external to the firm are separate from the resources internal to firm, but current study findings have shown that firms aiming to internationalize through any mode establish contact with institutional network. The institutional network-based resource inputs has not only helped the internationalization process but also guides toward the acquisition of funds and other key resources for the internationalization project. Therefore, when

internationalizing, SMEs are connected to institutional networks, most of their resource capacities are simultaneously embedded in the support and resource flow from the institutional connections.

13.6.2.2 Policy Implication

One significant inference which will be helpful for the policy makers is, to step up the efforts in promoting awareness of various institutional support centers and networks that already exist on the local, national, and international level which supports SMEs' internationalization process.

Also, policy intervention has to be made to reduce certain bureaucratic barriers highlighted by the case-firms like longer procedures to avail support/assistance schemes provided by government, redefine the SEZ concept to acknowledge the geographical outgrowth of firms beyond the SEZ area, reducing complexity in export-related processes, which will lead to increase in ease of SMEs being able to access the institutional network-based resources such as financial assistance and improving the infrastructure like road and port facilities, supply of quality, and uninterrupted power, etc., shall contribute greatly to "cost" competitiveness of SMEs.

There is a dire need to review the *blanket-like* definition of MSMEs, which presently categorizes them based on their investment, which actually views a heavy weight child company of a mighty MNC parent, on par, with that of a startup firm promoted by a passionate technopreneur.

Finally, as indicated earlier, the government and policy makers should not only concentrate on enhancing the ease for accessing resource but also increase fund available for SMEs development, which will enable to help larger community of SMEs.

13.6.3 Limitation of Research

Because of time frame, the selection and the number of SMEs chosen to study was limited. All the empirical data for this study were collected during a period of one month; thus, interviews were conducted only with the case-firms who have volunteered. Secondly, because the authors depended on the referrals from institutional network providers to gain access to their client SMEs, it could be argued that access to internationalizing SMEs was first restricted to the contacts that the network institutions provided, and most importantly, access was restricted to only the firms that agreed to grant interviews.

13.6.4 Scope of Further Research

In continuation of the present study, research studies shall be taken up on firms those who have not utilized the services of institutional networks for their

internationalization. Such a study shall target SMEs that has internationalized without the direct utilization of institutional networks. It will also be of use to repeat the current study with more sample firms and adopt a quantitative approach to validate the data by increasing the number of samples in each product categories. Such a study can also help in generalizing the findings and help policy makers.

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Chapter 14

Development and Internationalization of Women's Enterprises: Benchmarking Indian Policies with OECD Policies



Sabiha Fazalbhoy and Asha Naik

14.1 Introduction

According to Sharma (2013), women entrepreneurs have been designated as “the new engines of growth and development in the economies of developing countries to bring prosperity and welfare.” A number of stakeholders speak of them as an important “untapped source” which brings forth economic growth, prosperity, and development (Minniti & Naudé, 2010; Vossenbergh, 2013; Agarwal, 2014). In India, the Micro, Small and Medium Enterprises development organizations, National Small Industries Corporation, various State Small Industries Development Corporations, nationalized banks, and even NGOs help in developing entrepreneurship among women through training programs and skill development programs (Veena & Nagaraja, 2013). These programs though many in number lack adequacy and effective implementation. They require regular monitoring to ensure the benefits to the recipients. The Organization for Economic Cooperation and Development (OECD) began in 1961, and its foremost objective was to strengthen the economies of its member countries and help them in increasing efficiency, expand free trade, and contribute to development in industrialized as well as developing countries. Since 1998, the policies of OECD have been focusing toward women empowerment and development of women entrepreneurs in its member countries; this forms a base for the study as India is now closely being followed by

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the OECD for trade and development. This paper depicts the relevance and need of reforming the existing policies for women entrepreneurs in the Indian scenario and provides a comparative study of the OECD's policies for women entrepreneurs. Suggestions and recommendations have been provided to improvise the existing policies by classifying women entrepreneurs in India into three levels based on the classification obtained from Prahalad (2010).

14.2 Literature Review

Women entrepreneurs have been described as “a women or a group of women who initiate, organize and operate a business enterprise” (Goyal & Parkash, 2011). According to the Government of India, women entrepreneurs are defined as “an enterprise owned and controlled by women having a minimum financial interest of 51% of the capital and giving at least 51% of employment generated in the enterprise to women.” (www.msme.gov.in). The World Economic Forum mentioned women entrepreneurs as “the way forward” in 2012 (World Economic Forum 2012). In recent years, according to (Minniti & Naudé, 2010), the role and focus on women entrepreneurship in most of the developing countries have increased to a great extent and according to (Vossenbergh, 2013; Sharma, 2013; Agarwal, 2014), women entrepreneurs are considered to be an untapped source which has not been focused upon yet and which is very important for the policy makers. OECD (2004) noted that women entrepreneurs in Canada exceed 821,000 and that they contributed 109 million to the economy annually (OECD, 2004; Mahajan, 2013; Rajni & Mehta, 2014). A study shows that the period between 1981 and 2001 saw a great rise in the number of women entrepreneurs up to 208%, as compared to a 38% increase for men. OECD (2000) has stated that women entrepreneurs' involvement has been limited in forms of international cooperation, such as Foreign Direct Investment (FDI), takeovers, mergers, and strategic alliance. On the other hand, the advances of new technologies, particularly Information and Communications Technologies (ICTs), are bringing new opportunities which have the potential to fundamentally alter the role of women-owned business in the globalization process.

According to OECD (2004), women entrepreneurship has two reasons due to which it needs to be studied: one being that they are an important source for economic growth. They become self-employed themselves and also provide other with jobs and give society solutions to management problems. Though they are a minority in terms of numbers, they yet provide a source of entrepreneurial opportunities (Thumma, 2012). The second reason according to the study by (Brush & Hisrich, 1999; Holmquist & Sundin, 2002) being that women entrepreneurs need attention as they are neglected. As stated by OECD (2004), “women entrepreneurs' impact the economy with their ability to create jobs for themselves and to create

jobs for others.” Study reveals that women entrepreneurs help in the growth of large number of businesses both small and large and thus have a great impact on the economy; however, this impact needs to be assessed. Women entrepreneurship is relatively new in India dating back to the 1970s which saw the rise of the women's decade from 1975 to 1985. However, it was visible only in the state capitals and the metros. It took a long time to reach out to other cities which were not developed. In the modern era where women are showing their capabilities in various walks of life (Veena & Nagaraja, 2013), women entrepreneurship is playing an important role in economic development and industrial growth of the country, particularly in the case of India (Siddique n.d.). To know the impact of policy measures on women entrepreneurs, it is very important to include their dimension and views while framing policies (OECD, 2004; Singh, 2014) periodically and allow for coordination and cooperation of activities between international organizations like Asia-Pacific Economic Co-operation (APEC), European Union, International Labor Organization (ILO), OECD, and the United Nations Conference on Trade and Development (UNCTAD) in order to continually improve policies and programs by exchanging best practices among them (OECD, 2004; Mahajan, 2013; Rajni & Mehta, 2014). In India, a women's cell has been introduced by the Office of the Development Commissioner (MSME) to assist and coordinate specific problems of women entrepreneurs. Many schemes have been initiated by the state and central governments to give assistance for training and business generation activities to make women independent economically. Small Industries Development Bank of India (SIDBI) operates and executes special schemes for women entrepreneurs (Dang, Malhotra, & Ghai, 2009). Currently, there are more than 27 schemes for women executed by different departments and a ministry under the government of India (OECD, 2004; Mahajan, 2013, Rajni & Mehta, 2014; Goyal & Parkash, 2011), but what is required is its regular and timely implementation. Most of the government policies, though they offer new opportunities to women, they lack regular and ongoing implementation. According to the Annual Report of Micro, Small and Medium Enterprises (MSMEs), 2011–12, only 215,000 enterprises across the country are owned by women. Government has started framing promotion programs for women entrepreneurs since the last two decades. According to OECD (2014), public policies to promote female entrepreneurship include: (i) creating a gender-neutral legal framework for business; (ii) reducing administrative burdens and excessive regulatory restrictions; (iii) providing equal opportunities to access finance for entrepreneurs of both genders through appropriate financing schemes; and (iv) increasing access to coaching, consultancy services, mentoring, and professional advice on legal and fiscal matters, and training and support networks. Sarfaraz, Faghih, and Majd (2014) have mentioned that entrepreneurship impacts economy through many factors such as quality, gender, and composition, and type of entrepreneurial activity. Women entrepreneurship is the key factor in economic development.

14.3 Women Entrepreneurs and SMEs

According to the 1981 economic census, there were only 1.5 lakh self-employed women in the country, which was 5.2% of the total self-employed. It was only from fifth five-year plan (1974–78) onward that women's development was recognized as an identified sector. The decade of the 1980s provided the real breakthrough for women in many fields. The era during we saw the rise of women's enterprise from 1975 to 1985 was known as the women's decade. As per the information retrieved from www.dcmsme.gov.in, the total number of women enterprises in SME Sector was estimated to be 1,063,721 (10.11%), the estimated number of enterprises actually managed by women being 995, 141 (9.46%).

Number of women enterprises in India from 2001–2002 to 2006–2007 as per the census report of Government of India are as follows:

Year	Total number of women enterprises in India	Registered	Unregistered	% of the total
Third census 2001–2002	995,141	114,362	880,780	9.46
Fourth census 2006–2007	2,021,000	215,000	1,806,000	13.72

The above table shows that there is a rise in women entrepreneurship in India over the years. Women entrepreneurs have been playing an essential role in managing and growing small and medium enterprises. According to the National Sample Survey Organization (NSSO) 2006, women own 14% of the businesses in India; this is much less as compared to male-owned enterprises (www.indianweb2.com). However, this number has increased over the years, and women have more opportunities as entrepreneurs in the coming years. Most of these businesses are in the MSME sector. Government of India has taken initiative in promoting women entrepreneurship and has recently launched the Standup India scheme, under which banks will be giving loans of up to Rs. 1 crore to SCs, STs, and female entrepreneurs.

14.4 Aims and Objectives of This Study

The main objectives of this study are as follows:

- (a) To undertake a comparative analysis of the policies for women entrepreneurs in India and the policies laid down by OECD for women entrepreneurs and
- (b) To highlight the areas of concern and to discuss the proposed benefits accrued thereafter.

14.5 Research Methodology/Design

The research design is based on secondary data derived from extensive literature review from reports of Organization for Economic Cooperation and Development (OECD) for various years, a number of Indian government reports, official Web sites, reputable journals, articles, and books. Data derived have been taken from various reports of the government, Web sites, and census reports. A review of relevant Web sites to derive literature has been done. The literature derived has been chronologically arranged.

14.6 Need for the Study

Women constitute a major part of India's population. Hence, progress is not possible unless their needs and aspirations are completely met. According to Siddique (n.d.), empowerment of women depends upon whether they are educated, well read, and informed. Women are not treated equal to men, and gender bias exists in societies. For women to enter into business, the consent of the head of the family is required as businesses are known to be male preserves. These are the common obstacles in their growth. The financial institutions are not confident upon them and their entrepreneurial abilities. From this research, it continues that the banking institutions consider giving loans to women as higher risk than giving to their male counterparts. Family commitments of women also deter their success as entrepreneurs. According to (Thumma, 2012), though women entrepreneurs are job providers and exploit entrepreneurial opportunities and also give solutions to business problems, they still represent a minority. Gender bias and discrimination that exist in the society need to be overcome to provide women entrepreneurs due recognition. The existing set of policies though many in number require amendment in terms of execution and implementation. The study focuses upon this need and compares policies for women entrepreneurs in Organization for Economic Cooperation and Development (OECD) as a base and provides suggestions for policy amendments for women entrepreneurs in India.

14.7 Policy Comparison

Table 14.1 provides a comparison of the schemes and policies for women entrepreneurs in India and Organization for Economic Cooperation and Development.

A discussion on the policies for women entrepreneurs will not be complete without a mention of the how policies for women have evolved over the five-year plans as discussed in Table 14.2.

Table 14.1 Comparison of the policies for women entrepreneurs according to OECD and in India

Key Policy recommendations of OECD for women entrepreneurs-2004, 2009, and 2014	Key policies for women entrepreneurs in India	Gaps identified in the policies—OECD and India's policies	Recommendations suggested
1. To provide equality at the work place for women and give them facilities for child care during work hours (OECD, 2004; Singh, 2014; Sangeetha)	No policy to correlate with the OECD policy	No specific policy in India to cover the dimension of availability of affordable child care at the work place	A policy in unison with the OECD policy can be framed to provide affordable child care at the work place
2. Provide a platform to women entrepreneurs by organizing information seminars, meetings, and providing women with web-based information for starting or growing their business (OECD, 2004; jru.edu.in; Singh, 2014; Vijaya, 2013; Sangeetha)	SIDBI's marketing fund for women for marketing of products manufactured by women entrepreneurs (Sharma, 2013) Schemes under the ministry of micro, small and medium industries-TREAD scheme-Trade-related entrepreneurship assistance and development scheme to provide credit, training, counseling, and information on related needs (Vossenber, 2013; Agarwal, 2014) (introduced in the ninth Five-Year Plan 1997–2002, will be implemented in 2014–15) Mahila Coir Yojana—women-oriented self-employment program (started in November 1994)	There are policies in India which cover the aspects mentioned in the correlating OECD policy e.g., TREAD scheme; however, the regular implementation of these policies must be ensured	Policies which coexist with the OECD's policy need to be effectively implemented
3. Incorporate women's entrepreneurial dimension while forming policies related to SME's (OECD, 2004; Mahajan, 2013; Rajni & Mehta, 2014)	No specific policy to correlate with the OECD policy	No specific policy in India to incorporate women's entrepreneurial dimension before forming SME-related policies	Women's entrepreneurial dimension needs to be studied before forming SME-related policies

(continued)

Table 14.1 (continued)

Key Policy recommendations of OECD for women entrepreneurs-2004, 2009, and 2014	Key policies for women entrepreneurs in India	Gaps identified in the policies—OECD and India's policies	Recommendations suggested
4. Develop and promote women entrepreneur networks (OECD, 2004)—by cooperation and partnering with national level and international level development networks, to facilitate entrepreneurial endeavors undertaken by women (OECD, 2004; Singh, 2014)	Ministry of labor and employment's scheme for women—skill development for early school leavers and existing workers in the unorganized sector in consultation with industry and micro enterprises (Sharma, 2013)	No specific policy to correlate with the OECD policy	Policies in India need to encourage the global networks to partner into facilitating women entrepreneurship
5. To undertake periodical evaluation of SME-related policies which measure their impact on actual growth of women. To understand how these women-owned businesses take benefit of these measures (OECD, 2004; Mahajan, 2013; Rajni & Mehta, 2014)	Swayam Siddha scheme for women—which was started as an initiative of the ministry of women and child development (2001) dedicated to empowerment of women and is a self-help group-based program. It was started in phases, and the first phase culminated in 2008	Lack of awareness is prevalent among women entrepreneurs, and regular monitoring of the policies is essential	Awareness generation programs can be initiated through the policies framed
6. To improve the factual and analytical understanding about women and their role in the economy —by carrying out gender-based comparative analyses of the impact of important development policies (OECD, 2004; Sharma, 2013; Vijaya, 2013; Agarwal, 2014; Rajni & Mehta, 2014)	The seventh five-year plan (1985–90) laid focus on gender equality for women. Qualitative aspects such as better rights' awareness, confidence building, and skills training for better employment were emphasized upon (Goyal & Parkash, 2011). This partially correlates with the OECD Policy (OECD, 2004)	Specific policy related to gender equality does not exist, and procedure to check the impact of the policies when framed needs to be laid down	Policies related to gender need to be implemented regularly, and they must be monitored to study their impact across the country over a period of time

(continued)

Table 14.1 (continued)

Key Policy recommendations of OECD for women entrepreneurs-2004, 2009, and 2014	Key policies for women entrepreneurs in India	Gaps identified in the policies—OECD and India’s policies	Recommendations suggested
7. Policy recommendations in closing the gender gap in education, employment, and entrepreneurship (OECD, 2014)	Seventh five-year plan (1985–90) laid focus on gender equality for women	In India, the policies are now being focused on closing the gender gap	Specific policy focusing gender equality for women needs to be framed in education, employment, and entrepreneurship
8. Recommendations for policy measures to ensure clarity, transparency, and make women aware of illegal practices in business and to encourage the potential of women to be job providers. Provide women with access to finance (OECD 2009)	Schemes are developed by the ministry of women and child development (STEP—support to training and employment program) for women to ensure economic justice to women particularly those living below the poverty line. Started in 1986. A number of schemes which provide financial support exist; however, their effective implementation is required (www.planningcommission.nic.in)	A specific Policy is required to generate awareness among women of illegal practices in business—does not currently exist	Policy to generate awareness among women about the illegal practices in business needs to be framed

Source OECD reports of 2000, 2004, 2009, and www.dcmsme.gov.in

These plans are committed to ensure empowered lives for women who comprise 48% of the country’s population. Currently, the Government of India operates a number of women-oriented schemes under the various ministries (Goyal & Parkash, 2011; Mahajan, 2013).

The above-listed five-year plans indicate and support the development of women; they focus on women empowerment in all spheres: education, overcoming gender bias, inculcation of confidence, access to resources, and providing training of skills for better employability. These initiatives of the government provide access and awareness among women to set up their own business, thus promoting entrepreneurship. As women form an essential component of the Indian population, it is essential to focus on their needs particularly in the unorganized and rural sector. These government initiatives are a step toward their development and empowerment; however, they lack in effective implementation.

Table 14.2 Policies for women through the five-year plans

Five-year plans	Key features
First five-year plan (1951–56)	Great number of measures focusing on women's welfare was introduced. Establishment of the central social welfare board, Mahila Mandals, and community development programs were a few steps in this direction
Second five-year plan (1956–61)	Intensive agricultural development programs were linked with women empowerment
Third and fourth five-year plans (1961–66 and 1969–74)	Education for women was focused upon as a welfare measure
Fifth five-year plan (1974–79)	Emphasized on providing training to women who needed income generation and protection. It coincided with the international women's decade. In 1976, women's welfare and development bureau were set up under the ministry of social welfare
Sixth five-year plan (1980–85)	Focused upon development instead of welfare. It pointed out that due to women's lack of access to resources, their growth is stunted
Seventh five-year plan (1985–90)	Laid emphasis on gender equality and empowering women. For the first time, qualitative aspects such as better rights' awareness, confidence building, and skills training for better employment were emphasized upon
Eighth five-year plan (1992–97)	Focused on empowerment of women at the micro level through the help of Panchayat Raj Institutions
Ninth five-year plan (1997–2002)	Focused on a strategy under which at least 30% of benefits and funds were reserved for women
Tenth five-year plan (2002–07)	Focused on providing empowerment to women by implementing the National Policy for Empowerment of Women (2001) and ensuring survival, protection, and development of women by giving them rights
Eleventh five-year plan (2007–2012)	Aimed at empowering women politically, educationally, economically, and legally
Twelfth five-year plan (2012–2017)	Aims to ensure dignity and equality of all women, in a manner that enables them to gain control over their choices, resources, societal perceptions, and attitudes through enhancement of their economic, social, and political freedom by engendering all national policies, schemes, and programs

Source Adapted from Goyal and Parkash (2011)

As said by Shah (2013), apart from the five-year plans, there are a number of other organizations which work to promote entrepreneurship among women at national and state level, which are as follows:

The Federation of Indian Women Entrepreneurs (FIWE) was founded in 1993 during the fourth International Conference of Women Entrepreneurs held at Hyderabad. FIWE facilitates interactions with women's organizations to enhance their involvement in a range of activities (Shah, 2013).

Small Industries Development Bank of India (SIDBI) is a financial intermediary set up at the national level to facilitate small-scale industries. As a part of promoting women entrepreneurship, SIDBI has specific schemes for women (Vijaya, 2013; Shah, 2013).

Khadi and Village Industries Commission (KVIC) was set up by the Khadi and Village Industries Commission Act, 1956, and has primary function of providing entrepreneurial opportunities to women entrepreneurs in the rural areas (www.planningcommission.nic.in; Shah, 2013).

Micro, Small and Medium Enterprises Development Organization (MSME-DO)—It is the apex body also known as SIDO—its main function is to assist government in formulation, implementation, and to monitor policies for small-scale industries in the country. MSME-DO provides a comprehensive range of common facilities, technology support services, marketing assistance, and entrepreneurial development support among others, to women entrepreneurs (Singh, 2014; www.business.gov.in; Sangeetha; Shah, 2013).

National Bank for Agriculture and Rural Development (NABARD)—NABARD is a financial organization which eases the availability of credit facilities to rural women entrepreneurs (Vijaya, 2013; Shah, 2013).

International Centre for Entrepreneurship and Career Development (ICECD)—ICECD undertakes the core function of training women for their development since a period of 25 years. Its operations are spread internationally to 55 countries (Shah, 2013).

The report of the National Knowledge Commission by Pitroda (2008) states the importance of vocational education training and skill development. It also lays importance on the promotion of entrepreneurial culture in the country through formal recognition of entrepreneurial networks.

The National Entrepreneurship policy of EDII for 2016 focuses upon promoting “inclusive entrepreneurship” by bringing women and minority communities within the ambit of the policy so that they get their fair share in the government efforts to promote entrepreneurship. Business development services and counseling is aimed to be provided to them (www.edii.ac.in 2016).

14.8 Findings and Discussion

We found that in comparison with the OECD’s policies for women entrepreneurs, there are very few policies in India which cover the aspects listed in the OECD’s policies, like no specific policy in India has been framed yet to cover the dimension of availability of affordable child care at the work place; this is an essential requirement, thus a policy in India to cover this aspect needs to be framed. In comparison to the OECD’s policy, which suggests listening to the voice of women entrepreneurs by organizing seminars, giving internet based services to women

longing to become entrepreneurs, there are certain similar suggestions made in the TREAD scheme in India however implementation is a concern for which regular monitoring is suggested by the researcher. Similarly, another recommendation of OECD to include suggestions by women entrepreneurs while deciding and framing policies for them has been observed by its member countries; however, no specific policy has been so far framed in India to incorporate women's entrepreneurial dimension before forming SME-related policies. In the OECD's policy, there is a policy measure to promote and develop women entrepreneur networks (OECD, 2004) by facilitating interaction between women entrepreneurs through cooperation between national and global organizations; this aspect needs to be covered in the Indian scenario. It is necessary to evaluate the impact of the policies framed at regular intervals; this aspect has been observed in the OECD's policy framework; however, it is lacking in the Indian policy framework. Policy recommendations with respect to closing the gender gap in education and entrepreneurship have been framed in the OECD's policy recommendations. In India, the policies are now being focused on closing the gender gap. Recommendations for policy measures to ensure clarity, transparency, and make women aware of illegal practices in business, and to encourage the potential of women to be job providers have been ensured in the OECD's policy; these measures need to focus on in the Indian policy framework. The policies measures of OECD which are relevant to the Indian scenario have been selected for the study and have been compared to analyze the gaps. Suggestions and recommendations have been provided that would provide benefits to the Indian women entrepreneurs and help them perform better.

14.9 Recommendations and Suggestions

As discussed above, a number of policies are formed in India, and in the OECD, however, there are some gaps which can be eliminated and some suggestions which can be absorbed from the OECD policies for the Indian framework to make the policies more efficient and beneficial to the recipients. The five-year plans made by the Indian Government have tried to focus on all aspects of development of women entrepreneurs; however, a consolidated, comprehensive, and inclusive approach is required, and implementation of these policies is a problem. The government's policies with reference to credit, promotion, and regulation are undertaken; however, very few of them focus particularly on women entrepreneurs. Some organizations either private or government also exist and work to promote entrepreneurship among women; however, women entrepreneurs lack the awareness of their services. Indian government has set up the National Policy for the Empowerment of Women (Singh, 2014). As an offshoot of this, many plans and schemes have started functioning, but their proper execution is a challenge, and its impact needs to be monitored. Women are not aware of the availability of financial support and assistance; thus, in spite of financial support policies, actual finance has

reached very few such women entrepreneurs. Due to the existence of gender bias in the Indian cultural setup, motivation among women is limited. They are considered to be most suited for domestic roles.

