



*Edited by*  
Rajagopal · Ramesh Behl

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# Entrepreneurship and Regional Development

Analyzing Growth  
Models in Emerging  
Markets

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Rajagopal · Ramesh Behl  
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*Analyzing Growth Models in Emerging Markets*

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## PREFACE

Entrepreneurship is the principal tool for economic development at the grassroots of the society. It contributes to the socio-economic and regional industrial growth as a feeder sector across various geo-demographic and cultural segments. Thus, entrepreneurship today has emerged as the mainstay of socio-economic development, which is widely supported by public policies within the emerging economies. However, performances of micro, small, medium-, and large enterprises across destinations vary due to asymmetric entrepreneurial behavior, contextual socio-political motivation, developmental resources, extent of industrial diversity, and entrepreneurial business of product and services. Entrepreneurship today has grown beyond epistemological boundaries, and it provides contemporary and hybrid insights into *coopetition* practices within the industry. It has a reciprocal relationship with markets and entrepreneurial competence, which strengthens the