We would like to provide the following recommendations and suggestions:

- Policies should aim at start-ups along with growth of business ventures at all stages. Training for appropriate funding at all stages of business must be provided.
- There are a great number of women who are making growth strategies for their businesses. Policies should focus on training, product development, consultancy, and credit pools offering a variety of credit customized as per the needs.
- Growth-focused initiatives for women-owned enterprises varying in sizes could focus on tax credit schemes, public-private partnership opportunities for women.
- Banks and supporting agencies must undertake stringent supervision and ensure that no discrimination exists. Comparative analysis to study the impact of the policies should be carried out.
- Gender-specific policy for education, employment, and entrepreneurship for women must be developed. Women entrepreneurs must be involved in policy-making decisions.
- Government initiatives through which small groups of entrepreneurs meet once a month under the “leadership” of a successful female entrepreneur for sharing their experiences and to develop business plans must be made (OECD, 1998, 1999). Self-help groups can be included in this policy measure as they are effectively functioning in most rural parts of the country; this suggestion can be imbibed in their regular monthly meetings.

14.10 Expected Future Benefits of the Suggestions Made

To understand the proposed benefits of the above suggestions, we have classified women entrepreneurs into three levels based on the market classification proposed by Prahalad (2010). This classification is necessary as in the Indian context, women entrepreneurs face a number of challenges. There are a number of factors that contribute and cause gender inequality; some of them are illiteracy, early marriages among women, and insufficient and lack of decision-making power. There are policies and credit schemes in abundance in India; however, they do not have a sufficient reach in the urban and rural areas, and there is a lack of awareness generation. Availing finance and shouldering multiple responsibilities are some of the great challenges which women face while starting and managing an enterprise. Due to lack of education and awareness, they do not have knowledge about easy access to raw materials, finance, and government schemes. As India is a diverse country with multiple cultures, each and every state has cultural diversity of its

own. Thus, the role of women changes in accordance with the culture prevalent. Women need family understanding and support to help them in managing multiple responsibilities. The needs and wants of women entrepreneurs also change, and their constraints are different. The classification below helps to understand the different constraints faced by these women entrepreneurs at different levels and the support required by them.

Level 1

This level includes those women entrepreneurs who belong to large cities and have greater professional and technical qualifications and are stable in terms of finance (Vijaya, 2013). They are well established and do not need support at this stage of their business ventures.

Level 2

These are those women entrepreneurs who required secondary support to overcome cultural bias, societal pressures, family pressures, maintaining work-home balance, financial advice for expansion, etc. These women have enough education and reside in cities and towns; they deal in traditional and other items.

Level 3

In this level, there are those women entrepreneurs who belong to the lowest or base category of the pyramid; they are mostly uneducated, inexperienced, and they require support right from the inception of the business to its functioning in all forms. They are uneducated and illiterate women, who render support in family businesses in the areas of animal husbandry, agriculture, agroforestry, dairy, fisheries, handloom, power loom, etc. (Vijaya, 2013). It includes all the women entrepreneurs who have the initiative and desire to set up a business. Women entrepreneurs from the Women Empowerment Corporation (WEC) and many such organizations can serve as an example of this level of women entrepreneurs.

14.11 Expected Future Benefits of the Above Suggestions to Women Entrepreneurs from Different Levels

- Growth-focused initiatives for female-owned enterprises like tax credit schemes for capital investments in SMEs, and favorable lending ceilings and public credit guarantees would enable these high-profile entrepreneurs to grow and diversify their businesses and promote women entrepreneurship (OECD, 1998, 1999). This would benefit women entrepreneurs from Levels 1 and 3.

- Banks and public support policies must provide for stringent supervision and prevent discrimination. Comparative analysis to study the impact of the policies should be carried out regularly. This would enable them to perform better as healthy competition free from all kinds of corruption would be present, and discrimination would be eliminated. This suggestion would benefit women entrepreneurs from Levels 1 and 2.
- Gender-specific policies for education, employment, and entrepreneurship for women must be developed. Women entrepreneurs must be involved in policy-making decisions. This would enable them to give first-hand information, and the struggle and obstacles can be clearly defined while making policies. This would benefit women entrepreneurs from Levels 1, 2, and 3.
- Tax credit schemes, favorable lending ceilings, and public credit guarantees would ensure the smooth functioning of the business activities, and thus, these women entrepreneurs can focus on other developmental activities. This would benefit women entrepreneurs from Level 2.
- It is pertinent to place a strong focus on factors that provide growth to female businesses. Policies should focus on training, product development, consultancy, and credit pools offering a variety of credit customized as per the needs. This would enable these women entrepreneurs to clearly define their strengths and weaknesses and overcome them through training and consultancy. Customized credit would abstain them from over borrowing and suffice the need as well. This would be beneficial to women entrepreneurs from Level 2 and 3.
- A government initiative through which small groups of entrepreneurs meet once a month for 6 months under the “leadership” of a successful female entrepreneur for sharing their experiences and to develop business plans (OECD, 1998, 1999). The Level 2 women entrepreneurs can benefit from this policy decision as it would help them interact and grow with other like-minded entrepreneurs; it would also give them an opportunity to discuss and overcome obstacles. For Level 3 women entrepreneurs, the meetings would serve a new direction, and the leadership of a successful entrepreneur would enable them to get motivated to perform better.

14.12 Conclusion

The Indian social setup is a male-dominated one. The modern era is revolutionized with a changing traditional setup. As Indian women are getting educated and aware, they are aspiring for better living, and their lifestyle is changing. The three levels classified above point out the different categories of women entrepreneurs in India, whose needs and wants differ. As their requirements are different, policies also need to be made accordingly. The paper has tried to focus on this need and provided suggestions to overcome the existent problems of the current policies in India. The comparison with OECD has brought to light many valuable suggestions which can

be incorporated to provide a better framework for the government to make policy decisions. The challenge is that there are a wide range of policies for women entrepreneurs apart from the five-year plans; however, all are not functioning, and thus, fewer but effective policies are required with effective implementation and monitoring. Policy measures provided in this framework would benefit female entrepreneurs particularly as they are subjected to gender bias in the society; discriminatory attitude of money lenders and banks also poses problems in terms of finance for them; besides this, the society is still evolving to the fact that women in India can be primary bread earners along with being child bearers and homemakers; these changes in policy measures would enable women particularly in India to perform their business activities with ease. Using OECD's policies as base, recommendations and suggestions for policy decisions have been made for the future which will empower women entrepreneurs and help them realize their potential. This body of research has tried and focused upon the entrepreneurial ecosystem and environment, particularly on women's entrepreneurship which can become a large source of socioeconomic development if tapped properly.

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Chapter 15

Ecosystem for Social Entrepreneurship in India: Facilitating Returnee Entrepreneurs



Shakti Prasad Tripathy and Nisha Pandey

15.1 Structure and Scope of this Chapter

The chapter begins with an attempt to define an enabling entrepreneurial ecosystem. In the second section of this chapter, the importance of the institutional context in shaping the nature of entrepreneurship in emerging markets is explored and emphasized through the neo-institutional lens. The neo-institutional lens includes values in addition to the traditional elements of the institutional theories. This builds sufficient background to understand the state of the entrepreneurial ecosystem in India. Existing literature on the returnee entrepreneurship phenomenon is reviewed in the next section followed by a framework for the emerging ecosystem for social entrepreneurship in India. After this initial theory and context building exercise, appreciating the central theme of this chapter becomes easy as returnee entrepreneurship is only one of the many flavours of entrepreneurship coexisting in emerging economies. The entrepreneurship policy environment of India is analysed next for its alignment with the imperatives of returnee entrepreneurship. The gaps identified in this policy analysis exercise lead to a set of policy recommendations towards the end of this chapter.

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15.2 Defining an Enabling Entrepreneurial Ecosystem

An entrepreneurial ecosystem enables and facilitates an interdependent set of entrepreneurial agents. It brings into clear perspective the elements that enable and obstruct entrepreneurship. According to Feld (2012), governments and such other service providers feed the entrepreneurial ecosystem while entrepreneurs act as the leaders. The government is expected to furnish a keystone framework which can range from bringing in the relevant regulations to creating the necessary infrastructure for essential services such as education and taxation. Other agents of the ecosystem do not exhibit a keen interest in cultivating these domains. Isenberg (2011) has identified a set of key principles that can facilitate the blooming of a vibrant entrepreneurial ecosystem.

- (a) Identifying the need to move beyond Silicon Valley as an ideal worth emulating
- (b) Promoting optimal use of the local micro-ecosystem to shape the larger ecosystem
- (c) Coopting the private sector from the initial stages in entrepreneurial activities
- (d) According need-based special treatment to entrepreneurial entities exuding high promise
- (e) Bringing a conspicuous winner on board to lead the change process during ecosystem formation
- (f) Addressing cultural differences *a priori* among the actors in the ecosystem
- (g) Laying emphasis on creating a strong foundation for the new ventures in the ecosystem
- (h) Entrepreneurial clusters are best allowed to evolve as a natural process
- (i) Reforms especially in legal, bureaucratic and regulatory frameworks should be brought in whenever desirable to facilitate the creation of mature entrepreneurial ecosystems

The pillars and components of the entrepreneurial ecosystem (WEF, 2013) may be identified as in Table 15.1.

Table 15.1 Pillars of an entrepreneurial ecosystem—World Economic Forum Report 2013

Pillar	Components
Accessibility of markets	Domestic market: large/medium/small companies and governments as customers Foreign market: large/medium/small companies and governments as customers
Availability of appropriate human resource	Management and technical skills, entrepreneurial experience of companies, scope for outsourcing and engaging migrant workforce
Access to sources of funding	Availability of debt from friends and family, angel investors, private equity, venture capital and risk capital

(continued)

Table 15.1 (continued)

Pillar	Components
Presence of a robust support network	Presence of mentors and advisors, access to quality professional services, access to incubators/accelerators in the locality and being connected to peers engaged in entrepreneurship through relevant networks
Presence of an active government and regulatory paradigm	High ease in starting a business, availability of tax sops, legislation and policies closely aligned to the needs of the business class, existence of basic infrastructure, existence of communication facilities like telecommunications/broadband and transport
Access to relevant sources of education and skills training	Pre-university/university-educated work force and training in skills relevant to entrepreneurship
Presence of high ranking universities to work as facilitators	Mastering a cultural renaissance respecting entrepreneurship in the region, key contribution in idea generation for new companies, major role in supplying graduates to new ventures
Promoting cultural change	Promoting a culture that tolerates risk and failure, promoting a preference for self-employment among youth, disseminating success stories/role models through appropriate media, R&D-based culture, forming a positive image of entrepreneurship as a profession and celebrating successes in innovation

Source Adapted from World Economic Forum (2013)

15.3 Importance of the Institutional Context in Shaping the Nature of Entrepreneurship in Emerging Markets: The Neo-Institutional Perspective

Institutional theory has been used by scholars of entrepreneurship to understand the processes underlying the phenomenon of entrepreneurship in emerging markets. According to Hoskisson, Eden, Lau, and Wright (2000), institutional theory plays a pivotal role in explaining the impact on the strategies adopted by the enterprises. Along with the foci of formal institutional theory (regulatory landscape, laws, technology, etc.), the neo-institutional theory is also about values and practices. In other words, it captures the institutional context of an emerging market in a broader perspective. One of the reasons the neo-institutional theory has emerged as a popular lens for studying entrepreneurship is the fact that unlike other approaches of research on institutional framework which look for a degree of adherence to institutional norms the neo-institutional theory is focussed on questions related to institutional change and the role essayed by the agents in defining the institutional processes (Phillips & Tracey, 2007).

Douglas (1986) defines institutions as self-policing conventions. Swidler (1986) lauds institutions for their role in providing a cultural toolkit that can create conducive circumstance for action and at the same time reduce risks by improving comprehensibility and predictability. Institutions can simultaneously play a

facilitating and constraining role in the activities of the agents in an entrepreneurial ecosystem. Deviations from the accepted institutional mores can be expensive, especially when they are deeply entrenched (Lawrence, Winn, & Jennings, 2001). Institutions have over a period of time evolved into systems that correlate non-conformity with increased cost. At the social level, it decreases legitimacy and enhances economic risk (Phillips, Lawrence, & Hardy, 2000).

Institutions cannot be characterized on the basis of their existence or non-existence alone. On the other hand, institutionalization is a continuous process, rather a continuum with scope for self-reinforcement (Phillips, Tracey, & Karra, 2009). Institutionalization can be imagined to vary according to their degree of institutionalization, from weakly institutionalized forms in which the cost of deviating from the established norms can be minimum to those which are very deeply institutionalized where the repercussion of straying away from the established norms can be significantly high.

Understanding institutional structures is necessary for understanding the economic context of the emerging markets. In an emerging market, entrepreneurs may face issues ranging from the absence of the relevant institutions themselves to the optimum depth of institutionalization. In such cases, fully active institutions premised on new practices may exist (Lawrence, Hardy, & Phillips, 2002), but their association with mechanisms that promote risk-reducing predictable behavior cannot always be guaranteed. The formal and informal frameworks required for entrepreneurship may not be reliable enough for the entrepreneurs in emerging markets to start high-risk new ventures where a high uncertainty may exist due to low degrees of institutionalization.

15.4 Understanding the Returnee Entrepreneurship Phenomenon

Firms premised on technology drive innovation and growth in a country (Bruton, Ahlstrom, & Obloj, 2008). But emerging economies lack expertise in entrepreneurship and the resources needed to innovate (Peng, 2001). This anomaly can be corrected by spillovers related to FDI and foreign trade (Buckley, Clegg, & Wang, 2002; Monteiro, Arvidsson, & Birkshaw, 2008; Wei & Liu, 2006; Liu, Wang, & Wei, 2009). Intra-firm and inter-firm movement of manpower can act as a conduit of knowledge transfer in a country (Almeida & Kogut, 1999; Saxenian, 1994).

According to Saxenian (2006), returnee entrepreneurs have the potential to emerge as a significant driver for the transfer of knowledge and spurring innovation. The phenomenon of highly skilled manpower like engineers to their countries of origin to start new ventures after prolonged exposure to international best practices in business and education is termed as returnee entrepreneurship. There exists a good scope for research on the returnee entrepreneurship phenomenon in the emerging economies particularly on the spillover means through which the nature

of innovation is affected due to the movement of skilled manpower across borders (Saxenian, 2006).

The preponderance of the traditionally accepted knowledge structures is challenged with the advent of new knowledge from across borders through the knowledge spillover route. Many times, the rise of technology innovations in countries like China is ascribed to the role essayed by its returnee entrepreneurs which has succeeded in attracting a substantial number of returnee entrepreneurs due to a variety of 'push' and 'pull' factors. On the other hand, these returnee entrepreneurs influence the innovation processes in non-returnee companies through knowledge spillover.

The role essayed by the immigrant entrepreneurs and ethnic diaspora in the development of geographical regions has been studied for some time now. The role of Indian entrepreneurs in the development of Silicon Valley has been the subject of study in many research papers (Saxenian, 1994). But the phenomenon of these high-potential entrepreneurs returning to their native lands and transferring knowledge through spillover to the local firms has not attracted as much academic attention. This phenomenon has not yet been sufficiently explored academically. According to People's Daily (2007), of the 275,000 Chinese scientists and students come from abroad to China by 2006, 2000 high-technology firms have been set up in Zhongguancun Science Park, considered the Silicon valley of China by 5000 returnees.

This has raised the curiosity of entrepreneurship scholars as the potential effect of such 'brain-circulation' as opposed to the traditional concept of 'brain drain' on the economics of an emerging country is significant. This area again has attracted limited academic attention (Oettl & Agrawal, 2008; Song, Almeida, & Wu, 2003). The degree to which transnational movement of manpower influences the technology and knowledge diffusion in emerging economies has not been extensively explored for empirical evidence. Knowledge spillover and innovation are channelized by movement of skilled man power. The research on knowledge spillovers is enriched by the analysis of returnee entrepreneurs acting as conduits of vital knowledge for the development of innovation. The networks, technology and patents that were created and brought by the returnee entrepreneurs may impact the local companies in the same technology domains through knowledge transfer. Further, the returnee entrepreneurs may act akin to 'knowledge brokers' being in possession of advanced knowledge and having access to international networks enabling international knowledge flows. Thus, we can infer that the impact of returnee entrepreneurs on the knowledge base of their economies through positive knowledge spillovers is high and is especially visible in the case of local firms which reside close to their location geographically.

High-technology intensive firms are resource constrained and are under constant stress to learn and deliver and possess a short life and size, which hence implore the

entrepreneurs to use their previous experience and networks to the fullest (Zahra, Ireland, & Hitt, 2000). The sources needed for knowledge creation may reside internal or external to the organization.

Drawing inspiration from a model presented in a paper titled ‘The Limits of Brain Circulation’ (2008) in which returnee entrepreneurs in China have been categorized into four different types along with their role in the technological development, the following matrix categorizing the returnee entrepreneurs in India has been created (Table 15.2).

Table 15.2 Returnee entrepreneur types based on nature of link with local ecosystem

Networks	Strong connection with local ecosystem	Weak connection with local ecosystem
International networks	Type A	Type B
	These are the most experienced returnees in the class and are characterised by their high-risk appetites	These are also experienced returnees but they are characterized by their capacity to integrate locally available knowledge with a firm’s global innovation networks
	Degree of embeddedness: This refers to entrepreneurs deeply embedded in the local public institutions to share inputs and resources	Degree of embeddedness: This refers to entrepreneurs who often extract knowledge available locally by engaging their cultural affinity
	Limitation: These entrepreneurs face a higher risk of failing owing to many imponderables	There is a tendency in transnational firms to limit their exposure to and engagement with the local research and development activities in order to protect their intellectual property
	Contribution: These entrepreneurs are active in the creation and transfer of new technology into the Indian domestic market. They may also be porous technology organizations permitting knowledge spillover. They have a tendency to send the accrued benefits of their research and entrepreneurship to India	Limitation: There is ample scope for a bidirectional flow of knowledge within the transnational firms’ innovation networks. But sufficient safeguards are deployed to check information leakages Contribution: The local firms may be affected indirectly through mismatching cultural and knowledge management strategies

(continued)

Table 15.2 (continued)

Networks	Strong connection with local ecosystem	Weak connection with local ecosystem
Non-international networks	Type C	Type D
	These are comprised of experienced entrepreneurs who succeed in forging partnerships with institutions locally, formally and informally	The spectrum of entrepreneurs in this category range from those experienced to completely inexperienced entrepreneurs. But what goads them to startup is their presumed superiority over the local firms
	Degree of embeddedness: The degree of embeddedness differs as returnees nurture local contacts themselves or through trusting partners at the local level.	Degree of embeddedness: The degree of embeddedness varies as the returnee entrepreneurs are either successful cultivating local contacts themselves or through trusting partners at the local level
	Limitation: These entrepreneurs are not connected with the new developments in the Western world. They employ contacts available locally for sharing resources and inputs informally They might consider conducting joint research with local firms	Limitation: The absence of international networks limits the scope of sharing costs and miasma In such cases the rate of failure may be as high as the local new ventures operating locally
Contribution: These entrepreneurs contribute both formally and informally in research networks and university-industrial collaborations. They are especially useful for student and faculty exchanges and for the sharing of knowledge	Contribution: These returnees contribute to the entrepreneurial ecosystem by generating competitions on the technology front and challenging the new ventures operating locally	

Source Adapted from Chen (2008)

15.5 The Emerging Ecosystem for Social Entrepreneurship in India: A Framework

Social entrepreneurship can be considered as a practice-located equidistant on a continuum of different entrepreneurship practices at the one end of which rests completely commercial entrepreneurship and pure philanthropy on the other. In other words, it harnesses the best principles of commercial entrepreneurship for creating sustainable social enterprises.

The emerging ecosystem for social entrepreneurship in India comprises the socio-economic, cultural and the legal components. While there are obvious overlaps with the elements of the entrepreneurial ecosystem there are conspicuous

points of divergence. A social enterprise can succeed in the Indian social context if it has access to four different types of enablers. They are

- Sowers of seed
- Pipeline creators
- Early supporters
- Late supporters

The ‘sowers of the seeds’ work more as triggers of the entrepreneurial ecosystem facilitating youth fellowships and campus clubs that can serve as ‘points of baptism/ initiation’ to the social enterprise structure. The ‘pipeline creators’ work through the academic and non-academic courses that can nurture the socio-entrepreneurial ideas once they have been seeded. They serve as a crucial link as even if the ideas have been seeded at an opportune time, they would fail to take off if not ‘incubated’ at the right facility. The role of ‘early supporters’ is also pivotal to the growth of the socio-entrepreneurial ecosystem as the ventures are too prone to failure to attract the attention of serious venture capitalists at the early stage. Finally, the ‘late supporters’ are needed to lend scale to the social enterprises which otherwise might die premature deaths as ‘idealistic wishful thinking’. The prospect of their long-term survival is also a function of their extended support network which includes technical support like start-up consultancy, HR support and research and advisory, network supports such as aggregators and conferences, advocacy support through institutions like The Indus Entrepreneurs and the media (Fig. 15.1).

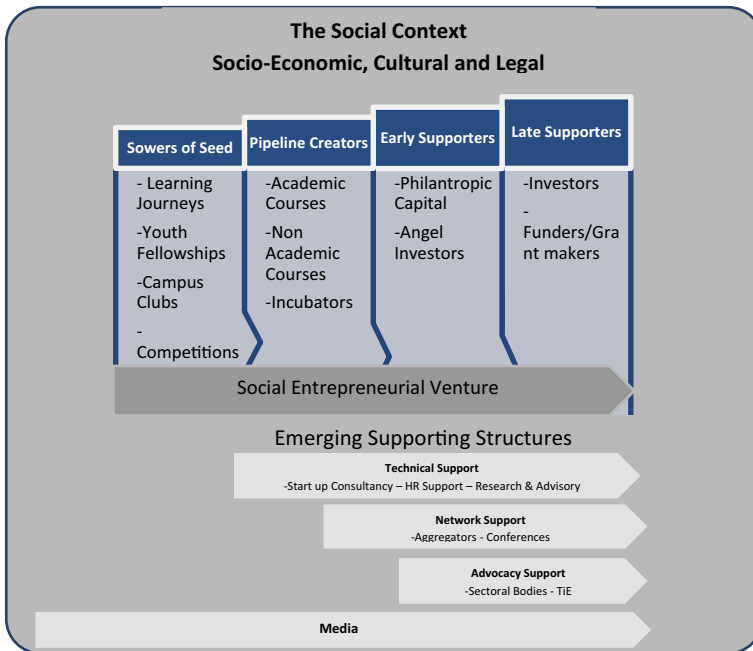


Fig. 15.1 The social context. *Source* Shukla, Farias, and Raghuram (2012)

15.6 Analysing the Entrepreneurship Policy Environment of India for Gaps in Returnee Entrepreneurship Alignment

15.6.1 National Entrepreneurship Policy of India—The State of the Entrepreneurial Ecosystem in India

Starting with the science, technology and innovation policy, 2013, we can see that at a global level innovation, technology and science have evolved as the key drivers of national development. It has reached a juncture where the country's science, technology and innovation policy determines the contours of national development.

The locus and focus of the Science and Technology Policy of India have changed significantly over the years since independence. The thrust of India's Scientific Policy Resolution of 1958 was to foster and promote scientific research in all aspects. The country's scientific construct was envisaged to be the fountainhead of solutions for the country's technological needs. The need to achieve sufficient competence in technological domains and self-reliance were the areas stressed in the Technology Statement of 1983. The Science and Technology Policy of 2003 had a vision of creating a national innovation ecosystem bringing together science and technology to collectively explore solutions to socio-economic problems in India through rigorous research and development.

India is yet to adopt a model-based approach in which innovation is used as an instrument of state policy. This is important as most of the countries at the forefront of science and technology have adopted detailed models of innovation guiding their respective policies. For a start, the decade 2010–2020 has been declared as the decade of innovation. A national level innovation council has been convened with the government stressing on the need to create a suitable policy that harmonizes science, technology and innovation.

15.6.2 The Science, Technology and Innovation Policy in India: Envisioning a New Model

It is not necessary for policy, science and technology to cohabit in the same space. But it is when the three inter-communicate for a higher purpose that new values emerge. The extent of the contribution of science, technology and innovation institutions to creating economic wealth and social value would determine India's standing in the global competitiveness arena in the coming years. Thus, if a framework can be created that works as an enabler to such a synchronization in areas identified as priority by employing internal strengths, India can lunge ahead in the Global Competitiveness Ranking. National problems like absence of universal access to education in the country, dwindling natural resources and degrading

environment and habitat point at the need to create new structures. Innovating for the people needs to be added to the established priorities of science and technology exploration in India. In other words, the government must recognize the Indian demography as a vital actor in the science, technology and innovation ecosystem. The solutions developed by the science, technology and innovation infrastructures in the country must be affordable, accessible and available to the masses to have any significant impact. Such inclusion in innovation can be achieved by effecting revisions in the instruments of the science, technology and innovation policy of India. This can also be achieved by nurturing a symbiotic relationship between the science, technology and innovation ecosystem and the socio-economic policies.

The policy framework can lay emphasis on certain core areas as listed below to inspire the aspirations of the emergent entrepreneur class in India.

- Talented youth may be encouraged to take up careers in science, technology and innovation by making them more remunerative and less risky
- Creating a strong mapping between the components of the science, technology and innovation ecosystem and the inclusive growth model by evolving a joint priority list
- Encouraging the private sector to participate in research and development
- Creating enablers to convert the research and development outcomes emerging from the different government sponsored laboratories into viable social applications on a commercial scale as well as creating public–private sector partnerships wherever feasible
- Establishing structures to seed science and technology-based high risk innovations
- Cultivating innovations that use resources optimally and are good value for money cutting across traditional boundaries
- Nurturing the required ambience that triggers changes in the mental makeup and value systems of the Indian society by rewarding, recognizing and respecting contributions by techno-entrepreneurs that create collective value from knowledge derived from science and technology research
- Formulating a strong national level innovation ecosystem with special focus on entrepreneurs

15.6.3 National Entrepreneurship Policy 2015—Government of India

The National Entrepreneurship Policy ‘cognizant of the need for the full ecosystem to be present to unlock entrepreneurial potential’ proposes a nine part entrepreneurship strategy:

- (a) Educate and equip potential and early stage entrepreneurs across India
- (b) Connect entrepreneurs to peers, mentors and incubators
- (c) Support entrepreneurs through Entrepreneurship Hubs (E-Hubs)
- (d) Catalyse a culture shift to encourage entrepreneurship
- (e) Encourage entrepreneurship among under-represented groups
- (f) Promote entrepreneurship amongst women
- (g) Improve ease of doing business
- (h) Improve access to finance
- (i) Foster social entrepreneurship and grassroots innovation

Though the framework clearly identifies the need to encourage social entrepreneurship in India it does not mention returnee entrepreneurs as a special class who deserve special incentives.

15.6.4 National Schemes Promoting Entrepreneurship in India

The Government of India has launched a number of schemes to promote entrepreneurship in India. Some of these schemes have been analysed as follows.

NIMAT

Under this program, the Entrepreneurship Development Institute, Ahmedabad, has been appointed as the National Implementing and Monitoring Agency for Training to conduct awareness camps and conduct entrepreneurship development programs and women entrepreneurship development programs. They are also focussing on technology-based entrepreneurship development programs as well as faculty development programs. This scheme does not accord special status to returnee entrepreneurs.

DST NIDHI PRAYAS

Conceived under the aegis of the Department of Science and Technology, NIDHI stands for National Initiative for Developing and Harnessing Innovations and PRAYAS stands for Promoting and Accelerating Young and Aspiring technology Entrepreneurs. While NIDHI extends support through scouting, supporting and scaling of innovations, PRAYAS is a program specifically designed to support young innovators for developing a robust proof-of-concept for their product ideas. Both the schemes do not identify returnee entrepreneurs as a special class.

TDP SSS

The Seed Support Scheme was started by the Technology Development Board of India in 2005 to provide financial assistance for start-ups in Incubators. The need for such a scheme arose as the existing funding mechanism could not adequately address the wide gaps in supporting the typical and specialized capital needed for supporting technology driven start-ups. Such early stage financial assistance would

have been extremely crucial for the success of the returnee entrepreneurs working in the social sector.

AIC

The Atal Incubation Centres intend to establish new incubation centres across India by providing them with financial support. Returnee entrepreneurs would have benefited immensely from such centres which worked dedicatedly in the field of social entrepreneurship in India.

BIPP

The Biotechnology Industry Partnership Program is a government partnership with industries for support on a cost sharing basis for path breaking research in frontier futuristic technology areas. It is focussed on the generation of intellectual property with ownership retained by Indian industry and wherever relevant, by collaborating scientists. It supports the development of appropriate technologies in the context of recognized national priorities and supports high-risk, accelerated technology development especially in futuristic technologies through research projects. Such a program could have set the returnee entrepreneurs acting on high-impact social enterprises on a firm footing.

15.7 Policy Recommendations for the Government of India for Encouraging High-Impact Social Entrepreneurship by Returnee Entrepreneurs Based on Gaps in Current Policy Regime

Building further on the key principles identified by Isenberg (2011) at the beginning of the paper, the government can consider acting on the following policy recommendations to encourage high-impact returnee entrepreneurship in the social sector in India

1. India as a nation has to learn to depend and nurture its local micro-ecosystem that would in turn shape the larger entrepreneurial ecosystem to make it conducive for the returnee entrepreneurs to contribute meaningfully in the social sector.
2. Coopting the private sector should not be an option but a priority just as according need-based special treatment to the returnees exuding high promise and working on pressing socio-economic issues is.
3. Bringing a conspicuous winner on board, preferably a returnee, is also vital to incorporate the returnee perspective into policy making. It would be more pertinent to include a widely respected returnee who is also a philanthropist and angel investor.
4. Addressing cultural differences sensibly should be a priority as the social enterprises have a direct exposure to the demography. Returnees are often

disconnected and disoriented in this area due to their prolonged stays in foreign lands.

5. The government has to establish a coherent set of mechanisms and policy frameworks cutting across departments which often do not communicate with each other, that lays a strong cornerstone for the returnee entrepreneurs to work on high-impact social enterprises.
6. The government also has to take steps to allow clusters of social enterprises created by the returnees to grow organically. In other words, even as the government might employ policy catalysts to expedite their growth, the clusters themselves cannot be moved from one stage of development to another in unrealistic sprints. Such action if attempted can be detrimental to the ecosystem for the returnees as a whole.
7. The government has to be proactive in introducing time-bound reforms in the legal, bureaucratic and regulatory frameworks wherever desirable to make them accommodative of the aspirations of the returnees interested in creating high-impact social enterprises. This includes enhancing the availability of tax sops, legislation and policies closely aligned to the needs of the returnee business class and existence of infrastructure like communication facilities and transport.
8. Access to regular and relevant sources of education and training is also an important enabler for the returnees. The upcoming paradigm of university-based incubators is an important development in this regard. The government should encourage setting up dedicated incubators at the national and regional levels for returnees working on high-potential social enterprises.
9. The government can initiate a kind of 'cultural renaissance' fostering respect for the idea of entrepreneurship among the larger Indian community. This would not only make returnees acceptable in the Indian context but also furnish them with the necessary social infrastructure to create high-impact social enterprises.
10. Deviations from established mores of social entrepreneurship can be expensive for the returnees in a country like India. As pointed earlier (Swidler, 1986), institutions play a pivotal role in providing a 'cultural toolkit' that can create conducive circumstances for entrepreneurship. Government again has to take tangible policy decisions that make the entrepreneurial ecosystem more comprehensible and predictable for the returnees which would reduce their exposure to risk. Institutions created for returnees, especially those engaged in high-impact social enterprises should be imbued with self-reinforcing mechanisms (Phillips et al., 2009), that strengthen them over a period of time.
11. Government can endeavour to create a symbiotic policy environment informed by the latest advances in science and technology. This would not only automatically align the returnee policy with the aspirations of the returnees but also make it easier to achieve high impact in the social sector in a relatively shorter duration of time.

12. Policy created for the returnees should encourage them to create affordable, accessible and available solutions for the masses.
13. Policy making for returnees should accept innovation as an instrument of state policy.
14. Policy governing returnees working on high-impact social enterprises should be guided by well-defined success indicators and they should be monitored at regular intervals to gauge their impact. The policy should mark a clear distinction between the 'easily achievable' outputs and the 'difficult to achieve' outcomes in this regard.
15. Talented youth in India can be encouraged to collaborate with high-performing returnees through an established mechanism. Such encouragement should be more forthcoming and pronounced when the venture is a social enterprise. University-based business incubators can be a good starting point in this case.
16. The returnees can be offered incentives to convert high-impact research and development outcomes available in India into viable commercial enterprises. Such enablers would also have the added advantage of building indigenous capacity in India.
17. Establishing a culture of partnering with returnees in prototyping high-risk innovations should become a priority particularly those directly impacting the socio-economic sector.
18. The returnee policy should lay special emphasis on incentivizing social-enterprises that utilize the resources, both natural and human, optimally avoiding the extrema of over exploitation and under exploitation.
19. Government can consider initiating policy that triggers changes in the mental makeup and the value system of the India society. It can achieve the desired impact by rewarding, recognizing and respecting contributions by returnee entrepreneurs that create collective value using knowledge derived from the latest developments in science and technology in India.
20. The government can consider taking active steps in evolving a national innovation ecosystem.
21. According to the newly discovered phenomenon of 'brain circulation', talented youth should be encouraged to move abroad for higher studies and skill up-gradation, against the traditionally held views on 'brain drain' that directed policy to the contrary. Such youth can re-enter the Indian economy as returnee entrepreneurs in the near future to create high-impact social enterprises among a plethora of enterprises they may choose to start.
22. Dedicated research parks may be created for the returnees experimenting on high-impact social enterprises.
23. Returnee policy should classify returnees depending on criteria like their degree of embeddedness, experience, contributions and limitations. This would not only streamline policy but also result in higher impacts on the socio-economic front. A model classification has already been proposed in the paper.
24. Trust is an important ingredient in the returnee entrepreneurship ecosystem. While the returnees must trust the government of the day to start their promising social enterprises they should also at the same time trust their local

- partners. The government should consider taking active steps to promote trust among the different stakeholders in the entrepreneurial ecosystem.
25. The Competition Commission of India can come up with special policy on returnees engaging in high-impact social entrepreneurship in India.
 26. Seeding of high-impact ideas in social entrepreneurship is a delicate process. Government can take an active participation in this by doing it in a controlled environment and creating appropriate incentive structures for the supporters.
 27. 'Pipeline Creators' constitute a vital link in the social entrepreneurship ecosystem, as already identified in the paper. The government can consider special measures in this regard.
 28. The social entrepreneurship ecosystem should afford the returnees ample scope to scale up their nascent social enterprises. In other words, they should be allowed to go public by the Securities and Exchange Board of India and should such privilege be technically difficult to award the government may consider creating a separate stock exchange for returnees as well as non-returnees engaged in high-impact social entrepreneurship in India. They should have legal access to risk capital.
 29. The government can consider taking adequate measures to ensure the presence of enablers like technical support, startup consultancy, HR support, research and advisory network, network supports such as aggregators and conferences and advocacy supporters such as TiE in the ecosystem for returnees in India.
 30. The government should have a clearly spelt intellectual property policy for the returnees. This should on the one hand encourage the returnees to interact freely with their local partners in matters relating to technology transfer and at the same time prevent the tendency to indulge in predatory behavior by either the returnees or their local partners. The IP policy should also state in unambiguous terms the norms for the transfer of technology from one entity to another and also be at par with internationally accepted norms in this regard.
 31. The government should facilitate the conduct of fora where the returnees can exchange their knowledge and skills with their local and international peers. This two-way flow would enrich the socio-entrepreneurial ecosystem in ways more than one.
 32. Arbitration and dispute settlement should be fast-tracked for returnees as the probability of failure is relatively high in exercises trying to set up high-impact social enterprises in a country like India. This should also improve India's standing in the 'Ease of Doing Business' Index.

15.8 Conclusion

From the given discussion, we can conclude that an ecosystem does exist for entrepreneurship in India. But there is a clear lack of focus on encouraging the returnee entrepreneurs to startup in the social sector in India. Returnee

entrepreneurs have not been addressed adequately in India's public policy dealing with entrepreneurship. The government of India has to introduce the relevant legislations in the regulatory and corporate governance framework in order to attract high-performing returnees to come and contribute meaningfully in the social sector in India.

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Chapter 16

Internationalization of Incubatee SMEs: The Role of Government-Supported Incubators



Beryl Thomas and Sheena

16.1 Introduction

The IT/ITES industry of India demonstrated astonishing growth over the past couple of decades and has become the world's largest destination for outsourced technology services with a share of almost 55% of the global sourcing market. Low costs and high availability of English speaking manpower have been judged as the major reasons for this remarkable growth. IT/ITES industry has played a key role in India's socio-economic transformation over these years; with the industry estimated to be employing approximately 3.5 million people directly and almost double of that number indirectly. IT/ITES accounts for nearly 10% of the country's GDP with about 17,000 registered organizations, of which about 15,000 belong to SME category. With its product and service offerings at three to four times cheaper rates compared to its US counterparts, cost competitiveness continues to be the USP of India's IT/ITES sector.

India is identified as the fourth largest base for young businesses in the world, according to NASSCOM. Annually, over 500 companies are added in the IT/ITES sector if the recent years' statistics are observed. The start-up ecosystem is in high spirits particularly after tech giants like Google and Facebook made acquisitions from the Indian tech start-up sector during the last couple of years. The financial year 2013–14 saw the total revenue of the IT/ITES sector standing at \$130 billion with \$88 billion accounting for revenues from export alone. Two-thirds of revenue of the sector has been out of exports over the years, and the infrastructure devel-

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opment in India will increase the domestic market volumes as well in the upcoming years. Schemes like “Digital India” by the central government that focus on automation of maximum possible number of services will also act as a catalyst to domestic demand for IT services. India’s Internet economy is expected to touch \$200 billion by 2020, accounting for 5% of the country’s GDP according to the IT-BPM sector strategic review by NASSCOM (2015), as the user base of technology products and services are exceeding the once big markets like US as a result of improving living standards of the urban and semi-urban masses of India.

Export of IT/ITES products and services has grown to become a predominant part of export revenues towards India. The sector has also created a large number of jobs and is now a promising sector for employment for many of our graduates and post graduates. Many companies in this sector started in India attract huge investments from foreign investors owing to the high growth rate offered by this industry. As a result of these promising socio-economic factors, the governments at central and state levels put their share of efforts to provide maximum aid to this particular sector.

There are several ways in which our governments support an industry sector. These include infrastructure support, R&D support and tax incentives. Several initiatives are taken up by governments to promote the most happening industries of those times in order to let the country as a whole leverage maximum benefit out of the growth potential of that industrial sector. The government of our country as well as our state governments have provided incentives to various industries during different junctures of time over the years. In the recent years with the huge rise in demand for India’s IT services across the globe, our governments have been supporting industries in IT sector through several ways. In the Indian IT boom, the role that was played by home-grown organizations was extremely commendable and even now, these companies hold a significant share of the progress that is being made by this sector. Even as international majors as well as Indian large cap companies rule the show in terms of volumes in India’s IT exports, a significant share is always contributed by small- and medium-scale IT firms which provide back-end support to many price-conscious clients in India and abroad, and even support the major big shot companies into technology sector itself, as they out-source work to smaller units with an aim to cut their own costs.

In this scenario, the small- and medium-scale entities in the technology sector deserve a special attention. If we look back to the history of many of today’s IT majors, they all had very modest beginnings and have transformed into highly successful businesses over the years through constant innovation and impeccable service quality. Business incubators are facilities or institutions to provide the right platform for young business ventures started by relatively inexperienced but talented people to build a strong foundation for their businesses and accelerate their growth. Incubators are set up by private ventures, educational institutions, PPP models, etc., with the objective of supporting and promoting start-up ventures. Most of the incubation facilities set up these days in India incline towards the technology sector. The governments support many such incubators as an initiative to support young business ventures to scale-up. As mentioned earlier, export orientation of this

industry is one major reason why governments find it important to support them, and hence, it is relevant to know if these companies that benefit out of the aids provided from public money are able to generate positive results in this regard. The aim of this study is to generate an outlook of the internationalization of young technology start-ups.

The focus of this study is on two government-backed incubators from Kerala—Technopark Technology Business Incubator (T-TBI) and Start-up Village. Both of them are technology sector-oriented business incubators strategically set up in key hubs of IT business. Both these incubators are having as their promoters the Department of Science and Technology, Government of India and Technopark Trivandrum, one of India's oldest and largest technology parks, which is an autonomous society promoted by the Government of Kerala. T-TBI is located in the campus of Technopark at Thiruvananthapuram while Start-up Village has been set up near Kochi at KINFRA Hi-Tech Park Kalamassery. These incubators are in the process of branching out to other cities as well, with T-TBI having several incubation centres in association with top academic institutions of the state like NIT Calicut and College of Engineering, Trivandrum, whereas Start-up Village is in the process of setting up a new centre at Vishakhapatnam, Andhra Pradesh. These incubators provide physical incubation which includes a small office space as well as other common infrastructural facilities in access, and also a provision called as virtual incubation where the companies are provided just an address to specify, while they can work from the promoters' home or garage. To undertake this study, only the start-ups that are physically incubated at the main centres of the two incubators were taken into consideration.

The state of Kerala is generally infamous for not having a very friendly environment for large-scale industries due to issues like shortage of land, high labour costs and ecological concerns, which make IT/ITES a business sector that is more feasible to set up and run in Kerala in comparison to manufacturing industries, for generating large-scale export revenues and employment opportunities in the state and to keep its prospects at par the modern day business scenario. This makes a study on the upcoming IT sector organizations of the state more relevant. Also, the export-driven nature of technology industry demands the internationalization strategies of these incubated companies to be effective enough to attract clients from their target markets, and hence, a study on this ground will provide insights that would be helpful to even technology start-ups from other locations as well.

16.2 Literature Review

There are many existing works on the areas related to the theme of this paper, which are summarized in this chapter.

According to Sharma (2015), the process of internationalization is highly specific to the context. Increasing globalization has given expansive scope for internationalization to organizations from emerging economies as well as developed

nations. He suggests that each internationalization strategy has to be a separate decision not in relation with any earlier or concurrent process because it will have its own unique dimensions. The dominant factors in each decision will have separate trade-offs involved, and the intensity of each of them will be dependent on the macro and micro aspects of the organization.

A study by OECD (2009) finds that limited firm resources, the absence of contacts and limited managerial knowledge are the key constraints to SME internationalization while growth and knowledge resources are the main motivators. It also finds that several economies make sector-specific and market-specific initiatives that can assist organizations to internationalize. It also suggests that organized private sector can aid internationalization of companies from an economy, citing the example of Finland.

For non Japanese software sector SMEs trying to enter the markets of Japan, Ojala and Tyrvaïnen's (2007) study identifies that the localized customization requirements of Japanese clients to their offerings is the most challenging factor to deal with, as many a times such companies lack the infrastructure, knowledge resources and manpower to handle such foreign requirements with regard to standards, practices and also language.

Oswal (2010) finds the four entry modes of internationalizing as exports, franchising/licensing, direct investment and joint ventures. As far as start-up companies and SME's are concerned, investment in a foreign location cannot be a practical step in its early years as it can only be an option for established business houses. Exports are the most popular way of life for most companies, but reaching potential customers in unknown countries is extremely challenging for new ventures that cannot spend so much on marketing and distribution channels. In such situations engaging in joint ventures with non-competitive enterprises or marketing firms, licensing individuals or firms as sellers and market research partners, etc., can be practical solutions to reach out and connect more efficiently with overseas markets.

Nair and Prasad (2004) propose a SWOT matrix for the state of Kerala as a hub for technology outsourcing destinations. The domestic market is observed as poor by the study making it important to the companies set up here to look outside India for profitable market opportunities. The connectivity of the state with other countries owing to the high density of non-resident Keralites across the world, availability of high-quality manpower, adequacy of IT infrastructure, etc., are seen as the positives of the story. The state has also got comparatively low costs of starting up compared to rest of India, as it observes that Technopark Trivandrum promoted by the Government of Kerala, has one of the lowest per square feet rentals among the major IT parks of the country. The study also finds that Kerala has the lowest employee turnover rates in the IT/ITES industry among the Indian states. The increasing competition from other IT hubs in India and abroad is found as the most important threat to IT sector of Kerala.

Bhattacharjee and Chakrabarti (2015) say that India will retain its competitive edge in the IT/ITES sector owing to the different factors that had catapulted its growth and helped it to sustain as well. It makes an application of Porter's diamond

framework to the industry to point out the advantages like innovation and quality compliances, cost arbitrage, strong supporting sectors like educational institutions, low infrastructural costs and the significant presence of non-resident Indians in key positions across the world. It also suggests the organization in the industry to be vigilant to leverage every opportunity and tackle every threat, since the sector is still relatively new and continuously evolving. It suggests start-ups to focus niche areas than going to be end-to-end providers as bigger players would be enjoying higher competitive advantage with diverse product range.

Pant and Ramachandran (2012) have observed that new ventures in emerging economies find it difficult to directly network and engage while dealing with prospective foreign customers due to cultural disconnect, especially with those in advanced economies. Such firms are suggested by the authors to cultivate and leverage social ties with easy-to-access homophilous ethnic ties to compensate for these liabilities. Hence, start-ups from India can leverage on making associations with Indians or Indian ventures that are already engaging with such markets to initiate business engagements. The study also suggests that in the process of internationalization, the strategy should not be merely about setting up a competitive advantage, but it should also be about overcoming the competitive disadvantage due to factors like perceived lack of confidence because of not being from the host country.

Prashantham, Dhanaraj, and Kumar (2015) have studied the impact of social ties in the internationalization of ventures with a special consideration to the Indian software industry. The migration of Indian software engineers, to countries including the USA, Canada, UK, Middle East, etc., has resulted in an added involvement of these countries with the Indian software industry. Social networks have definitely got a big involvement in the way that the start-ups studied by this paper internationalize as well, as it can be observed that the number of companies doing business with a geographical region is somewhat influenced by the region's size of migrant Keralite population. Interactions with many Indian businesses suggest that market opportunity identification and closure of deals in many international markets happen with the mediation of social ties with Indians present there.

Yoos (2012) proposes the market channels that start-ups can use to rapidly internationalize. Communications, networks and alliances, marketing, promotional, financial, educational and logistical support programs were identified as to help start-ups to build customer relations overseas at a faster pace. The study suggests that start-ups, if they put in significant efforts, can build very efficient and cost-effective marketing and distribution channels that can help them to reach out to international audiences with relatively better visibility in those unfamiliar market regions. It suggests that entrepreneurs must carefully utilize their investments to build multiple, diverse marketing channels to successfully internationalize at a rapid pace. Going straight to the market without clear discretion of the channels and over relying on the Internet to do the marketing of the product and the company might potentially push start-ups into failure.

Roelen-Blasberg and Weiss (2014) says that incubators can influence resources, network, capabilities, ideas and operations when it comes to internationalization,

and a network- or execution-oriented approach is what matters for truly global start-ups. It finds that different incubators support internationalization of start-ups in different ways as all of them face different, unique environment compared to each other. It says that coaching, networking, basic business services, funding and physical infrastructure are the most important needs that start-ups expect to be fulfilled by incubators, and the amount of “international business” quotient in each of these services provided by the incubators can change the way the start-ups learn, behave and grow.

Fertik (2013) says that young businesses in the US scenario need to go international much earlier than when they do, as the world is fast becoming one market and it is just as easy to generate international revenue as to do it with your local clientele. It cites the example of SurveyMonkey, which has added 15 languages and 29 currencies over two years to transform itself from being a service that was “not designed to serve international clients” as they had only English as their language and US dollars as mode of payment. He says start-ups not to constrain themselves thinking of costs based on assumptions but to do research and apply creativity to figure out how to find an optimal way. He also adds that new companies shall even consider acquisitions overseas, as a small acquisition in a high-potential market can also open doors to rich opportunities equipped with native capabilities and other non-tangible assets of the acquired company.

The literature review has supported the formation of the premises for the study and selection of the variables to be analysed in the empirical study.

16.3 Methodology and Data Analysis

The study was exploratory in nature and employs secondary data analysis of literature to find out the various proven techniques of internationalization, primary data from structured surveys and interviews among start-up entrepreneurs and incubator officials to validate the data recognized from literature reviews, to arrive at conclusions through an inductive reasoning approach.

The study intended to cover a total of 101 start-up technology organizations physically incubated at either T-TBI, which had 51 start-ups or Start-up Village that accommodated 50 start-ups. With permission from the officials of the two incubators, the request for participation in the data collection survey using a questionnaire was made to all the companies by personally visiting the two incubators, to which 62 start-ups responded through either the hard copy questionnaire or online questionnaire set up using Google Drive. Nine responses were rejected as they were improper or carried insufficient data, and finally, the data of 53 organizations were considered for the study. Out of the 53 start-ups, 39 were private limited companies and 14 were limited liability partnerships.

The incubated companies and the T-TBI itself are comparatively older than the Start-up Village. T-TBI operates in four buildings in a fully functional 19-year-old dedicated Information Technology park of 300 acres in which is the Phase-1

campus of Technopark, which opened as India's first IT park in 1996. They work alongside big shot IT companies setting a very formal corporate environment for its physical incubatees. Whereas, the Start-up Village's location is in two buildings of KINFRA Hi-Tech Park is still in development stage and located at the industrial satellite town of Kalamassery near Kochi. This park accommodates non-IT industries as well. The first impression you will feel about Start-up Village is an easier going place with relatively less or no corporate culture to be felt, as the park currently is occupied by hardly any other companies than the Start-up Village incubated ones. Start-up Village is many years younger in comparison to T-TBI, and it is much more vibrant and energetic with its walls-free style of architecture and a relatively casual environment.

The year of incorporation of the start-ups was found to be as shown in Table 16.1.

The companies under consideration were all having a low number of employees with 50 out of 53 having less than 20 employees. Twenty-seven start-ups, exactly half of the part-takers, were found to have employee strength in the range of 5–10, while 11 of them had less than 5 employees only. Most start-ups with less than 5 employees were relatively new ones among others. Table 16.2 shows the employee strength of the start-ups.

The total annual revenue of the companies under consideration for the financial year 2014–15 shows that 35 of the 53 start-ups had the annual turnover below INR 50 lakhs and 8 of them had the gross revenue over INR 1 crore. Total revenue distribution for the start-ups is as shown in Table 16.3.

Considering the share of revenue these companies were generating from overseas businesses, the observation was that 10 start-ups were not generating any foreign revenues, whereas 12 were generating over 75% revenues from overseas. The distribution of revenue share from overseas is shown in Table 16.4. It indicates that just like established IT sector firms, start-ups are also very much dependent on export revenues.

Looking at the geographical distribution of customers of these companies shown in Table 16.5, it is observed that nearly 50% of the companies studied have clients from the North American region as well as the Middle East countries. This can be due to the general high demand for North American markets to outsource technology processes to India and the influence that Kerala and its people have established over the Arab countries owing to the dense migrant population in that region, respectively. The Australian continent and UK also have a good NRK population to their favour, and the regions follow UK English as their primary official language. The distribution clearly reflects the impact of social networks in

Table 16.1 Year of incorporation and number of start-ups

Year of incorporation	2008	2009	2010	2011	2012	2013	2014	2015	Total
No. of start-ups	9	2	5	7	9	9	11	1	53

Source Survey data

Table 16.2 Employee strength of start-ups

No. of employees	No. of start-ups	Percentage
Less than 5 employees	11	20.8
5–10	27	50.9
11–15	4	7.5
15–20	8	15.1
Greater than 20	3	5.7
Total	53	100

Source Survey data

Table 16.3 Gross revenue distribution of start-ups for 2014–15

Revenue (lakhs of rupees)	No. of start-ups	Percentage
<25	17	32.1
25–50	18	34.0
50–75	7	13.2
75–100	3	5.7
>100	8	15.1
Total	53	100

Source Survey Data

Table 16.4 Overseas revenue share distribution of start-ups for FY2014–15

Revenue share from overseas	No. of start-ups	Percentage
Nil	10	18.9
0–25%	9	17.0
25–50%	16	30.2
50–75%	6	11.3
>75%	12	22.6
Total	53	100

Source Survey data

Table 16.5 Geographical distribution of customers of start-ups

Region	No. of start-ups	Percentage
US and Canada	26	49.05
Australia and NZ	15	28.30
UK	13	24.53
Rest of Americas	0	0
Africa	5	9.43
Rest of Europe	6	11.32
Arab Nations	24	45.28
East Asia and China	10	18.87
Central Asia and Russia	2	3.77

Source Survey data

Table 16.6 Variants of English used by start-ups

Variant of English	No. of start-ups	Percentage
US	31	58.5
UK	22	41.5
Total	53	100

Source Survey data

attracting business ties for these start-ups. Latin Americas, Central Asia, Euro zone outside UK and Africa, which are regions having a meagre English speaking population, are shown to account for outsourcing businesses to only below 15% of the start-ups.

The companies under consideration were found to be using the US variant of English in their websites and communication materials more than UK format. Since US English is more popular throughout the digital world being the default choice in all popular computing software and platforms, it is chosen, many a times unknowingly also by start-ups, more than the UK English, which is the variant that Commonwealth countries including India usually follow for official and academic use. Table 16.6 shows number of companies using each version of English.

16.3.1 Internationalization Strategies Being Followed by the Start-Ups

On the basis of existing literature and experience, a set of commonly practiced strategies for internationalization was identified and the survey enquired which all among these strategies were being followed by the start-ups for attracting potential overseas customers. Table 16.7 summarizes the number of start-ups that used each one of the twelve strategies that were found. It was found that demonstrating the start-up's offerings at international business events in India and abroad was the most used tactics by these start-ups. This was followed by the strategy of partnering with marketing agencies in target market locations. Use of multi-language content was the least popular one used, probably due to the absence of right manpower availability to employ it economically.

On interacting with incubator officials it was known that the opportunities for the start-ups to showcase their offerings at many business summits in India were being arranged by them on many occasions. Also, the incubators host many foreign delegates from industry persons to administrative officials who are available to the start-ups to interact and network with. Both the incubators are visited frequently by bureaucratic delegate teams. Most recently Start-up Village was visited by a team of delegates from the US consulate.

Apart from the incubator supported initiatives, the start-ups themselves collaborate with each other at times to employ various internationalization tactics more efficiently. At T-TBI, a group of the incubated companies teamed up and arranged business visits to Germany and Australia in the recent past to let the start-ups

Table 16.7 Strategies employed to internationalize

Strategy employed	No. of start-ups	Percentage
Multi-language content in website	2	3.8
Multi-language documentations	7	13.2
Physical contact points abroad	13	24.5
Sending employees abroad for direct marketing	7	13.2
Alliance with marketing firms at target market	18	34.0
Alliance with Indian marketing firms selling at target market	10	18.9
Alliance with related businesses at target market	11	20.8
Alliance with Indian related businesses already in target market	16	30.2
Demo at international business events held in India	21	39.6
Demo at international business events held outside India	19	35.8
Collaboration with events at target market	11	20.8
Print/visual media ads at target market	13	24.5
Online media ads at target market	17	32.1

Source Survey data

showcase themselves at distinguished business events, which would have been a very expensive outing if attempted alone. The initiative even received financial support from the incubation centre promoters. Apart from this, there are other start-up clubs and entrepreneur networks in the region that organize events with the objective of providing international exposure to the start-ups.

16.3.2 Perceived Effectiveness of Internationalization Strategies of SMEs

The choice for implementation of the internationalization strategies would be impacted by many factors like perceived effectiveness with regard to the product and market, associated monetary costs and other resources. As far as start-ups are concerned they will be mostly short of cash, and hence, try to restrict expensive strategies as far as possible even though their perception of results may be positive. So the data of actual use of strategies would be complemented well by a study of the perceptions of the survey part-takers about the various strategies that were considered for the study. A five-point rating scale was used to record the effectiveness perception of 14 strategies or ways in which start-ups could connect to international buyers. Among the 13 strategies in the list, referrals from clients are mostly independent of the service provider, although sometimes the companies might pay some commissions to referrers; and marketing via Internet is not an expensive method and all start-ups are assumed to use it and were avoided from the data regarding strategies used in Table 16.7. Also, advertising in conventional and

online media that were separately listed for Table 16.7 were concatenated to a single variable for this data.

Factor analysis was used to find factors among the observations so that the data containing many variables can be summarized to indicate concisely the perception of the entrepreneurial ventures. Factor analysis groups the strategies with similar of perception characteristics together. With the summarized data further analysis can be made possible so as to work out further studies in the same area. In this research factor, analysis testing was carried out in order to summarize the perception of internationalization strategies of the 53 start-ups that were considered for the study.

The first step of factor analysis is to take the KMO measure that indicates the sampling adequacy which should be greater than 0.5 to go ahead with a factor analysis satisfactorily. If any pair of variables has a value less than this, they shall be dropped from the analysis. The off-diagonal elements should all be very small (close to zero) in a good model. As shown in Table 16.8 which was generated from the data, the KMO measure was found to be 0.640, and hence, qualified for proceeding.

Bartlett's test is another indication of the strength of the relationship among variables to be carried out in precedence to factor analysis. This tests whether the correlation matrix is an identity matrix, a matrix in which all of the diagonal elements are 1 and all off-diagonal elements are 0—implying no significance and the absence of any relation. From Table 16.8 itself, it can be seen that the Bartlett's test of sphericity is significant with its associated probability being 0.00, which is less than 0.05 implying that the correlation matrix, in this case, was not an identity matrix.

The output of factor analysis next carries a table of communalities which show how much of the variance in the variables has been accounted for by the extracted factors. Closeness to 1 indicates that the model is able to explain the variance in the model. Strategies with less than 50% of extraction were dropped from further analysis. One of the 13 variables was dropped and this was the use of India-based marketing partner/reseller. Table 16.9 shows the communalities of the 12 strategies that are qualified for further analysis.

Table 16.10 in the analysis result shows all the factors extractable from the analysis along with their Eigen values, the percentage of variance attributable to each factor and the cumulative variance of the factor and the previous factors. It was found that that the first factor is accounted for 27.933% of the variance, the second 14.947%, the third 11.831% and the fourth 11.375%. Remaining components were

Table 16.8 KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.640
Bartlett's test of sphericity	Approx. Chi-square	191.711
	Df	66
	Sig.	0.000

Source Processed survey data

Table 16.9 Communalities of variables (strategies)

	Initial	Extraction
Marketing partner/reseller at target location	1.000	0.773
Referrals from existing clients	1.000	0.838
Own marketing executives travelling abroad	1.000	0.783
Own marketing team working online/telephonic	1.000	0.738
Tie-up with related businesses based at target market	1.000	0.772
Tie-up with India-based related businesses working at target market	1.000	0.804
Use of local language of target market for website	1.000	0.800
Demonstration at business summits in India	1.000	0.780
Demonstration at business summits held outside India	1.000	0.899
Partnering/sponsoring/hosting events at target market locations	1.000	0.840
Advertising in target market's local print/visual/online media	1.000	0.727
Use of local language of target market for communications	1.000	0.865

Extraction method: principal component analysis

Source Processed survey data

Table 16.10 Total variance explained

Component	Initial Eigen values			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	3.352	27.933	27.933	3.352	27.933	27.933
2	1.794	14.947	42.879	1.794	14.947	42.879
3	1.420	11.831	54.710	1.420	11.831	54.710
4	1.365	11.375	66.085	1.365	11.375	66.085
5	1.099	9.162	75.246			
6	0.716	5.963	81.210			
7	0.639	5.323	86.533			
8	0.446	3.717	90.250			
9	0.352	2.933	93.183			
10	0.333	2.771	95.953			
11	0.295	2.461	98.414			
12	0.190	1.586	100.000			

Source Processed survey data

insignificant in total variance and this indicated that four components or factor sets were identified. Table 16.10 shows the component variance percentages.

Table 16.11 shows the component matrix with loadings of the twelve strategies on the four factors extracted. The higher the absolute value of the loading, the more the factor contributes to the variable. The bold values on the table represent the loadings that are less than 0.5, and all other components are suppressed.

Table 16.11 Component matrix

	Component			
	1	2	3	4
Tie-up with related businesses based at target market	0.804	0.289	-0.118	-0.134
Marketing partner/reseller at target location	0.758	-0.013	0.130	0.427
Tie-up with India-based related businesses working at target market	0.696	0.095	-0.001	-0.102
Demonstration at business summits held outside India	0.606	0.235	0.276	-0.010
Referrals from existing clients	0.530	-0.093	0.284	-0.518
Own marketing team working online/telephonic	-0.001	0.766	-0.189	0.126
Partnering/sponsoring/hosting events at target market locations	0.295	0.678	0.278	-0.130
Demonstration at business summits in India	0.261	0.659	0.167	0.022
Use of local language of target market for communications	0.071	0.144	0.905	-0.141
Use of local language of target market for website	0.076	-0.017	0.848	0.274
Own marketing executives travelling abroad	-0.012	0.069	0.161	0.850
Advertising in target market's local print/visual/online media	-0.002	0.505	0.051	-0.520

Extraction method: principal component analysis: 3 components extracted

Source Processed survey data

From Table 16.11, it can be observed that tie-up with related business based at target market location, marketing partner or resellers local to target market, business partnership with India-based related sector business that has already made its presence in the target market, demonstration of the company and its products and services in business events outside India and referrals from existing clients abroad are substantially loaded on factor 1. This means that the above five are the strategies that are perceived by the entrepreneurs to be most effective while internationalizing. All these strategies are costly on the monetary side and also demands extensive networking to successfully implement, as the effectiveness of all those strategies depends on the third party involvement and responses. This result explicitly points finger to the need of good social networking skills for start-ups to establish and grow in international markets. If compared with Table 16.7, it can be found that although expensive they are being very well employed by a significant number of start-ups considered. Interestingly, most of these tie-ups are actually being facilitated by social ties (friends, relatives, friends of the above two categories, etc.) than actual business relations.

Marketing team working from India, partnering with or sponsoring with events in targeted markets and the demonstration of the products and services at international business events in India are loaded on factor 2. These strategies are also favourites for the start-ups studied when it comes to actual implementation, except

the strategy of collaboration with events as sponsors or partners. This is probably due to the high amount of costs involved in the process.

Language-based strategies find its place in factor 3. Local language communications and documentations as well as maintaining versions of the website in the native language of the targeted markets are the two strategies suggested in this component. This may be because very few of these start-ups actually work with non-English speaking clients now, and also they consider the process to be much cost and time-consuming and not worth the effort for they shall work more on other aspects meantime for getting business from people who understand English. As it was seen previously, only two of the 53 companies were currently having translated websites and only 7 were providing translated documentations for the benefit of non-English speaking customers.

Sending own employees, who are marketing/business development executives to the target markets and advertising in the local media of target market locations through conventional or online channels, are loaded on factor 4. It is interesting to see this because these two are the most fundamental conventional methods of marketing, and it has to be interpreted that start-ups are very much after innovative marketing strategies than traditional ones. Also, the conversion rate of these traditional marketing tools might not be so effective and heavily depends on factors like skills and attitude of the executive in the former method's case and the number of potential customers reached in the latter case. And also for start-ups they may find it difficult to generate a profitable return on investment to these methods owing to the high sunk cost of these methods.

So the analysis of data collected as part of this study brings us to conclude that start-up internationalization at the studied region is significantly good but certainly need improvements. The perception analysis suggests that they are highly in favour of innovative internationalization strategies that were loaded in factor 1 and factor 2 components than traditional methods that were poorly rated.

16.4 Conclusion

The study has given a snapshot of the current status of internationalization by the start-ups at the two incubators of Kerala. Following are the significant observations made from the analysis of data on the 53 start-ups:

- About 19% of the companies do not earn any overseas revenue
- USA/Canada and Middle East are the biggest market for these start-ups
- Social networks and tie-ups are leveraged and converted to business very well by many start-ups
- Non-English markets are rarely targetted
- There is no uniformity in the variant of English used for implementations and communications-among the British and American variants
- The start-ups hardly diversify to international languages

- Strategies that require high investments are mostly avoided
- Referrals and over the wire marketing are still perceived as powerful
- Advertising is less preferred by start-ups
- Business partnerships are employed successfully by many start-ups
- Innovative marketing techniques and alliances are more preferred by start-ups to internationalize compared to traditional methods
- Collaborations and incubator activities are supporting the start-ups to expose themselves to international markets

The recommendations of the study are as follows:

- The incubators must be more concerned about the start-ups that do not go for internationalizing and encourage and support them to grow overseas
- Collaboratively the start-ups can work on building content in languages other than English and target to tap into more markets
- Create more opportunities for start-ups to participate in international business events in India and abroad
- Employ UK and US variants of English based on situation in consideration (give multi-language option in websites and for documentations)
- Aggressively employ strategic alliances with third parties for improving internationalization standards
- Build strong networks beyond borders—referrals and business alliances are perceived to be extremely powerful
- Invest less into traditional marketing tactics like advertisements and direct selling

The findings and recommendations being a result of analysis of the incubated start-ups from Kerala's two cities could be tested for validity in other geographical locations and varying socio-political environments as part of future research so that the findings can be refined for the global start-up ecosystem. It could lead to definition of indicators for performance review of incubators as well as for comparison of incubated and non incubated start-ups. The results could also support future conceptual studies in the relatively unexplored research area of start-up organizations.

Appendix

INTERNATIONALIZATION SURVEY QUESTIONNAIRE FOR TECHNOLOGY STARTUPS

Name of the Organization :

Year of Incorporation : Type of Incorporation :

Year of Incubation :

Gross Revenue (INR) 2013-14 :

Gross Revenue (INR) 2012-13 :

Gross Revenue (INR) 2011-12 :

No. of Employees as on 01-04-15 :

No. of countries in which products/services are sold :

Percentage of Revenue from sales outside India (2013-14) :

Percentage of Revenue from sales outside India (2012-13) :

Percentage of Revenue from sales outside India (2011-12) :

Tick regions with which your company has ongoing/past business relations:

US & Canada	<input type="checkbox"/>	Rest of Americas	<input type="checkbox"/>	Arab Nations	<input type="checkbox"/>
Australia & NZ	<input type="checkbox"/>	Africa	<input type="checkbox"/>	East Asia & China	<input type="checkbox"/>
UK	<input type="checkbox"/>	Rest of Europe	<input type="checkbox"/>	Central Asia & Russia	<input type="checkbox"/>

1. Which variant of English do you use for official communications, website content etc?

US

UK

2. Do you have multi-language content in your website with any foreign, target market language? Yes / No

If yes which all languages other than English:

.....

Do you have versions of your promotional materials in the above mentioned foreign languages? Yes / No

Do you have your product/service manuals and related documentations in the above mentioned foreign languages? Yes / No

3. Do you have any physical contact point at foreign target market locations?

Yes / No

If yes how many? :

4. Do you send your employees for direct marketing with clients at foreign locations?

Yes / No

5. Do you have any business partnership/alliance with marketing firms / distributors / franchisee partners based abroad to study the market and sell your products or services in their markets? Yes / No

6. Do you partner with any Indian marketing agencies/distributors to study the markets and sell your product/service abroad? Yes / No

7. Do you have any alliance with vendors in related businesses in markets abroad to sell your products or services? (eg. Your product is aimed at hospitals; and you tie up with an established medical equipments firm)

Yes / No

8. Do you have any alliance with vendors in related businesses based in India to sell your products or services abroad? Yes / No

9. Have you ever demonstrated your services/products at international business events held in India? Yes / No

10. Have you ever demonstrated your services/products at international business events held outside India? Yes / No

If yes, on how many occasions? :

11. Have you ever collaborated with any event held abroad as an organizer / partner / sponsor? Yes / No

If yes, on how many occasions? :

12. Have you ever advertised your products/services on print/visual media local to a targeted foreign market? Yes / No

13. Have you ever advertised your products/services on online media local to a targeted foreign market? Yes / No

14. From your experience and knowledge, rate the following on a scale of 1 to 5 on the basis of how beneficial these strategies are, for a company to connect with clients internationally:

(1 for least beneficial and 5 for most beneficial; consider cost factor also)

Strategy	Variable (in SPSS)	
Marketing Partner / Reseller at target location	marketing_partner	
India-based marketing partner/ Reseller	marketing_partner_ind	
Referrals from existing clients	referrals	
Own Marketing Executives travelling abroad	own_marketing_executives	
Own Marketing team working online/ telephonic mode only	own_marketing_team	
Tie-up with related businesses based at target market	tie_up_with_related_bus	
Tie up with India based related businesses working at target market	tie_up_with_ind_based	
Use of local language of target market for website	local_language_website	
Use of local language of target market for communications	local_language_communications	
Demonstration at Business summits in India	demonstration_india	
Demonstration at Business Summits held outside India	demonstration_outside	
Partnering/Sponsoring/Hosting events at target market locations	partnering_sponsoring	
Advertising in target market's local print/visual/online media	advertising_in_market	

Please provide an email id to convey the findings of this study:

Name of the Participant: Designation:

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Part IV
Evolution and Organizational Change
for Internationalization

Chapter 17

Internationalization of SMEs: A Darwinian Perspective



Abilash Daniel George, Linda Susan Mathew and G. Chandramohan

17.1 Introduction

The globalizing economy opens up avenues for firms to compete in an international arena. Internationalization contributes to economic development of countries by improving productivity and generating employment. Small and medium enterprises are forced to venture into the international market due to competition as a path for survival and then, of course, growth. These forays by SMEs often are coupled with performance improvement and better competitiveness. Globalization has created new opportunities for the SME sector much more than before, and there are clear symptoms that the sector, in fact, has been taking a positive approach and embrace of it, particularly, in the global market. SME sector has more leanings or affinity towards the international market than towards the domestic market in the modern era of globalization naturally because of the higher degree of integration in business activities, lowering of trade barriers and the revolutionary change happening in the field of information technology where distance becomes a mere hurdle that can be overcome easily through lightning speed communication available on one's fingertips (Kiran, Majumdar, & Kishore, 2013).

The dynamic business environment generates novel chances and motivation for SMEs to internationalize. On the one hand, liberal trade policies open up novel avenues. At the same time, it also poses domestic firms with the danger of international competition. SMEs are increasingly facing outsider foreign competition

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and need to be responsive to these in their strategic environment. This not only calls for a recalibration of the domestic-centred approach, but increasingly motivates firms to go beyond the domestic borders. Putting aside the motives, the international arena presents firms with chances to boost productivity and enhance the probability of survival. For an SME, the local environment is subjected to constant transformation and growth. This transformation heralds in new markets and suppliers but also brings with it threats of competition and shorter product life cycles. Globalization and rapid progress of technology are making the world a more faster and integrated world. Even if an SME decides to simply limit its focus to the domestic market, the threat of international players invading that domestic market is always real and therefore even an SME has to evolve its strategy to be an international player to ensure long-term survival and growth (European Commission, 2007).

Although internationalization may stimulate firms to grow and thrive in the long run, freedom from failures or disintegration is not a guaranteed consequence. The uncertainty and monetary implications stacked in the process are not small. Smaller firms find it difficult to surmount these obstacles, and find often their relatively smaller size and resources to be a hindrance in the quest to internationalise. The financial hindrances in the internationalisation activities, the dearth of international experience in their managerial force, the difficulty in identifying and catering to an international market are some of the difficulties which hinder the internationalization of SMEs. Nevertheless, progress in information technology and other technologies remarkably has mitigated the uncertainty involved in easing or bursting into the international arena. This creates an increasingly conducive environment for a rising number of small and medium-sized firms to make use of the opportunities in foreign markets.

It is here, where one could draw a parallel from the Darwinian principles of evolution to understand how an SME evolves into the international stage. Darwin himself suggested generalising the core principles of Darwinism to cover the evolutionary transformation of social entities (Howard et al., 2008). By using the Darwinian principles to traverse the journey of an SME towards the international arena and thereby identify and establish the various catalysts and obstacles that determine the dynamics of the SME's journey. In evolution, there are certain drivers and barriers that determine the fate of the organism. This concept can be superimposed onto an organization to see what are the evolutionary drivers and barriers that influence the growth of the organization to be an international one.

17.2 Objectives of Study

- To draw a parallel between evolution of an organism and that of an organization
- Using principles of evolution onto the transformation of an organization, thereby to identify the limits and catalysts of the internationalization of an SME.

17.3 Scope of the Study

This conceptual paper aims to bring together the concept of biological evolution and its dynamics onto a general platform. From there it will attempt to transpose it onto an organizational-level evolution of an SME from being a domestic/regional player to a more dominant state—the state of being international. On the roadmap to internationalization envisaged by an SME, this paper aims to identify how the SME will come up with the various catalysts and limits that influence its evolution into the international state.

17.4 Limitations of the Study

Time proves to be the greatest hurdle in this theorization of drawing a parallel between SME internationalization and evolutionary principles. The dynamic environment in which the businesses operate pose a challenge to accurately identify the various catalysts and limits with respect to SME internationalization. The view that biological evolutionary principles should not and cannot be applied to the field of economics and, in turn, to that of business proves to be a hurdle to convince the readers about the applicability because of the seemingly different nature of both disciplines.

17.5 Problem Statement

Generalized Darwinism has been attempted by many to be applied to all evolving systems around us. The principles of Charles Darwin have been applied to economics by many researchers to see how well it fits into the lifecycle and evolution of a business organization. An SME being an organization, the evolutionary dynamics from previous research shall be attempted to be applied and find out how an SME responds to the various limits and catalysts in its path to being international.

17.6 Literature Review

Bioeconomics focuses on the common ontological factors shared between the branches of economics and biology. But, the indication does not necessarily mean that the dual streams converge as a single one. As an alternative or substitute, it is advocated that evolutionary principles pose a generally applicable theoretical explanation for unravelling the nature of not so simple evolving systems,

comprising of clusters or groups of varying and duplicating existences, which are found in the naturally occurring environment as well as the human society. A substitute to the core Darwinian principles of differentiation or variation, selection and duplication or inheritance cannot be found to open up about the transformational growth or metamorphosis of such existences (Hodgson & Knudsen, 2008).

The conversation between economics and biology existed even before Charles Darwin. For instance, in the nineteenth century, there were prevalent famous sentiments in the social sciences that many economists supported and it was that features of humankind that could be more or less explained in biological terms (Hodgson & Knudsen, 2008). Alfred Marshall proposed that economics “is a branch of biology broadly interpreted (Marshall, 1920)”. More acutely, Marshall saw institutional and cultural change to higher or different degrees as driven and limited by biological evolution: economic institutions are the realizations of human nature and cannot surpass or overtake the speed at which the human nature evolves (Marshall, 1923).

The basis that the theory of evolution as proposed by Darwin is applicable towards unravelling economic metamorphosis, barring the aspect of not being in an ideated one solution for all principles but rather as an evolving theory about how human-engineered metamorphosis could rise out from, and is shaped in, evolution in nature. The significant deviation here is that, because of the presence of logic and reasoning of the human brain, purposefulness, abstractive ability, and gathering and sharing knowledge, the rules of fabricated evolution are likely to deviate from that of life-oriented metamorphosis (Levit, Hossfeld, & Witt, 2011).

Darwinism encompasses a more divergent prone and more general set of ideas, whose application is not limited to just the discipline of biology. Darwinism at its crux has a general theory of the evolution of all open and intricate existences. Theory of evolution involves a basic philosophical promise to detailed, cumulative and causal understandings. As dually exhibited, the theory of evolution finds a perfect fit into the fabric of socio-economic systems (Hodgson, 2002).

Hodgson speaks about the concept of “Universal Darwinism”, which is a pivotal set of Darwinian principles that, along with complementary explanations specific to each scientific area, are considered to be of utility to a broad span of episodes. Argument is presented as those metamorphic characteristics of the humankind and the cultural spheres both encompassing the core theory of evolution principles comprising of variation, duplication or inheritance and assemblage of selected entities. Universal Darwinism strives wholeheartedly to apply Darwinian principles to cultural evolution, i.e. it is advocated that these principles are good enough for unravelling other forms of evolution. Consequently, Universal Darwinism is put forward as a wide theoretical framework for the dissection and understanding of the evolution of all open, intricately designed existences, even spanning over the economic fabric woven by man (Cordes, 2006).

Generalized Darwinism proposes that the evolution of all open complex systems can be explained in terms of the Darwinian variation–selection–retention principles. This mechanism unravels how open complex systems become one with their local

environment, how the diversity among them can be routed back to the same origins and how adaptive or rather successful complexity, or design, accumulate through replication. This explains also the aspect of the historical and ontological continuity of the evolutionary processes as the necessary foundation of Generalized Darwinism. The ontological continuity of all evolutionary processes dictates that Generalized Darwinism should be one that is superimposed “from the bottom-up”. The evolution of individual behavior is both the historical and ontological common link between biological and cultural evolution and avital feature of unravelling why and how such forms of social organization as the modern firm function (Stoelhorst, 2008).

One version of Darwinism as advocated by Pavel Pelikan is the evolutionary developmental biology or simply known as “evo–devo”. This version projects itself in triangular way:

- (1) From genes to all genomes
- (2) From how genomes replicate to how they instruct, with a plethora of utility-oriented inputs from the surrounding and internal domains, the forming and development of organisms and
- (3) From fully developed organisms to the entire developmental process.

All three points convene onto an essentially vital concept: the pivotal nature of instructions. This forms the link between development and evolution and provides the main benchmark for differentiating between the two. A distinction may be made as follows that evolution rolls out instructions for initiating and stimulating development. Devoting special scrutiny to guidelines stimulates the stemming of a new promising avenue for exploration and understanding, starting with the logically obvious, but so far little-exploited principle: all the possible utility of commands requiring prior required commands. It is from this proposition that a fascinating limitation on what biological metamorphosis can, and what will not be able to, fulfil will be dawned upon (Pelikan, 2011).

Those parts of Darwin’s theory that are applicable to organizations are:

- Evolution from first form of beginnings to the “latest” organizations of gradually accumulating complexity
- Gradually increasing step-by-step processes of deviation influenced or carried out by painstakingly slow processes of arbitrary trial and error and
- Laying importance on the specialised adaptation of individuals at least isolated from, if not struggling with, the larger environment preparing for its survival and eventual proliferation through the process of replication (Baskerville, 2006).

In the two disciplines of Economics and Accounting, there was an overpowering metaphor of a mechanistic explanation for their subject matter. Economics, business organizations, and capital markets were considered to operate as machines: inputs and outputs, controls and regulators—a more of a system approach *n* view. There was no Darwinist metaphor or inclination of a struggle for survival in the writings

of researchers of the time. It was only later in the disciplines that the mechanistic metaphor was replaced by a biological one (Baskerville & O'Grady, 2007).

This is where one really gets to visualise a parallel between the biological evolutionary dynamics of an organism juxtaposed to the evolution and growth of an organization into the international arena. An SME is like an organism. It hatches out/born into an environment, tries to adapt and adopt, fights for survival and constantly so because the environment as we all know is dynamic. Survival of the fittest doesn't just extend to the strongest, fastest, ruthless and cunning. It also extends to the smaller, weaker, slower and socially cooperative organisms. This is easily proven by the diverse variety of flora and fauna we have on this planet, in the biological sense. The same can be seen with respect to the diverse kinds of businesses that are run all over the planet—big or small.

Porath (2003) the ability to be alive, be functional and reproduce depends on the genetic information each organism contains. That information will enable it to build the tools and structures it will require to survive when faced with both external and internal requirements. This genetic information is coded into the DNA, an enormous polymer chain made of four basic building blocks that make a code by groups of three. These groups are then translated through the use of the RNA into proteins. Proteins generally have the function of

- (1) Building the cell structure, determining the in and out movement of materials through its membranes and other same cellular functions
- (2) A class of proteins known as enzymes determine, control and catalyse the various chemical reactions taking place in a cell and in between cells.

Biological Evolution can be summed up to be a three-step mechanism where variation or diversification occurs and mutation arrives. The traits that make a mutation successful are selected and these are passed on through replication to ensure survival and proliferation of the species. The enzymes perform complex tasks—tasks that are in place due to evolution and adaptation throughout the course of life on earth.

These enzymes are characterized by features such as:

- Function under certain conditions in a system
- React with the surroundings
- Be selective about what process to carry out
- Be highly efficient regarding the energy balance of the internal and external environment
- And have a short lifetime

This behavior of enzymes makes the process of selection less random or less accidental and takes us to the concept of "Directed Evolution". A mechanism which has four major steps is as follows:

1. Creation of a set of mutants
2. Selection of genes or successful genes in mutants that are successful in surviving

3. These successful genes are subjected to mutation again
4. When a level of improvement has reached that is in tandem with the requirements both external and internal, the mutation stops or slows down (Porath, 2003).

The premise of survival of the fittest does not prove to be sufficient enough to deal with change and transformation or rather the evolution of the firms. It is centred on the idea of gradual change and does not address the phenomenon of radical, quick change that occurs as a part of radical mutation. Secondly, it advocates the survival of the superior species and not the survival of the species that is most fit in the environment existing at that point of time. Survival of the fittest would fall short in explaining the organizational reengineering, knowledge management and its proliferation (Sammut-Bonnici & Wensley, 2002).

It is crucial and necessary to observe variables and processes that influence successful realisation into the international arena as small to medium-sized enterprises (SMEs) are increasingly competing in the global arena due to the all-encompassing effects of globalization. Internationalization can be pivotal to a firm's future success, and the extent of expansion and uncertainty involved is significant. Internationalization encompasses significant amount of monetary commitments and uncertainty that influence profitability in the end, dictate the way of capital allocation among investors, and ultimately, affect the stakeholder value. Even primarily domestically oriented SMEs should become internationally competitive to help ensure their long-term viability and success (Smolarski & Wilner, 2005).

During the last decade or so, a paradigm shift has taken place: it is now widely accepted that SMEs are a vital player and contributor of employment both in developed countries and in countries fast developing and are uniquely poised to overcome the hurdles of an ever-faster globalizing economy. The dynamic and expanding business environment through trade and investment in domestic market and abroad has been expanding the internationalization of production through multinational corporations along with the emergence of new forms of business organizations such as network and strategic alliances transcending national boundaries (Mohanty & Nandi, 2010).

Internationalization is both means and end in itself. It is a journey taken up by organizations to survive. No organization can afford to be content and complacent with its present success as the rate at which the world is becoming smaller in the literal sense is a fact highlighted by the current business environment dynamics. Science and technology has reduced the obstacle of distance if not eliminated it. Reduction in trade barriers and policies and outlook are being forced to be open to ensure progress on a larger and faster scale. Therefore, internationalization can be said to be a process—an incremental process in which firms internationalize their operations from nearby countries to distant countries (Kontinen & Ojala, 2012). Prior research on SME internationalization has discussed three major internationalization kinds: gradual internationalization as advocated by the Uppsala model, radical internationalization as advocated by past research on born globals and

international new ventures and radical but late internationalization as advocated by the so-called born-again global firms (Olejnik & Swoboda, 2012). Internationalization is found to be an important aspect of the maximization of business opportunities, and over the last few years, many SMEs began internationalization as a requirement for a business success, i.e. to compete and to survive (Al-Hyari, Al-Weshah, & Alnsour, 2012).

Johnason and Valhne in their “Business Relationship Learning and Commitment in internationalization Process” describe the Uppsala model of internationalization to be one that is dynamic and evolutionary in nature and where firms generally increase their international involvement (Steen & Liesch, 2007). According to Penrose, business expansion is inherent in every firm in its attempt to expand profits and is meant to ensure its long-term competitiveness and survival. Even though this motivation to expand is shared among firms, she argues that the expansion track taken by each individual firm depends on their distinct history, i.e. it is limited in any given point of time and shaped by the firm’s existing business activities (Coad & Guenther, 2013). This can be interpreted to be analogous to genes and the course of genetics in an organism and the role they play in the organism’s evolution.

The way a firm carries out its business can be termed as the routines of the firm. The regular and predictive patterns of behavior exhibited by firms can be called as routines. These involves the production or manufacturing means, the procedures involved in hiring/firing, inventory management, research and development, production management, formulation of strategies, policy formulations and investment choices. These routines are analogous to the biological genes that are persistently present and have the capability to determine the behavior, they are heritable and they are selectable (Nelson & Winter, 1982).

Porath (2003) gives a more clear definition in this regard: The enzymes that influence the activities of a living thing, the capability to assimilate itself into its biological domain, establish and improve its capabilities, take the required resources from the biotic and abiotic domain in and around and live, sustain and flourish could be paralleled to the routines existing in each organization. These would be the routines—the personnel, structure, organizational culture and work processes that the organization follows.

Just as in evolution of organisms—the presence of limits and catalysts that come into play to have a pivotal role in its survival; same is the case with SMEs, where they are faced with barriers and catalysts or drivers that make it conducive for them to evolve into the international arena. The barriers faced by SMEs as put forward by (OECD, 2009):

- Shortage of financial resources
- Lack in identifying foreign opportunities
- Limited information
- Lack of managerial time, skills and competencies
- Inability to contact potential foreign customers

The drivers or catalysts are:

- Growth opportunities
- Knowledge
- Network/social ties and supply chain links
- Domestic/regional success
- Managerial initiative and leadership

A more detailed form of the various barriers is listed down by (Al-Hyari et al., 2012) as follows:

Internal barriers that comprise of informational barriers, functional barriers, financial barriers and marketing barriers. Informational barriers relate to insufficient information about overseas markets, difficulty in gaining access to some data sources and difficulties in making customer contacts, whereas the functional barriers consist of the lack of managerial time to deal with exports, lack of export skills, lack of excess production capacity for exports and lack of new technology. Financial barriers are in the form of high cost of capital to finance export and the lack of financial resource to finance exports. Marketing barriers are of three kinds: product barriers that are due to developing new products for foreign markets, difficulties in adapting export product design, meeting export product quality/standards, meeting export packing/labelling requirements and offering technical/after sales service. The lack of competitive price acts as a price barrier that too comes under market barriers. The next kind of market barrier is the distribution barrier that arises due to the complexity of foreign distribution/advertising channels, accessing export distribution/advertising channels and obtaining reliable foreign representation. The final kind of market barrier is the logistics barrier that arises due to high insurance cost, unavailability of warehousing facilities abroad and high transportation costs.

The external barriers are mainly in the form of the regulatory barriers, governmental, task and environmental barriers that arise due to complex documentation requirements, the delay in receiving payments and lack of governmental incentives. Currency fluctuations and strict foreign rules and regulations are also hurdles for a firm on its path to internationalization. The cultural difference coupled with language difference also poses a significant obstacle in the roadmap of internationalization.

17.7 Theoretical Interpretation

Porath (2003) in directed evolution in strategy and management sciences depicts the process of evolution to be one where an organism is subjected to a mutation that arises out from external and internal requirements to survive. Gathering from the process, the unmutated variety and the mutated variety coexist till the mutated

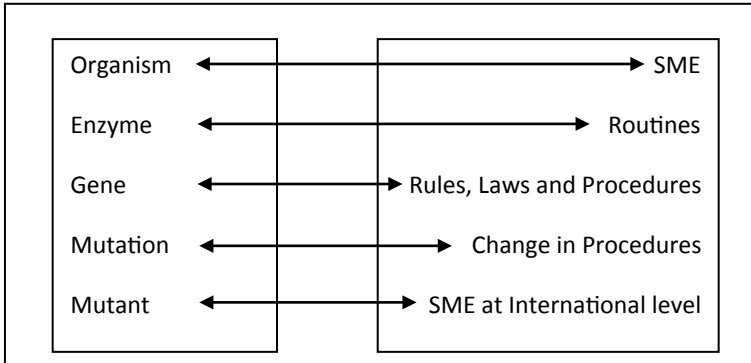


Fig. 17.1 Similarity between organism and an SME with respect to evolution as a common base

variety gains dominance. This dominance is achieved through the selection process where the successful traits or rather traits that aid the survival of a variety are selected and are replicated by passing it onto the next generation of the variety. So, a variation–selection–replication cycle is at the core of the evolutionary process.

The same applies to an organization as well and for that matter of fact, to an SME. The similarities between an organism and an organization are exhibited in Fig. 17.1.

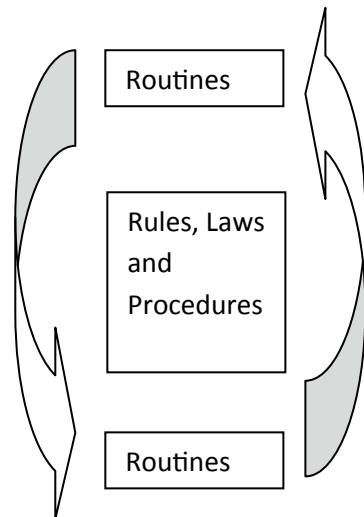
The process of internationalization of an SME is analogous to evolution of an organism to a more dominant or better surviving mutant form. The “genes” of rules, laws and procedures are at the centre with the “enzyme” of routines surrounding it. The SME defines the environment it is operating in and the environment to which it aspires to be in, the capabilities required to evolve and fit into that environment and the required routines to achieve that goal. It begins with the “awareness phase” where the management is aware of the opportunities that exist in the international market. This awareness over a period of time creates an interest in the mind of the management that is inclined to growth. It is here, in the “interest phase” that the management inspired to expand the SME’s current operations and reach decides to see what is required to become an international SME and slowly start incorporating such measures and criteria into the routines. The requirements coupled with the capacity of the organization influence the rate and extent of change it can make. The set of routines along with the set of rules, laws and procedures undergo change or are subjected to change to make the SME “evolved” into an international organization. The external and internal drivers such as growth opportunities, managerial leadership and attitude, availability of various resources such as personnel, finance aid the change, whereas entry barriers, international competition, inexperienced personnel, lack of knowledge could be the limits to such a transition. The change is triggered keeping the old or previous set of routines and rules, laws and procedures (for convenience sake it shall be referred to as RRLP) intact as a safety net to revert to in the event of failure of the new “evolved” set of RRLP. Then arrives the trial phase where the evolved set of RRLP is tested out to see if it will survive in the

international scenario. Here the evolved RRLP could either survive or perish in the face of the international market demands and requirements. If met with success, the evolved RRLP is maintained as devised. In other words, it is “selected” to replace the old RRLP to completely adhere to the organization’s new goal of becoming international. This is the adoption phase where the new “evolved” RRLP is set to be passed on to be the base for further evolution. The environment in which any organization operates, let alone an SME is dynamic and ever changing. Constant evolutionary tweaks are required to the current operational set of RRLP to ensure the SME can survive the competition, demands of the international market and other threats/obstacles that pose a danger to its dominance or even its own existence (Fig. 17.2).

As shown in Fig. 17.3, we can identify a roadmap for the internationalization of an SME. Let this model be called the ESI model (evolutionary model of SME internationalization). Making a generalized set of steps in the route to internationalization as per (Kontinen & Ojala, 2012) a firm begins with domestic operations and gains stability in the domestic operations as STEP 1. STEP 2 relates to the firm doing experimental exports beyond its domestic operations—a phase of litmus test for the firm to see how it reacts to the international market and also to see how the international market reacts to the firm. STEP 3 is about establishing the success in experimental export stage to start doing regular exports. Step 4 denotes the firm gaining foothold in the foreign countries and start establishing subsidiaries in those foreign countries to facilitate greater operational and growth control in line with its internationalization policies. With the setting up of foreign subsidiaries, the firm then sets up a representative office or control centre for those subsidiaries in the foreign lands.

The ESI model acts as the transition or evolutionary phase for the SME to progress from one step to another where the SME mutates its existing RRLP to

Fig. 17.2 Genetic level depiction of an organization



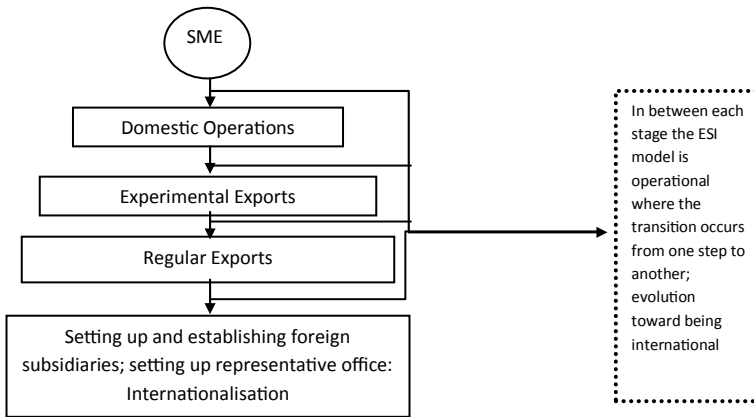


Fig. 17.3 Steps in SME internationalization

progress to the next stage. If the RRLP mutation/evolution isn't good enough to stand the test of the requirements of the concerned step, the management reverts to the previously successful state of RRLP and modifies it again but this time with the help of experience and knowledge gained from the previous failure.

Just as in the biological world, where evolution happens to group or results in a mutated group, the line of progress can be seen here in the case of an SME. The success or failure in venturing into the international arena by an SME or several SMEs is a subject of study with the intention of "selection"—the selection of what to replicate and what not to or what to be wary of in the route to being international. To the existing pool of knowledge, this study and its results are added. The purpose of such selection and documentation of success is to make note of the best mutations and make it a benchmark for future imitations and replications—for SMEs operating in similar environment and circumstances—it will also serve as a point of reference for those operating in different environments under different circumstances. The best mutants are analysed, and the change in routines responsible for successful internationalization is documented. The resulting routines serve as the foundation for further evolutionary progress work as the environment in which the SME is operating is ever dynamic and constantly in itself a subject to evolution thereby giving a *modus-operandi* on how to adopt the drivers and overcome the limits in the route to internationalization (Fig. 17.4).

17.8 Juxtaposition of Biological Evolution with Respect to SME Evolution

See Fig. 17.5.

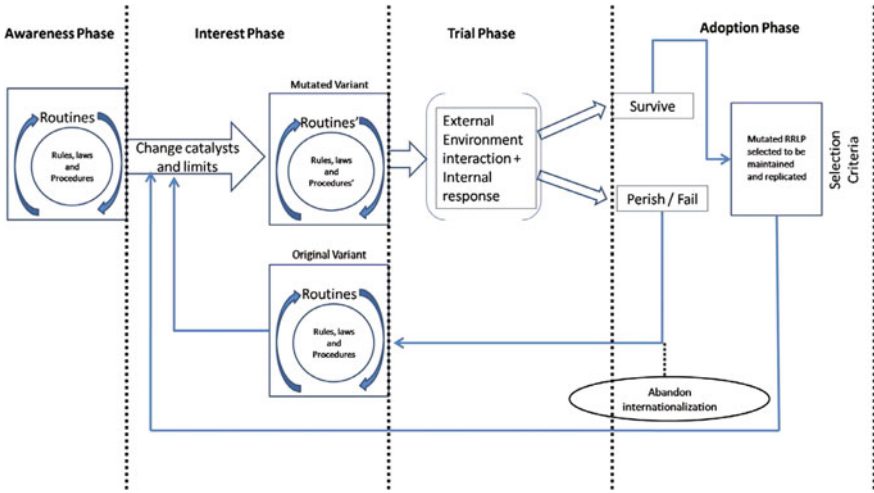


Fig. 17.4 Evolutionary model of SME internationalization

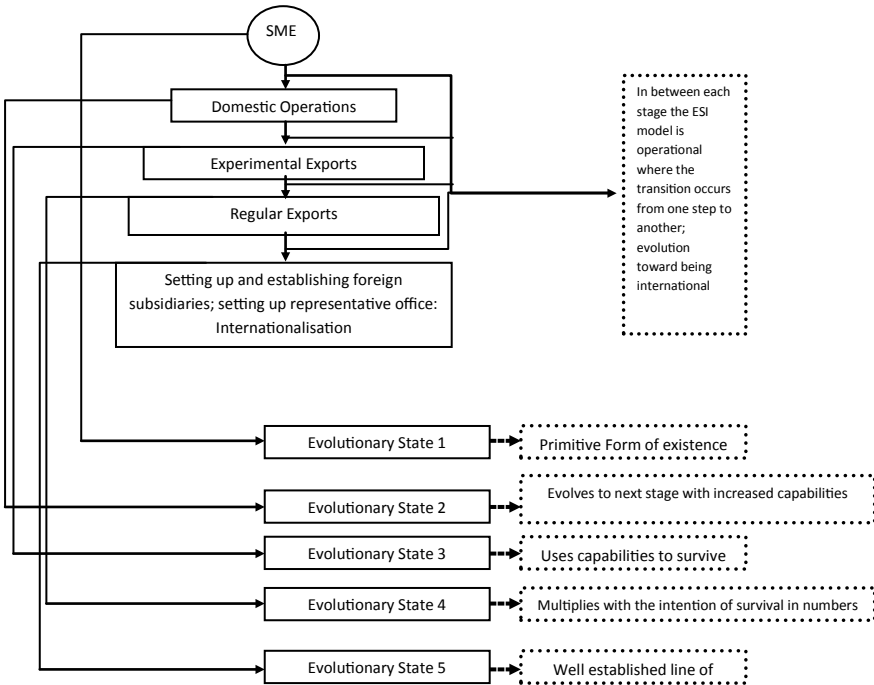


Fig. 17.5 Juxtaposition of the similarities in biological evolution and SME evolution to the international arena

17.9 Conclusion

Internationalization is a constantly moving target. The degree of internationalization of an SME is related to its size and resources. The problems and the corresponding support measures required will have to change as the company evolves and grows, i.e. as the times change, the SME has to evolve itself to meet those changes. The most important factor that lays the foundation of SME internationalization is the pro-international orientation of the decision makers within the SME. This is like the instinct of an organism that is determined to survive by adopting itself to the changing times. If the SME does not become international, then internationalization would come to the SME in the form of competition from international firms. The decision makers have to adopt a pro-international attitude to kick-start the evolution towards being international as it is the commitment of the top management that emanates throughout the organization and orients, prepares and builds up its capacity to become an international firm. As in evolution, where a mutated variety when successfully survives tends to thrive and grow, the SME too thrives and grows from its success and becomes an international player. Variation-Selection-Reproduction is the fundamental property of any evolving system. An SME varies its RRLP to match the requirements of successful evolution gradually towards being international. When an organization is facing an unfamiliar environment it tries to bring in stability by changing or spawning a new organization with a better set of RRLP to thrive and grow in the unfamiliar environment. Spawning a new organization has the additional beneficial feature that the parent firm is able to retain its original set of RRLP. Following the principle of natural selection, the SMEs which evolve and adapt well to the dynamic international will lead to a proliferation of similar if not same kind of SMEs. Different environments and internal strengths and priorities will lead to evolution of diverse kind of international SMEs. Internal factors of an SME that include human resources and managerial knowledge, technological innovations, ICT capacity and firm size act as the genetic material upon which the decision makers make modifications to respond to the operational barriers like in exporting products/services and informational barriers like identifying, contacting and selecting of markets. Therefore, ultimately it is the international market knowledge and the pro-international orientation of the decision makers in an SME that acts as the major driving force in its evolutionary internationalization.

17.10 Scope of Further Research

Generalized Darwinism does have an encompassing effect on all kinds of evolutionary dynamics. As in genetic engineering where one can identify the single gene which gives a competitive advantage for a particular species, a kind of bio-business engineering would prove vital in understanding how and what exactly determines

the evolutionary dynamics of success of not just an SME, but also for bigger organizations such as MNCs that were once small organizations. This theoretical framework would serve as a basis for further such research to be applied for different kinds of organizations in different kinds of environment.

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Chapter 18

Organizational Transformation of Internationalizing Hi-Tech SMEs in India: A Case-Based Analysis



Ramesh Narasimhan, M. V. Ravi Kumar and M. K. Sridhar

18.1 Introduction

It is now widely recognized that the small and medium enterprises play a significant role in the economic development of practically all nations, be it developed or developing. SMEs contribute 25–30% to the global exports of manufactured goods, and exports account for 10–40% of the total sales revenue of about 20% of the

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SMEs (OECD, 2000), as reported in Svante, Gabrielsson, and Ingemar (2004). The Indian SME¹ sector contributes 8% to the GDP, 40% to the manufacturing GDP, and 40% to the manufactured exports of the country (Ministry of MSME India, 2014). The number of SMEs and their international activities have been growing and accelerating, driven by globalization of markets for products, services, and knowledge. It is reported that globalization has affected three-quarters of SMEs, and those who remain focused only on the domestic market has been decreasing (Rodriguez, 2007). The small firms are beginning to engage in internationalization earlier than before (McDougall & Oviatt, 2000). Hence, the successful management of the international activities of small firms is gaining critical importance (Svante et al., 2004). But, the SMEs differ from their larger counterparts due to constrained resources (Bonaccorsi, 1992), a low capacity to absorb risk associated with even experimenting in foreign markets due to the general 'liability of foreignness' (Hymer, 1976) and 'hyper competitiveness' (D'Aveni, 1994), and a low tolerance for temporal crisis (Castrogiovanni, 1996). Therefore, the theories and frameworks developed in the context of the larger established firms would not usefully guide SMEs aspiring for internationalization (Etemad, 2004). Also, SMEs in the emerging economies could be expected to operate under more severe constraints compared to their counterparts in the more developed economies. Moreover, the emerging economy SMEs have been exposed to unprecedented changes in the economic policies during the last three decades which have opened up new perspectives on internationalization in terms of defensive survival strategies (Dawar & Frost, 1999; Craig and Douglas 1997) and competitive strategies (Khanna & Palepu, 2006; Mathews, 2006). Technology-intensive SMEs are reported to overcome some of the key constraints faced by the SMEs by leveraging their capability to serve deeply niche markets (Oviatt & McDougall, 1997). Technology-intensive sectors exhibit a high level of creation and use of knowledge (Eisenhardt & Schoonhoven, 1990) with research and development (R&D) activity often seen as an indicator of knowledge intensity (see e.g., Kuivalainen, Sundqvist, Puumalainen, & Cadogan, 2004; Autio, Sapienza, & Almeida, 2000). Though the technical (or technological) capabilities are among the most recognized determinants of success in small knowledge-intensive firms (McGrath, 1994; Zahra, 1996), the process of internationalization implies the development, integration, and transfer of knowledge of different types—business knowledge, institutional knowledge, and internationalization knowledge (Johanson & Vahlne, 2003; Prashantham, 2005). The productive integration of all such knowledge with other firm resources constitutes the overall organizational capability (Penrose, 1959). Hence, understanding how these capabilities transform as the technology-intensive SMEs internationalize and the management of the transformation is crucial from a managerial perspective (Nummela, Loane, & Bell, 2006). Our paper is divided into five sections. In the first section, we

¹SME is a subset of a larger grouping called micro, small, and medium enterprises (MSME) in India. But the SME sub-group would account for practically the entire share of the contribution cited above.

present an overview of the internationalization literature with a focus on internal transformation. This is followed by a section on the design of the study. Then, we present the individual case study of the three firms, followed by a section on the cross-case analysis. Finally, we integrate our findings into a model and discuss the implications.

18.2 Internationalization and Internal Transformation

Citing Svante et al. (2004), Etemad (2004) posits the possibility of a ‘phase-change’—qualitative internal change and adjustment that might take place in knowledge-intensive SMEs after a threshold of internationalization are achieved. Dynamic internal feedback processes, in response to both internal and external forces, shape the evolution of knowledge, competencies, and the overall orientation of firms (Etemad, 2004). How the central business operations change as the SME internationalizes, and the process by which SMEs engage in the global economy is under investigated (Acs & Preston, 1997; Lefebvre, Lefebvre, & Préfontaine, 1999). Interestingly, the stage and process models of internationalization are predicated on gradual and progressive changes through an accumulation of experiential knowledge through a process of learning as the firms expand their geographical reach (Chittoor, 2009). This process involves a gradual buildup of capabilities related especially to R&D and technology, as the organizational learning occurs and the firm acquires and accumulates advanced and specialized skills, as it moves through the various stages of internationalization (Lefebvre et al., 1999). However, few studies have attempted to open the ‘black-box’ of the firm to unpack the content of internal change. The few exceptions examine the process of adapting to internationalization in terms of the market perceptions of managers, the costs and benefits of different modes of market entry and patterns of internationalization (Calof & Beamish, 1995), resolving the managerial dilemmas with respect to the strategy, structure, and human resources (Lam & White, 1999) and linkages among the changes (and the extent of change) in (a) the business idea, (b) the external dimensions like the product, mode of operation and markets, and (c) internal dimensions like finance, personnel and organization structure (Nummela et al., 2006). While these scholars have contributed toward a better comprehension of the process of change, they do not shed light on how and why the changes drive the internationalization process. Also, with the exception of Nummela et al. (2004, 2006), who have examined Finnish and Irish SMEs, the others have studied the process of change in larger established organizations. Hence, this study tries to address the important, but inadequately, investigated topic of internal transformation of the SMEs as they engage in internationalization activities. We have chosen an integrated model of internationalization for our study, motivated by the consensus among scholars that none of the internationalization theories could independently explain the dynamics of the internationalization of technology-intensive SMEs (Kuivalainen, Puumalainen, Sintonen, & Kyläheiko, 2010) and the argument that no one model could be adequate to *fully* explain how and why SMEs

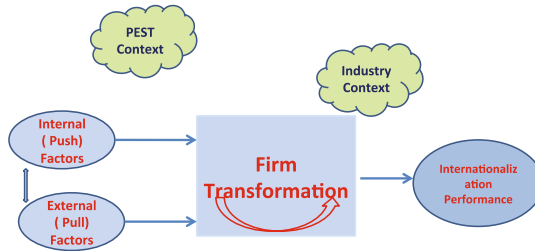


Fig. 18.1 Internationalization process: an integrated model

internationalize and that the *FDI theory*, *stage model*, and *network perspective*, are related and complementary representations of the internationalization concept (Coviello & McAuley, 1999). We have adapted the integrative framework proposed by Etemad (2004) since it is the most inclusive that we have come across, embodying ‘a range of influential forces at work and to reflect the early developments of the field’ (:5). We describe the model (Fig. 18.1).

General Perspective of the Model: The internationalization behavior of an SME is driven by two sets of conceptually distinct, but interactive, factors, which operate at the firm level and reside internal and external to the firm. These factors directly act on the firm to motivate and influence the commitment of the firm toward internationalization activities and are largely responsible for sustaining the continued international expansion of the firms (Johanson & Vahlne, 1977). These two sets of factors or drivers are mediated by the inherent and idiosyncratic characteristics of the firm: the propensity of the entrepreneur-manager to internationalize based on the entrepreneurial orientation (Lumpkin & Dess, 1996; Kumar, 2013) and global mindset (Nummela, Saarenketo, & Puumalainen, 2004), the administrative systems and processes (Lieberman & Montgomery, 1998), the organizational structure, and the overall culture of the organization. All these factors interact in a dynamic manner—through mutual shaping, feedback loops, and learning effects, consistent with the evolutionary and behavioral theories of the firm (Cyert & March, 1963; Nelson & Winter, 1982) to describe and explain how and why SMEs undergo transformation as they engage in the internationalization as measured by the degree of internationalization—internationalization performance of the firm.

Internal Factors: These factors act as impulses for the SMEs to identify international opportunities to market their products as well as acquire new technological knowledge and capabilities (Chittoor, 2009). The economics of operations such as the need to secure an adequate return on investment in either manufacturing or/and R&D could be a strong motivational driver to foray into international markets (Coviello & McAuley, 1999). Recognition of specific competitive advantages and determinants of the level of competitiveness such as cost, product features, process technology, quality or speed of delivery, or a combination of these resources could also propel an SME toward internationalization (Sass, 2012).

External Factors: These factors attract the firm into the international market fold. The size and attractiveness of the markets, the ease and the associated costs of

transactions in the foreign markets, opportunities to link with and leverage suitable partners in those markets, and institutional milieu promoting and supporting exports and globalization (Che Senik, Scott-Ladd, Entekin, & Adham, 2011)—all act as drivers toward internationalization. The inertial constraints of the domestic market environment such as bureaucracy, regulatory regime, local institutional rent-seeking behavior could also act as important triggers in favor of internationalization.

Transformational Factors: While the presence of favorable internal and external factors constitutes the necessary conditions for internationalization, they are not sufficient. These factors are strongly mediated by the characteristics of the enterprise and its management team as a whole. These include, *inter alia*, the mind-set (Nummela et al., 2004), and orientation of the founding entrepreneur or team (Kumar, 2013), the capabilities and resources of the firm, the organizational culture and structure (Nummela et al., 2006; Knight & Cavusgil, 2004). The dynamic, interactive, and evolutionary properties of these factors (Etemad, 2004) drive the first- and second-order changes within the firm (Watzlawick, Weakland, & Fisch, 1974) and eventually, result in its transformation. An organizational capability like the capacity to learn and absorb new information and then knowledge and use them is paramount (Prashantham, 2005). The mutual reinforcement of capability building and capability-leveraging is an aspect of internationalization (Tallman & Fladmoe-Lindquist, 2002). We believe this virtuous cycle is reflected in the organizational transformation propelling the firm toward growth and international expansion.

Internationalization Performance: International revenue as a proportion of the total sales revenue is a widely accepted measure of the international performance of a firm. While the profitability of international operations is a useful metric, the non-availability of this data due to its business confidentiality, especially in the context of the SMEs, which are not public listed companies, renders the use this measure problematic. However, we recognize that there are other measures of internationalization like the strength of alliances with partners in foreign markets (Lu, Lu, Beamish, & Beamish, 2001), foreign sourcing as a proportion of total procurement value, number of geographical markets served (McNaughton, 2003), and foreign R&D alliances (Svante et al., 2004). These measures are also an indication of the capability of the firm to engage itself more in international operations which in turn shaped by the experience and commitment of the firm to international operations (Kuivalainen et al., 2010).

PEST and Industry Context: In our conceptualization, we have chosen to treat the environmental context consisting of the broader political, economic, social, and technological (PEST) factors and the industry context as either helping or hampering the internationalization efforts of the SMEs, driven by a combination of the internal and external factors discussed above. These are part of the critical contingencies in a firm's external environment which may influence a firm's decision to internationalize and also drive its pace and patterns of international expansion (Svante et al., 2004).

We believe, based on the aforementioned description, that this model would serve as an useful conceptual lens to study the internationalization phenomena of the technology-intensive SMEs and uncover the critical factors which could provide an account of the 'how and why' of the process of transition and transformation from a domestic engagement to an international one.

18.3 Design of the Study

18.3.1 Methodology

Our study is aimed at unpacking the process of transformation within the enterprise, as it travels along its internationalization trajectory. Investigation of such change processes calls for a longitudinal and retrospective perspective (Nummela et al., 2006). When investigating growth and development of capabilities and experience, it would be better to use longitudinal research design (Kuivalainen et al., 2010). This cannot be addressed through the examination of a few variables alone. Moreover, the context is an integral part of the phenomenon, and the boundary between the two is hazy. Therefore, this is essentially a process-oriented study and not a variance-oriented study. The case study research would be the most appropriate methodology (Eisenhardt, 1989; Yin 1994).

18.3.2 Case Study Sample Selection

Since the purpose is to understand the process of change during internationalization, only firms who have had a long and hence stable internationalization effort has been considered. This would ensure that the organizational as well as the internationalization changes observed have achieved a state of equilibrium, especially when we are looking at the change processes involving cyclical recursive causation (Terrence & Lawrence, 2001). This would mean that only enterprises which are 15–20-years old be considered so that we are assured of stability of the process. Also, the watershed event in the political economy of India, namely the New Economic Policy, happened in the mid-1991. This has had wide ramifications across the entire Indian industry and hence constitutes an important macroeconomic context. We have ensured the chosen organizations have straddled this ‘inflection line.’ Case study sampling follows the logic of ‘replication,’ much like the scientific experiments (Yin, 1994). In order to achieve theoretical generalizability and external validity, we have selected cases from diverse verticals like electronics and telecommunication, electrical, and specialty chemical. We reached a reasonable level of ‘theoretical saturation’ after covering three cases and hence did not feel the need to examine more cases. There are several definitions of ‘small and medium enterprises (SME)’. We have adopted the definition as per the Indian ‘Micro, Small and Medium Enterprises Development Act, 2006’, which defines small and medium enterprise as one which has original investment in plant and machinery in the range of Rs. 25–100 million. We have not considered enterprises engaged in pure services. We have considered only those SME units, which have either and/or been engaging in product, process or practice development. This reflects our broad understanding of technology (Pankaj & Basant, 1998). The three cases chosen had been actively engaging in all the three knowledge-based technological activities,

Table 18.1 Case study company profile

Parameters (figures for 2010/11)	SSS	AUL	HTPL
Total sales revenue (million INR)	130	113	500
Internationalization intensity (%)	48	57	100
No. of employees	300	155	200
Industry affiliation	Electronics	Specialty chemicals	Electronic manufacturing service

though to varying degrees. Also, these technology-related efforts are critical for the competitiveness and hence play a strategic role in the survival and growth of these firms in their respective industries. Thus, we have ensured the case sample firms are ‘technology-based SMEs.’

This is a retrospective study and not longitudinal which would have been the most appropriate design, primarily due to the demands of cost and time for the latter (Nummela et al., 2006). The data collection was carried out at a point in time from the three case study sites. Semi-structured interviews were conducted with respondents ranging between 2 and 4 in each firm to achieve triangulation of data collection (Yin, 1994). The respondents were the founder-entrepreneur—CEO and a few senior managers responsible for strategic and operational decisions and had been with the company for a reasonably long period of time. The respondents were asked to recollect when and how their company began to internationalize and the corresponding changes, incremental as well radical, in their operations, technology, products, and organizational structure. It should be noted that the data was based on the respondent’s view of the various events and milestones but were triangulated with the views of a few other senior functionaries in the same organization to ensure internal validity (Gemser, Brand, & Sorge, 2004). These primary data was supplemented with secondary sources of data like news reports about the companies, reports about the industry to which the company belongs, company, and product brochures, company websites. The three case study sites are profiled broadly in Table 18.1. We shall turn to a detailed description of each case study site in the following section.

18.4 Internationalization and Transformation of SSS

Founded by an engineer in 1971, for close to 20-years SSS had been supplying capacitors mainly to the public sector Indian Telephone Industries (ITI) for use in the telecom equipment manufactured in collaboration with Bell Telephones Manufacturing Company (BTM), Belgium. SSS worked closely with ITI and developed indigenous MPET-dielectric capacitors, then the leading technology, as per the drawings, as part of the import substitution efforts of ITI. Since ITI insisted

on ‘high-specs, low-cost,’ only those who could be cost and quality competitive could remain a vendor in the long run. SSS continued to remain a key vendor to ITI over 2 decades, before diversifying its customer base. SSS targeted customers who were willing to pay for the quality and performance standards. Since the advent of the New Economic Policy of the Indian Government in the early 1990s, MNCs had begun manufacturing in India and demanded global standards of product performance from their suppliers. In order to compete with these MNC players, the domestic Indian players also had to upgrade their quality standards. The Director-technical commented:

The efforts were to be the best in class in India, if not the world. We were not competing with the imported GE and Matsushita capacitors. We kept on improving - our own laboratories and process consistency.

18.4.1 Internationalization Trajectory

SSS began exporting in 1995, nearly 23-years after its inception. The key motivator was the need to diversify away from the domestic market since it was difficult for quality-oriented capacitor manufacturers to compete with the tax-evading players in the market. This was compounded by the market fragmentation—a large number of small players, supplying to a few large customers, which intensified the degree of unscrupulous competition.

The Southeast Asian market was the most appealing due to the proximity, personal contacts, and the market potential for quality capacitors. Singapore was the first halt, followed by Malaysia, Thailand, and Philippines. The market entry began with the local electrical dealer markets that were serving the original equipment manufacturers (OEM) and the after-market. There was demand for cheaper substitutes for the capacitors imported from Europe, USA, and Japan. The subsequent foray into the Middle East (ME) market [Dubai, Saudi Arabia] was similar to the SE-Asian market, beginning with the after-market and later gaining direct access to the OEMS. In the European market, the local manufacturing base of capacitors was gradually shifting to low-cost countries like Brazil, Slovakia. SSS tied up with a Spanish manufacturer of capacitors who was on the verge of bankruptcy due to the low-cost competition from East European and Asian players, as a contract manufacturer serving their markets in Europe, Middle East, South Africa, and Australia. Later, SSS forged a similar arrangement with the affiliates of the Spanish company who were operating in Slovakia and UK where similar cost pressures had driven them to source capacitors from low-cost geographies. SSS’s share of international business peaked at 70% of its total revenues in 2007–08 but dropped to 48% in 2010–11.

18.4.2 Transformational Trajectory

Product technology had kept pace with the internationalization efforts. SSS had developed burst-proof safety capacitors in 2004–05, dual-concentric winding capacitors for AC (for compressor and fan separately) application in 2007 and was exploring the adoption of segmented-film technology, an emerging product technology available with the Korean capacitor manufacturer. The quality assurance, for both the domestic and export markets, was based on the more stringent international IEC standards rather than the Indian BIS standards to meet the rising export volume and gain better control over quality, cost, and delivery, SSS set up a plant for in-house metallizing of raw capacitor films—a significant strategic decision for backward integration. Exports, decisively, demanded a firm commitment to consistency in quality, cost, volume delivery, and the product performance. The capacitor winding technology (a key process technology in the manufacture of capacitors) transformed progressively from manual to semi-automatic and eventually fully automatic, in line with the increasing export intensity. Automation technology also enhanced the confidence of the management in securing essential approvals for certifications such as ENEC for lighting applications for the European market. A young member of the founding family had been inducted as the Director-Technology to spearhead the implementation of ERP software. A shift in the business strategy was under discussion, wherein the attempt was to balance the domestic and export markets. The management perceived that the domestic market was growing in volume as well as applications and had upgraded in terms of quality and customer sophistication triggered by the entry of MNC players. The management believed the domestic market had internationalized.

18.5 Internationalization and Transformation of AUL

Established in 1972 by an entrepreneur armed with a doctorate in chemistry, industrial experience in the USA and a few patents under his belt, AUL began its journey with a chemical substitute for titanium dioxide widely used in coloring pigment used in textile printing, at one-third the price of the latter. Soon, the company spotted an opportunity to integrate forward into the manufacture of fluorescent pigments used in textile industry for dyeing and printing, which was being imported in huge quantity from the UK. The Founder-Entrepreneur, along with his Chief Chemist, developed this import-substitute fluorescent pigment and the corresponding batch-process technology—beginning with a laboratory scale of 100 g and scaling up for commercial production from 50 to 100 kg per day, over two years. The customers accepted the product due to the significant price advantage, though it met only 50% of the quality specifications of the original international suppliers. The R&D team progressively perfected the product and the process technology. The batch-process reactors were designed in-house with

technical inputs from the equipment fabricators. AUL diversified its product portfolio to serve a range of applications like paper coating, plastic-toys, and printing ink. But the core product remained niche—the fluorescent pigment. By the end of 1980, AUL was capable of offering 500 product variants, which used 50–60 different chemicals, about 60% of which was sourced from across the world—both developed and emerging countries. By the end of the decade of the 1980s, AUL had managed to drive the domestic competition completely out of this niche market segment due to its unbeatable combination of good and consistent quality coupled with aggressive pricing.

18.5.1 Internationalization Trajectory

AUL began its internationalization efforts with a big established textile company in Thailand in 1989–90. The price difference—AUL was priced one-fourth with respect to the suppliers from the west, served as the cutting edge of the wedge. But AUL had to work with the customer to meet their quality standards. Over the next few years, AUL expanded the presence to cover applications like paper, plastic, and printing ink. AUL entered the Taiwan market in 1993, followed by the South Korea market, within six months. Distributors were the key channels of entry and penetration into these markets. AUL had to beat a hasty retreat from the US market due to the poor perception of Indian brands. In the European market, AUL had estimated it had a 60% ‘quality gap,’² but the big customers were willing to give a chance to a low-cost supplier like AUL. The UK turned out to be a tough market due to strong local competition. The Scandinavian market proved relatively easy to enter, albeit for the non-industrial ‘recreation segment’—Clay Pigeon.³ Soon after this, AUL entered the German and French markets for Clay Pigeons, followed by the traditional applications such as textile, paper, and plastic. AUL had to face significant gaps between the quality they offered and that demanded by the customers in these developed markets. The industrial processes at these customers were largely computerized and hence offered little tolerance for variations in specifications. The stringency of specifications was applied right down to the packaging⁴ of the pigments. In December 2010, AUL was actively engaged in scouting for a suitable warehousing facility in Mexico to cater to the South American market. AUL was in advanced stage of discussion with a large paint manufacturer in the USA for a contract manufacturing alliance. AUL’s share of international business rose to 57% in 2010–11.

²Quality is measured in terms of color stability with respect to temperature and light and particulate size.

³Clay Pigeons are fluorescent colored small disk-shaped like saucers, which are shot-down as they are tossed up by a machine, in an open playground. This recreational sport is supposed to help relax the mind and enhance concentration.

⁴Packaging had to be clean, easy to open, biodegradable, etc.

18.5.2 *Transformational Trajectory*

AUL had assiduously developed its capability in three areas—R&D, process technology, and organizational development. The R&D efforts progressed through four stages—reverse engineering of the imported pigments during its formative years, diversification of applications beyond the textile industry, bench-marking against competing global brands, and finally, product customization to suit the stringent specifications of developed markets. The close nexus between the product and process technologies in chemical industry led AUL to develop its competence in designing its own batch-process reactor vessels where the main polymerization process happened. Also, AUL had been scaling up its reactors vessel capacities over three decades, in line with the increasing volume, driven by its international expansion. AUL upgraded its balance unit equipment like grinding and drying machines to German technology since they had also become critical for the international markets, in view of the stringent specifications with regard to ‘powder-size⁵’ and ‘dust-proof.’ R&D organization was the key engine of growth, with peak strength of 20 scientists and chemists. AUL had invested on an average 7–10% of its sales turnover on R&D. AUL had an alliance with a foreign university laboratory to develop products based on the emerging nano-technology. In the wake of the economic liberalization of India in 1990, AUL sets itself a vision of transforming into a leading player in the global market. While the Chief Executive led the internationalization efforts during the early period—1995 to 2005, an international marketing team consisting of two senior managers was set up. The separation of ownership from that of management had been one of the key decisions to professionalize the company in order to attract the best talent and grow internationally. General Managers were responsible for each function (the GM-Finance is active now, and one for R&D is recently on board) and the day-to-day operations of the company. In order to diversify from the niche fluorescent pigment, AUL set up a separate R&D team with six scientists, to work on diversification projects. Research collaborations were another organizational initiative to complement the in-house R&D capability. AUL was working on ERP to streamline the operations. The Manager—business development said:

The overall caliber of key personnel would definitely improve significantly. Marketing and technology have teams already. We have consultants to help us take the organization to the next level.

⁵The particulate size had to remain within the narrow band of 2–5 μm , else it would not pass through the customers ‘mesh.’

18.6 Internationalization and Transformation of HTPL

HTPL was set up in 1987–88 by a techno-entrepreneurial couple as a vendor to a major public sector company engaged in the strategic electronics sector for assembling and testing of complex printed circuit boards (PCB) and later for the design and manufacture of transformers. HTPL imbibed the principles of good housekeeping, worker training, the management's own technical training, and inventory management and a strict vigil on quality, during these formative years. After a couple of years, HTPL began to supply to a reputed TV manufacturer, transformers, and degaussing coils used in the control of picture quality and hence a critical component in a TV. The volume of production began rising and along with it the challenges of process quality control. Simultaneously, HTPL also assimilated the design technology of transformers enabling it to solve technical issues faced by the customer, design-to-cost due to market pressures, and adapt to any change in the input raw material. This also led the company into the sourcing of materials and components for the transformers, some of which were difficult to procure due to the regulatory restrictions. The Director-Operations said:

We could do all this with zero-defect even at that time. Our customers were thoroughly impressed. It was important for us to look good in front of the customer. Quality was strictly managed, and we never took anything for granted.

In 1992, HTPL was contracted to supply transformers to the telecom gear manufacturers across India under license from a public sector telecom R&D organization. HTPL invested in computer numerically controlled (CNC) machines and in building its capability in designing and sourcing. The CEO, HTPL, said:

Suddenly, we were catapulted from a cottage industry making transformers and PCBs for a couple of local players, to a national player with 70% of the share of the market of the government licensee. This was achieved in the face of stiff competition from a dozen players in the market.

This strengthened HTPL's process capability, especially the automation of transformer winding, and its skills to manage a supply chain, which was increasingly turning international in scope. Achievement of ISO 9000 certification in 1995, positioned HTPL as an established player in the Indian telecom industry.

18.6.1 Internationalization Trajectory

HTPL, quite abruptly, found its C-DOT-licensee market dry up in the wake of the change in the telecom licensing policy of the new government in 1993. The management resolved to enter the foreign market. In the mid-1993, HTPL won the first export order for transformers, though small in size, from a mid-size customer in Switzerland. Later, HTPL got a breakthrough with Siemens who were making transformers for telecom application in Munich. HTPL was chosen from among a

number of contenders from North Africa, China, and India. Within a couple of years of engagement with Siemens, HTPL struck similar contract manufacturing deals with global players like ST microelectronics in Italy in 1998 and Nokia in Finland in 1999. In fact, by 1997 HTPL was earning its entire revenues from the international markets. By early 2000, the global ecosystem began changing, and China was emerging as a destination of choice for large-scale manufacturing services. HTPL found its global clients ‘migrating’ to China. HTPL after a couple of years of adjustment to these changes (even shipped the transformers to China), decided to exit what had become a ‘commodity business.’ In the mid-2000 Bengaluru began emerging as an aerospace hub for engineering and manufacturing services, both software and hardware. HTPL was selected over an established defense electronics company, as a manufacturing partner by UTC, a highly diversified technology behemoth serving a variety of hi-tech applications, including avionics and a Tier-1 supplier to Boeing, Airbus, and Lockheed. At the end of three years of the arduous process of qualification of samples conforming to stringent norms, HTPL progressively graduated from a ‘build-to-print’ to ‘build-to-spec’ vendor—for over 100 components. HTPL had begun its efforts to deepen and widen its engagement with other global players in the aerospace industry.

18.6.2 Transformational Trajectory

HTPL assembled its manufacturing ‘machine,’ ‘part by part’. The formative years, 1988–1995, saw the company training and tutoring itself on good practices and skills in assembly, quality assurance, and ‘impressing’ their customers, in order to win more orders and customers. HTPL acquired capability in global sourcing on the back of its deep and wide engagement with the telecom gear licensees, during the early 1990s. The hallmarks were sound systems and processes resulting in deliverables with a high degree of conformance to customer’s specifications. The capability to procure customized multi-spindle CNC winding machines and integrate them into the production system, was developed as HTPL ramped up the volume from 4,000 transformers/day to 100,000 transformers/day, to serve various international customers. HTPL invested in increasingly sophisticated transformer winding machines including the high-end 16 and 18 spindle Italian machines. The capability to maintain and manage these machines was developed through the transfer of skills from the supplier and training of others in the company. HTPL also adopted and further innovated the cell technology concept. Each line acted as a semi-independent system with its own line leader, quality inspector, and maintenance supervisor. The partnership with UTC had paved the way for the adoption of the lean manufacturing system through a comprehensive program offered at the Eto University⁶ set by UTC in China. Coupled with HTPL’s exposure to statistical

⁶Named after the late Mr. Eto, the iconic former Head of Quality at Panasonic, Japan.

quality control techniques, it was developing the capability as a ‘hi-rel’ vendor—an ability to offer EMS services for high-precision critical applications. HTPL’s internationalization during the rest of the decade led to more extensive sourcing of the critical raw materials, components, and embodied technology in the form of machines, from developed and developing countries. As HTPL’s engagement with the global aerospace industry deepened, it developed the knowledge and skills to source for the basic raw materials and components in order to deliver on the exacting levels of efficiency and tighter tolerance demanded by the applications at altitudes of 70,000 ft. The continued involvement of the senior management in SCM was a reflection of the importance and institutionalization of this capability.

18.7 Cross-Case Analysis

In this section, we compare and contrast the three cases on dimensions drawn from the conceptual model (Fig. 18.1) and discuss the implications in the next section.

18.7.1 *Contextual Dimensions*

It is interesting to note that all the three case firms had embarked upon their internationalization journey after 1990, when the epochal ‘liberalization, privatization, and globalization’ policy of the Government of India was unveiled. This was the overarching milieu of global opportunities as well as challenges, in which the case study firms began their efforts toward internationalization. The gradual dismantling of the ‘license raj’⁷ enabled the basic requirements for internationalization—permission to import raw materials, intermediate goods, and capital goods at reasonable tariff, availability of adequate foreign exchange for international travel and transactions etc. Simultaneously, the protective mechanisms and the tariff concessions for the SME sector were slowly withdrawn. These presented opportunities as well as threats for this sector. The more capable and entrepreneurial firms leveraged the new ‘windows of opportunities,’ while preparing to face the threats. This was reflected in the fact that independent of the industry context, whether fragmented or oligopoly and mature or growing, all the three firms had embarked on internationalization, strikingly, almost around the same time—during the 1993–95 periods.

⁷The Indian industry, since independence, had been controlled closely by the state through various forms of licensing. This stifling regime was pejoratively known as the ‘License Raj.’

18.7.2 Motivational Drivers

The founding managers of all the three case study firms shared either a science or a technology profile, especially in terms of the basic educational qualification. Barring the founder—Chairman of AUL who had his master and doctoral education in USA, the others had been educated in India and were the first generation entrepreneurs. AUL and HTPL had a strategic vision and a singular commitment to internationalization. AUL had achieved market dominance in its niche segment in the domestic market and had to look beyond for growth. HTPL had suffered a reversion in its position as a national player, and the global markets offered the hope of revival. These had acted as strong internal *push-factors*, which triggered the international foray of these companies. The external factors which had pulled them toward internationalization had been the relative attractiveness of the international markets and their segments—be it the size of the market and segments, value-for-money customers, the stability of the markets, the absence of unfair practices, the professionalism in the customer–supplier relationships, and the potential to learn and adopt best international practices.

18.7.3 Formation of Competitiveness

All the three case study firms had, unambiguously and assiduously, developed their mainsprings of competitiveness through their years of engagement in the domestic market. The researchers could uncover two key forces at work—the genesis in the form of ‘sowing the seeds’ and the subsequent process of ‘cultivation.’ The large public sector companies had played a key role in ‘seeding’ the formative process of building quality, cost, and delivery strengths. The import substitution regime, which prevailed till the early 1990s, also seemed to have enabled the early formation of competitiveness. The phase of ‘cultivation’ had been, understandably, longer, and all the three cases demonstrate the impact and importance of the engagements. The demands of the customers and the intense competition in a limited domestic market had driven these companies to deepen their quality-cost advantages in order to expand in the domestic market. SSS and AUL have had to benchmark against established MNC and Indian competition and move up the value curve of quality and cost. HTPL was driven more by the exacting standards of high reliability expected by its clients. The competitiveness was further honed and deepened in the domestic market. After the liberalization of the Indian economy, the entry of MNCs led to an up-gradation of the standards of quality, delivery, and service and this influenced the domestic players too. SSS, particularly, reported a significant enhancement in the expectation of their Indian customers due to the heightened competition from the MNCs in their respective product markets.

18.7.4 Internationalization Trajectory

All the three case study firms had achieved a level of 50% international intensity within the 10-year period. The pace of internationalization, in the product markets, had varied among the three cases. SSS and AUL had achieved an international intensity of 60 and 70% over a period of 15 years—1995–2010. On the other hand, HTPL had completely moved out of the domestic market to achieve 100% internationalization. All the three case study firms had adopted a measured approach in their market expansion strategy—as captured in the ‘psychic distance.’ Another interesting metric of internationalization efforts and commitment is reflected in the movement on the ‘Establishment Chain’—ranging from the low-cost and low-risk entry modes like distributor or agent to a higher-cost and higher-risk investment in a full-fledged subsidiary or warehousing logistic facility and an independent or joint venture production facility. SSS had moved up a little with a contract manufacturing (OEM) arrangement with a Spanish company. AUL was close to setting up a logistic facility in Brazil and actively working on a contract manufacturing arrangement in USA—evidence of moving up on the ‘establishment chain.’ AUL had the highest geographic and segment diversity—over 40 countries. SSS was serving 15–20 countries. HTPL had been focused on two or three countries, in the telecom and aerospace verticals. Another important characteristic of internationalization is the degree or depth of end user engagement. SSS had been very shallow on this dimension. HTPL emerged the strongest on this, followed by AUL. Yet another measure of internationalization is in terms of the globalization of the technology supply chain linkages—sourcing of the raw material, components, and technology embodied in process machines. HTPL exhibited the highest depth—about 60% of the inputs were imported, half of which were from the developed countries and almost all their key machines had been sourced from Japan to Italy. AUL scored high on raw material (chemicals) supplies—about 60% were sourced from developed countries and emerging economies of Asia. SSS had been sourcing its key process equipment from abroad (Sweden, South Korea, and China).

18.7.5 Technological Transformation

It was observed that all the case study firms have had to upgrade their technology as they internationalized—product, process, and practices. However, the firms exhibited variations in the degree of transformation on the three dimensions. Process technology had witnessed the most transformation driven by the need to automate the key process in order to secure higher volumes and consistency in quality. The adoption of quality management practices had been varied. HTPL adopted lean manufacturing and related practice technologies and had invested significant efforts on training, facilitated by their international OEM partner. During the process of internationalization, there were two key sources of potential learning

—customers and suppliers. Firms with customer engagement like HTPL and AUL had learnt from their international customers, with the former leveraging the most. While suppliers of machinery had transferred the embodied technology and done a little handholding initially, much of the learning had been in-house. The product technological transformation had been led by R&D efforts. Most had graduated to a level of capability, which allowed them to develop a product as per customer's specifications. The ability to secure stringent international product certifications was a reflection of this capability. All the firms were open and keen to invest in additional R&D linkages and alliances to extend their capability in emerging areas and strengthen the existing areas.

18.7.6 Organizational Transformation

As the firms internationalized, their organizational characteristics have had to undergo a change to meet the requirements of the new capability—be it technology or talent. Quality orientation had been generally of a high order. The professionalization of the firms, while varying, appeared to head in the direction of increasing operational control in the hands of the professionals. The case study firms differed markedly on their strategic focus on internationalization. AUL and to a large extent HTPL had staked the company's future on international markets. AUL had set an audacious goal of becoming a global company. SSS had tried to balance the international with the domestic market. With the exception of HTPL, the others exhibited a low-to-medium propensity to invest in learning and development. AUL had been active in exploring strategic alliances aimed at linking and leveraging the strengths of other organizational entities. Interestingly, the case study firms were open for collaborations from any part of the world.

18.8 Discussion and Conclusions

In this section, we discuss the findings as captured in the proposed model (Fig. 18.2).

The domestic market serves as the foundation for the SME's attempt to internationalize. The SMEs develop locally based capabilities and relevant advantages (Etemad, 2004), build and leverage social capital (Nahapiet & Ghoshal, 1998), and the networks and alliances (Gulati, 1995), to compete in the domestic market, against fair as well as unfair competition, in the face of institutional voids (Khanna & Palepu, 2006). This formative stage of the SME seems to be facilitated by the environmental context characterized by stringent import restrictions and the government policy of protection for the SMEs (Chittoor, 2009). 'Domestication' leads to a stage of 'initiation' into internationalization. However, it is the mediation of a combination of push and pull factors, which act as the triggers to initiate the

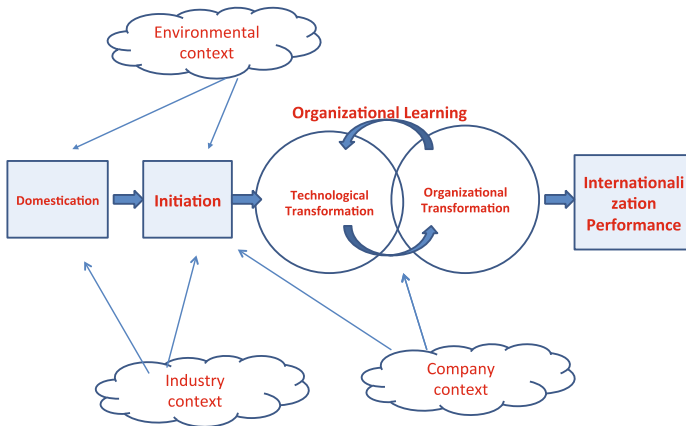


Fig. 18.2 Model of transformation process

internationalization efforts. These factors are embedded in the industry and company context. This seems to shape a favorable attitude and propensity to internationalize. This phase could continue till a threshold level of internationalization is achieved which could be about 25% of sales of the firm (Kuivalainen et al., 2004). The ability of the firm to acquire adequate internationalization momentum and move past the stage of initiation seems to be predicated on its degree of technological transformation covering product, process, and practices. A corresponding and matching demand on the firm seem to be the commitment of its leadership toward organizational transformation (Nummela et al., 2006). It is interesting to note that these two transformational processes—technological and organizational—act in close concert and appear to be ‘mutually shaping.’ Organizational learning arising from the international engagement seems to play a dominant role in this ‘mutual shaping.’ The company context, quite understandably, has a mediating influence during this stage of the internationalization process. The final internationalization performance of the technology-based SME is an outcome of a complex interplay between the two key transformational processes (technology and organization). The SME has to pass the ‘rites of initiation,’ before graduating to the actual transformation processes. Firms, which have managed technological and organizational transformation better, have either achieved or are well positioned to achieve superior levels of internationalization performance. We recognize certain limitations in our study. This study is based on only three cases and hence could be viewed as exploratory. A larger sample of cases covering both mature and emerging technologies like Internet and digital could strengthen the external validity of the findings. Another limitation of the study arises out of the retrospective nature of the study, which depends, largely, on the memory of the respondent—managers and their perception of the nature of change, extent of change, and even the causal attribution of the change.

There are some interesting directions for future research. One could explore the issues in the context of firms, which have been able to achieve rapid internationalization and some who were ‘born-global’. Do the same processes play out in the same sequence? How does a born-global leapfrog the ‘domestication’ and the ‘initiation’ stages? Or is it a radically different internationalization phenomenon? Our study has considered firms which had their inception as well as the start of their internationalization ahead of the ICT revolution India witnessed since the beginning of the twenty-first century. Would the internationalization process, facilitated by ICT, be any different? Our study also offers some prescription for government policy toward facilitation of SME internationalization. It is suggested that a governmental or industry-level mechanism be established to incubate the SMEs during the crucial stage of initiation into the internationalization process. The SME techno-entrepreneur should be equipped with skills to manage the process of organizational change in order to steer the enterprise through its internationalization trajectory. We hope our study has been able to afford a view into the ‘black-box’ of internal transformation of technology-intensive SMEs during their internationalization journey.

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Chapter 19

Internationalization of New Technology Ventures: Organizational Challenges for Innovation Management and Growth



Rushi Pandya and Nirlesh Kothari

19.1 Introduction

Internationalization has continued to be a popular step for a large number of firms in the world. It does not remain the choice for large firms, but small- and medium-scale enterprises (SMEs) have also gained benefits of fading barriers of internationalization. Globalization and liberalization of economies have provided a large number of opportunities to grow for SMEs and start-ups. SMEs from developing countries have also expanded into the international markets.

Growth by diversification in international markets helps the organization to increase their revenues due to a large number of customers (Lu & Beamish, 2001). There is also risk related to the process of innovation. Small firms lack resources to meet the required strategic position for internationalization. Small companies are required to develop the strategies to utilize their all the available resources with optimum scale (Ruzzier, Antončič, & Konečnik, 2006). That may lead to innovative practices within the organization. Innovation and its management are tools to develop competitive advantage and core competency in the market (Lecerf, 2012). Prange and Verdier (2011) considered organizations' internal and external challenges as enablers for managing the innovation with internationalization. The study focuses on the challenges faced by the IT-based SMEs and the process of internationalization.

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19.2 Internationalization for SMEs and Start-Ups

In the modern management research, internationalization term has been used frequently by the research scholars and academicians. The term was explained by the scholars of Australia and published with much elaboration in research publications (Welch & Luostarinen, 1988; Anderson, 2011; Knight, 2004). Internationalization is a very important step for an emerging organization. It is an opportunity to exploit a new market with core competencies of the organization (Lu, Zhou, Bruton, & Li, 2010).

In the last decade, small- and medium-scale industries (SMEs) have become very important for the global economy. For example, 99% of the organizations in the European Union are SMEs (Wymenga, Spanikova, Barker, Konings, & Canton, 2012) and 90% of Indian industry units are SMEs (Kathpalia & Raman, 2014). Small-scale business is a critical factor for Indian economy with 8% of annual growth rate (Arora, 2014). SMEs have been practicing internationalization in the last few decades. Many of them are integrating internationalization by developing import—export units in one or more countries (Todd & Javalgi, 2007; Armario, Ruiz, & Armario, 2008). SMEs also have adopted a practice of partnership and joint venture to establish their organizations in other countries. Collaborating with other organizations has helped the Indian SMEs to learn and develop new knowledge base which can be used to improve the products and services provided by them as their core competencies to grow in the foreign markets (Javalgi & Todd, 2011).

19.3 Need for Internationalization

A large number of India-based information technology SMEs have explored new countries as their potential markets. Many different business models have come out as the result of such practices (Casadesus-Masanell & Ricart, 2010). Partnering with regional companies for entering into that market is an observed method adopted by start-ups and SMEs. Indian IT companies look for opportunities in the developed economies to expand their digital products and services (Todd & Javalgi, 2007). The international market is important for technology SMEs as it provides a large number of potential customers and possibly higher revenues (Gankema, Snuif, & Zwart, 2000). The information communication technology has eliminated the concept of distance for the development of IT-based projects. Using this advantage, SMEs can afford to open business branches in other countries with development centers in India. It has made internationalization easier as well as affordable for small- and medium-scale enterprises (Axinn & Matthyssens, 2002).

Internationalization is an advantage for transfer of capital, labor, and technology. New geography as market creates lots of opportunities to learn about the latest technology, economy, and market (Ruzzier et al., 2006). Collaborating with other companies can help to acquire new expertise which can be very helpful to strengthen organization's position. Internationalization is the process to see beyond

domestic markets. It allows the organization to understand the global trends and markets (Van Beers, Berghäll, & Poot, 2008; Shrader, 2001). SMEs can learn the latest practices to compete in the international market with greater competency and to serve a large number of potential customers from foreign markets. It also helps the organization to innovate for competition with other international organizations (Osarenkhoe, 2008).

Internationalization is an indicator of growth for small-scale business units (Schweizer, 2012). The global presence of an organization is very important for the sustainable growth. Internationalization for IT-based SMEs is very important, and it is inevitable in the competitive economic condition and globalization (Todd & Javalgi, 2007).

19.4 Challenges for Internationalization

According to Kuivalainen, Saarenketo, and Puumalainen (2012), internationalization is a practice to expand services and products into other international markets where there are a need and scope for acceptance and large user base. For SMEs, adoption of internationalization has many challenges during the entire procedure of internationalization.

19.4.1 Selection of Market

SMEs and start-ups take internationalization process as finding new customers for their services and products. Information technology products and services have an advantage that it does not require large capital funds to establish new facilities in the different markets (Oviatt & McDougall, 1994). It requires basic infrastructure which can be set up at a moderate cost in any part of the world. Selecting a new international market is the most important challenge for the SMEs. Denis and Papadopoulos suggest that international market selection should be based on a systematic approach. Root's model (1998) has emphasized on data-driven approach about estimated market size and potential customers. Selecting the right international market is also dependent on the external factors, i.e., economic policies, stability, and business environment of the target country (Blomstermo, Deo Sharma, & Sallis, 2006). Wrong market selection can cost huge to the organization, and it can affect the core business strategy (Matenge, 2011).

In a large number of the SMEs and start-ups, the decisions of selection of market are based on the 'non-systematic approach' (Agarwal & Ramaswami, 1992). 'Opportunistic' approach is adopted by the organizations considering the lesser administrative capacities for market analysis and research. Karagozoglu and Lindell (1998) found that lack of international managerial experience also affects the decision of selecting the new international markets. Globalization has helped IT-based companies for easy access to the information for new markets, but it

always needs skills and experience for selection and implementation of the new international market strategy (Singh, Garg, & Deshmukh, 2008).

19.4.2 Managing Technology Competency

Advanced technology, new product capability, and responsiveness to the market change are the key core competencies of technology-based new ventures (Bougrain & Haudeville, 2002). IT-based start-ups and SMEs with their products and services need higher responsiveness according to the market needs for successful internationalization. Internationalization of technology ventures affects the technological capability and innovations (Ferreira Ribeiro, Oliveira De Miranda, Borini, & Bernardes, 2014). It is important to adopt appropriate technological changes and strategies which can help the process of internationalization. On responsive technological changes, an organization can maximize their revenues by providing solutions to international customers (Crick & Jones, 2000). It requires an approach beyond the local markets and understanding of the global market needs.

To adopt the changes and highly responsive strategies, start-ups and SMEs do not have extra resources and excess of capital funds to invest into specialized technological advancements (Lawson, Alcock, Cooper, & Burgess, 2003). It requires a thorough understanding of the consumer needs and current business practices. Partnering with the existing companies in the international market can be an inviting step, but there should be proper business terms between both the parties which should help the organization to learn and perform with flexibility and efficiency (Spence, Manning, & Crick, 2008).

19.4.3 Strategizing for Internationalization

According to Young (1987), there are two types of internationalization strategies adopted globally. First is 'an Uppsala model firm or Traditional firms,' organizations which have a stronghold in the domestic markets and gradually moved to international markets (Forsgren, 2002). Latter is 'Born Global' organization which has designed their strategies only considering the international markets since its inception (Ruzzier et al., 2006).

At the initial stage, Uppsala model firms adopt the strategies to work in the domestic markets. Gradually with the capacity building and understanding the saturation in the domestic markets, the firm decides to explore the new international markets based on the experiences and available information (Forsgren, 2002). This approach is ideally correct, but during the implementation stage, entrepreneurs fail to redesign their business model to meet the demands of international customers. They also face challenges in adopting the new practices and introducing new

methods in their organization to meet the standards of international markets (Whitelock, 2002; Oviatt & McDougall, 1994).

'Born global' firms are focused on approaching international markets. They have an advantage over the former type (Knight, Cavusgil, & Innovation, 2004). The growth of the organization is much faster than the 'Uppsala' model firms'. The major challenge is in terms of capital funds needed during the very initial stages. To enter into the international markets, start-up is required to understand and to practice the international standards and strategies (Rasmussen & Madsen, 2002). It also requires competitive and sustainable technical capabilities for international markets. Knight (2004) explains that SMEs and start-ups have a big challenge to manage the funds to run different operations inside and outside the organizations at the initial stage. 'Born global' firms have to invest more into their different operations to meet the criteria of international markets to compete and earn the revenue (Weerawardena, Mort, Liesch, & Knight, 2007).

Designing the strategy for internationalizing is a systematic process, and it should be implemented with an integrated approach which does not affect the performance of the organization negatively. It should include time of internationalization, target markets, resource utilization, and business objectives.

19.4.4 Managing People

Organizations are made of people regardless of their size. Founders and employees play a very important role in the performance of the IT start-ups and SMEs. 'Human factor' is more important for the international organization (Manolova, Brush, Edelman, & Greene, 2002). It is essential to understand that the existing philosophy of people management in domestic markets may not work for operations in international markets (Schuler, Tarique, & Jackson, 2004; Ruzzier, Antoncic, Hisrich, & Konecnik, 2007). SMEs and start-ups must understand the differences between cultures and attributes among the people of different geographical locations (Lu & Beamish, 2001).

An international firm operates in a dynamic and complex environment due to multiple operations and a large number of stakeholders. The nature of challenges is highly variable (Schoorman, 2000). Growing firms that internationalize rely on recruiting the right kind of people who can manage and operate numerous operations and implement good international HRM practices. Having a right kind of talent, partners and appropriate HR practices have been always an ideal combination for success in international business ventures (Mueller, 1996; Ruzzier et al., 2006). SMEs and start-ups should also invest their resources in developing knowledge management processes, global organizational culture, responsive organization structure, and effective communication methods.

19.5 Innovation Management for SMEs and Start-Ups

In the developing country like India, SMEs are very important for the growth. Increasing SMEs are creating a competitive environment. In this age of competition, hi-tech enterprises have a major challenge to sustain their edge over the market. Technology life cycles and product life cycles are shortening due to cutthroat competition in the market (Tiwari & Buse, 2007). This changing market forces SMEs to adopt the new strategies and develop new technologies frequently to be in the competition (Prange & Verdier, 2011). It is essential for them to reinvent their business models according to the dynamic market needs. Varying business model is considered as inconvenient for the SMEs. Due to limited resources and experiences, SMEs could not survive in the market without innovating (Maitland, Rose, & Nicholas, 2005; Zarei, Nasser, & Tajeddin, 2011; Onetti, Zucchella, Jones, & McDougall-Covin, 2012).

Innovation for SMEs is very important as it gives them an edge over the market. Collaboration in between the departments and with other firms can help the SMEs to innovate (Narula, 2004). Expanding to different regions and partnering with international firms for resources and technology are important for SMEs' growth. Innovation in different processes provides SMEs a competitive advantage (Lee, Kelley, Lee, & Lee, 2012).

IT-based SMEs in India have created a competitive market. Due to this competition, it is inevitable for them to avoid innovation. Vanhaverbeke, Vermeersch, and De Zutter (2012) suggest two types of innovation methods: (1) technology innovation and (2) business model innovation. For technology innovation, SMEs have their in-house technology development cell. New technology becomes the competitive advantage for the firm. Business model innovation is possible to do without having in-house technology development facilities. SMEs can leverage from the external technology partners and expand their services (Jones, 1999; Giovannetti, Ricchiuti, & Velucchi, 2011).

19.6 Need for Innovation Management

Innovation is not a once in a while process. It is an approach for consistent growth of the organization to meet the dynamic market needs and competitions (Lundvall, 1988). Innovation management in IT-based SMEs is an essential part of the organization processes that improvise the traditional approach for new product development or process development (Cognizant Business Consultancy, 2012). This inspires exploratory approach and creative thinking. Firms relying on technology-based innovations tend to expand their core competencies and sustain in the market through constant innovation (Tidd, 2001; Adams, Bessant, & Phelps, 2006). Similarly, business model innovation-based organizations need to understand the market needs in 'top-bottom' and 'bottom-top' approach. It is to understand the industry insights and customer insights, respectively (Daft, 1978; Mom, Van Den Bosch, & Volberda, 2007).

Innovation management is not only constrained to research and development processes. Innovation also affects the organization's culture. To inculcate the culture of innovation inside an organization is a strategic task which is required for organizational innovation (Lundvall, 1988; Onetti et al., 2012). New age IT firms are coming up with new approaches to include innovativeness in different processes in their organizations. It also improves the readiness of the organization for new ideas and changes. Strategic and disciplined implementation of the innovative processes helps the organization to provide sustainable innovations to the market with consistency (Maitland et al., 2005).

19.7 Challenges of Innovation Management Within SMEs

Start-ups and SMEs are always caught in a dilemma. With the pressure of competition, they are required to perform consistently. Expectations of higher quality by the customers and tighter cost control strategies by SMEs make a practice of innovative processes important (Vanhaverbeke et al., 2012). At the same time, SMEs relate innovation always as associated with the risk. With the limited information about markets and resources of managerial and technical expertise, small businesses are skeptical about implementing the new ideas (Tidd, 2001; Adam et al., 2006).

19.7.1 External Challenges

Ambiguous market condition refers to high risk and uncertain outcome about the feasibility for internationalization success for new technology ventures. Moreover, while considering the high-tech environment markets, ambiguous market conditions are common due to the unexpected failures (Gassmann, 2006). There is a high uncertainty about the rejection of the new technology in the market due to many factors. The predictability of the market acceptance remains unclear. Considering the international markets, the uncertainty could be higher due to factors like consumer preferences, purchasing power, infrastructure, policy support, and adaptability (Young, 1987). Developing a technological product for the international market is strategically an important step but involves high risk. Understanding the market needs, infrastructure to launch and sustain in the market, adaptability of the target consumer, willingness to pay, and business-friendly environment are some of the prevailing challenges for the internationalization. On the market side, perception about the new technology and alternative products are always a challenge. In the case of small technology ventures, target consumers may lack information about product reliability, performance and value creation and side effects. It is also seen as a threat to the existing technology and product (Liu, Ghauri, & Zou, 2010).

19.7.2 Internal Challenges

Technology-based start-ups and SMEs have competitive markets globally. The market needs are changing due to alternative solutions and development of new breakthrough technologies (Nussbaumer, 2013). This is important for the organization to understand the changes and include competitive flexibility as their core competency. Readiness for exploratory approach and adopting new practices to replace the existing processes is important for an organization to be competent to innovate. The majority of SMEs employees and owners are found skeptical about taking new ideas and processes into implementation. It has many factors, i.e., limited funds and knowledge, limited resources to experiment, and limited infrastructure (Razavi & Attarnezhad, 2013; Nussbaumer, 2013).

Small- and medium-scale organizations are also finding it challenging to introduce change in the organization with changing markets. Innovation cannot happen in the isolation, but it is a process and collective efforts by the team of people (Kiran, Majumdar, & Kishore, 2013). Organizations do not introduce change in the organization effectively which weakens the impact of change, and it results in ambiguity among the employees. It is also observed that start-ups in India are lacking scalable knowledge management infrastructure. Knowledge management facilities are considered as the base of ideation and innovations (Johanson & Vahlne, 1977).

Due to lack of strategic approach for integrating organizational changes, start-ups and SMEs can have a low retention rate of employees as well as clients. It affects the overall performance of the organization.

19.8 Internationalization and Innovation Management

Smith (1776) proposed that international competition is very good for the nation. He quoted 'Consumption is the sole end purpose of all the production' (Smith, 1776). Internationalization of the firms is essential for the growth of the economy. It helps to expand the business into new markets and to serve a large number of consumers in different geographical locations. IT-based SMEs and start-ups in India have marked their presence in different countries of the world to get the higher number of potential customers (Welch & Luostarinen, 1988; Bhatti, 2012). Many companies have selected developed countries as their target market for internationalization. With different approaches, firms have internationalized, i.e., partnership with local firms, establishing their facilities in other countries, and importing and exporting of the services and products (Forsman, Hinttu, & Kock, 2002).

Internationalization provides start-ups and SMEs an opportunity to increase their resources by reaching to the new markets. It helps them to leverage the financial resources by serving to the new large segment of customers (Johanson & Vahlne, 2006). Internationalization also helps the organization to increase their technological competencies by partnering with the local firms. It increases the chances of

innovation. New markets and new consumers will challenge firms to innovate. Innovation in the business models and technology according to needs of new markets and customers increases company's revenues (Oviatt & McDougall, 1994; Zarei et al., 2011; Bhatti, 2012).

However, there are difficulties in the process of innovation in the internationalized firms in the transferability of the resources. Different cultures of the organizations affect the knowledge-sharing process and information flow. Lack of strategic and managerial skills affects the innovation management and internationalization. It challenges SMEs and start-ups to select either innovation or internationalization (Chelliah, Sulaiman, & Yusoff, 2010).

In the technology firms, protection of intellectual property rights is very important to maintain the competitive advantage. Internationalization of a firm can affect the protection of those rights while sharing the resources with other firms to gain the larger international markets. It can become a threat to the technological competency of the organization. Partnership terms must include the conditions for sharing and protecting intellectual property rights.

Innovation process and management are very much integral part of the organization. It requires essential resources to innovate new products and services. SMEs and start-ups who have ventured for late internationalization must redesign their strategies to maintain common organizational goals across all the facilities of the firm. All the centers of an organization should be working to achieve common business goals and objectives. The inefficient organizational communication channel can affect adversely to the performances of individual offices. It affects the development and commercialization process of innovative technologies into large markets. Human resources management is also a very important aspect which affects successful internationalization and efficient innovation management in the organization.

Hence, internationalization of the SMEs and start-ups is a huge opportunity for them to expand their market reach and to grow faster and sustainably. However, it is also a tough challenge for small- and medium-scale technology organizations to manage all the possibilities with limited available resources.

19.9 Proposed Model: Collaborative Internationalization

Figure 19.1 shows the proposed model for internationalization considering innovation management as a very important aspect. The model has focused on the international partnership for advanced technological support and approaching to the international customers. It helps SMEs to develop core technological competencies without investing large capital investment into the research facilities.

The proposed model emphasizes on developing the common facilities and shared facilities for different operations. Here, considered assumption is that the partner is an international firm in the target market. Resource planning is important in two stages: (1) product development stage, and (2) product

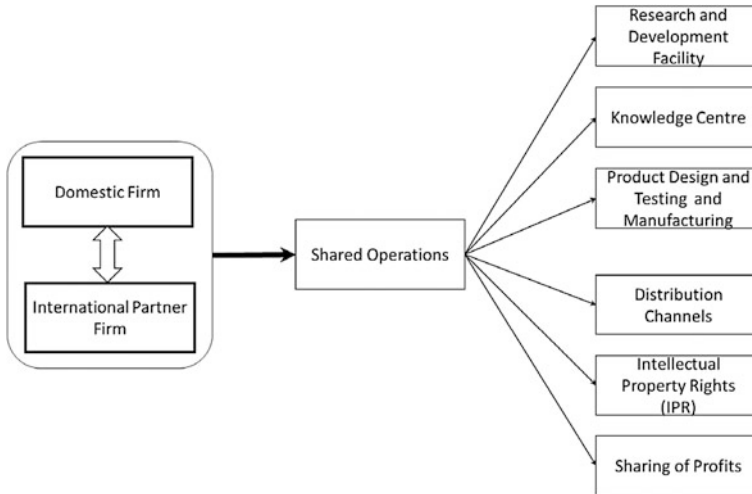


Fig. 19.1 Proposed model: collaborative internationalization

commercialization stage. The partnership between the domestic and international firms may lead to conflict in some cases. Shared common and separate facilities is a strategic decision at the early stage of partnership. It includes large investment and risk as well as provides significant time to develop the trust between the partners. The model emphasizes on common facilities for research and development unit, knowledge center unit, and product design and testing units. At the product commercialization stage, it includes shared facilities for distribution channels, shared ownership on IPR for new products, and sharing of profits accordingly. Research and development unit with the common team and infrastructure provides a platform for experts from both the firms. A shared knowledge center would be very critical for understanding different markets, technologies, factors of economics, and more. Shared knowledge center with expert personnel results in robust and innovative product development for the target market. Distribution channels, IPR, and profits are considered during the post-development stage of the product in the international market. Developing a distribution channel in the new target market for the new product can be an ideal strategic choice for the national firm. An international partner firm and its existing distribution channel can be used to launch the product. Ownership of IPR and sharing of profits are a major point of conflicts if considered as the shared and common (Bolin, 2003). Appropriate contract terms and negotiations must be in place at the initiation stage. There is an operational flow diagram of the proposed model as Fig. 19.2.

The process of internationalization and collaboration requires an adaptive culture as an antecedent. Organization culture is an important factor to inspire members of the organization to innovate (Hofstede, 1980; Von Zedtwitz & Gassman, 2002; Knight & Cavusgil, 2004; Sapienza, Autio, George, & Zahra, 2006; Harris & Crane, 2002). The model has focused more on the systematic approach to

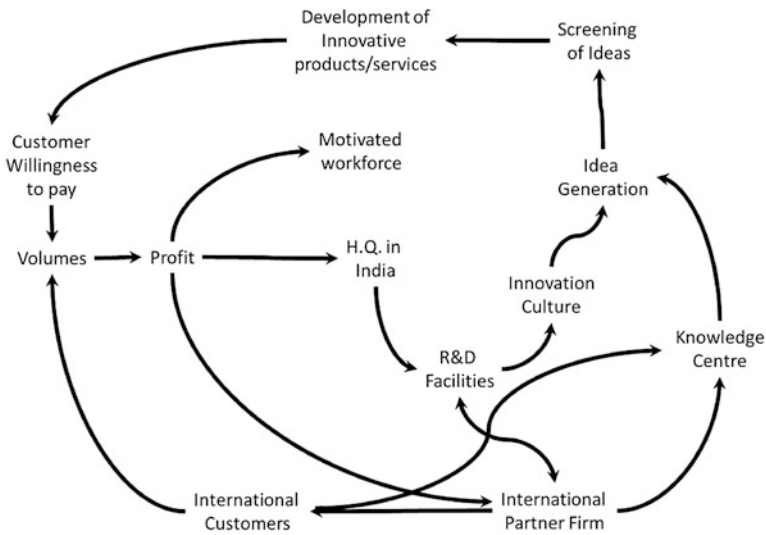


Fig. 19.2 Operation flow diagram for collaborative internationalization model

innovation, inside the firm itself. It helps the organization to protect the intellectual property right violations. It also suggests that firms should have different innovative products and services gradually in their portfolio to serve a large number of international consumers in different geographies. Such strategic expansion is possible when the partnership has been successful in the process of internationalization. Another important factor is knowledge management. As it includes various stakeholders and facilities like international customers, product development and testing units, and international partner firm; knowledge management improves the innovation outcome (Easterby & Prieto, 2008). A collaborative knowledge platform should be helpful for the new product development team during the early stage. It also helps organizations to understand the customer needs and market needs in the global market (Eriksson, Johanson, Majkgard, & Sharma, 1997; Mudambi, 2002). Sharing of resources and intellectual team members leads to the development of better understanding of diverse customer requirements and helps to select the new markets and new technology developments in the future (Lu & Beamish, 2001).

The development process of this model has considered all the possible challenges which are faced by the technology-based SMEs and start-ups. However, there are certain limitations to this model which can be understood during the implementation of the model. Let us understand different aspects of the proposed model of the SME internationalization related to innovation management and organization.

19.9.1 Adaptive Culture and Innovation

Internationalization is not only to allow a firm to enrich its sources of knowledge and profits but also it provides an opportunity to adopt new ideas, practices, and culture from the different markets. In the area of management, organizational culture is considered as a prominent structural variable. It represents the core values, ethics, practices, and orientation toward people (Kersten, Kersten, & Rakowski, 2002; Dimitratos, Petrou, Plakoyiannaki, & Johnson, 2011; Nussbaumer, 2013). According to Naranjo-Valencia, Jiménez-Jiménez, and Sanz-Valle (2011), organizational innovation is an outcome of a responsive and creative organizational culture. A culture that enables the innovative initiatives becomes the most important factor for innovation management during the stage of expansion (Claver, Llopis, Garcia, & Molina, 1998). The proposed partnership for the research and development with a common team approach provides an interactive platform among the members during the internationalization process. Partnering firms with different culture and practices face challenges related to differences with their diverse culture and environment. Challenges arise related to cultural competence with respect to practices, habits, knowledge, perception, and understanding (Lu & Beamish, 2001). With different nationalities and cultures, it is more likely to have initial conflicts in operations. Culture may be a major variable that affects the cognitive development and decision making of the managers (Nassbaumer, 2013).

Organizational learning is a process through which organizations can introduce the steps for reformation, change, and rules (Argyris & Schön, 1997). Through the process of learning initiatives, the organization creates new knowledge that contributes to sustain strategic growth and change. Such organizational knowledge enhances the process of strategy formulation for future (Lu & Beamish, 2001). Internationalization is quite an important step that includes an investment of monetary resources and people. With such high risk of partnering and developing common R&D facilities, adaptability of the culture becomes a critical factor. In the proposed model, organizational learning and capability for partnering are essential challenges. With agile learning systems and knowledge development, cultivation of innovative, responsive, and adaptive culture can be developed (Crossan & Berdro, 2003).

19.9.2 Organization Change

To sustain the organizational change, SMEs can focus on competitive capacity and human resources of the firm. According to Beer and Noor, organizations which focus on the both have been able to get good results while managing the change.

Organization change is a strategic decision in the process of internationalization. Introducing the change of business goals, policies, structures, technology, target markets, and more may affect the performance of the organization (McDougall &

Oviatt, 1996). Despite its effects, change in the technology-based organizations is constant due to highly competitive and rapid innovations in the market as well as decreasing technology life cycles. Internationalization in the technology-based SMEs includes radical technological advancements as well as the development of technology to cater the new market (Jones, 1999). Thus, the change in the existing processes is inevitable and it requires to be managed to sustain the high performance of the organization.

Marshak (2002) suggests four metaphors for change in the market: (1) fix and maintain, (2) build and develop, (3) move and relocate, and (4) liberate and re-create. The proposed model adopts the model liberate and re-create for developing a shared common product development facilities. Understanding the target market and development of innovative product or service is more advanced change. An independent platform must be compatible for the partner firms. Such challenges must be addressed during designing and introduction of the changes.

Organization change management is very important during the internationalization of technology-based SMEs. According to the new model, an international firm is associated to contribute to the performance of the company. The international partner firm has a role in supporting the research and development of new technology to expand the company's business. It has contributed to the core competencies of the organization. The task of Indian IT-based SMEs is to include the technological innovation into the business model. This process of commercialization includes many resources of the SMEs to get the sustainable growth with newly developed technology.

Technology-based SMEs are highly dependent on the quality human resources like other service organizations (Cardon & Stevens, 2004). Organizational change needs to be introduced to the people of the firm in a more strategic ways with clarity (Weick & Quinn, 1999). This change also includes the new skills developments, innovative business practices, and quality management processes with the international standards. Stages for introducing the organizational change are the following:

- (1) Define the objectives of change considering clarity about business goals and strategy
- (2) Develop a strategy aimed at innovative practices for adopting change
- (3) Design the inclusive re-engineering process for the firm
- (4) Uphold and strengthen the innovation-oriented changes for constant innovation
- (5) Monitor and reproduce the changes to maintain the flexibility of the organization

19.9.3 Organizational Redesign

Mintzberg (1979, p. 2) defines organization structure as ‘sum of total ways in which the firm divides its labor into the distinct task and achieve the coordination among them.’ The proposed model is focusing on developing a horizontal structure with lesser hierarchies into that. It improves the efficiency of introducing innovation across the organization. Working with international partner firm also requires a flexible and responsive design to accept the challenges and differences between them.

Organizational redesigning process requires the involvement of knowledge workers, large-scale resources, and commitment of the top management (Agarwal & Helfat, 2009). It is important to redesign the organization to meet the new business goals and expansion in different countries. With the internationalization in focus, top management should be supportive of introducing this change in the organization by developing appropriate training modules and job redesign modules. With the introduction of incremental strategic renewal, internationalization affects the design of the organization. It is required to consider international branch offices while designing the organizational structure and policies (Zhu, Hitt, & Tihanyi, 2006). Along with that, decision-making procedure requires a participative approach that includes partner firms in the issues related to technology research and development. Defining the roles and responsibility of the two organizations prevents many disputes and helps for effective governance (Zucchella, Palamara, & Denicolai, 2007).

19.10 Conclusion and Scope for Further Research

Indian economy has a high dependence on SMEs and start-ups as they contribute 90% of the total industrial firms in the nation. SMEs and start-ups have understood the importance of internationalization and leveraged the benefits of globalization to expand into new countries. Market expansion is a risk for small- and medium-scale organization because it utilizes its limited resources to attract the large number of potential customers (Berisha & Lama, 2013). There are challenges involved into internationalization. It requires a thorough understanding of the new markets and customer needs. IT-based organizations prefer to expand into developed economies where the product life cycle and technology life cycle are getting smaller with the competitive global environment. Hence, India-based technology SMEs must understand the importance of innovation with internationalization. Innovation management can give SMEs technological core competencies and helps organizations to succeed in the competition to expand into the diverse markets. To be an innovative organization, SMEs need to adopt a collaborative research and development and knowledge management. It is recommended that Indian SMEs should partner with international technology firms for resource sharing.

Developing the culture of innovation and open communication setup in the organization helps to increase the responsiveness of the organization. Organizational leadership should be effective and efficient to take strategic decisions for the overall growth. It increases the possibilities of successful commercialization of innovative products and services in the international market. Proposed model is developed based on the challenges by SMEs and start-ups in India based on the available literature and in-depth conversations with concerned people of SMEs and start-ups.

This research work can be taken forward to understand the proposed model with the case methodology approach. Detailed analysis of various factors affecting the internationalization process and organizational challenges would improve the process of designing effective strategies.

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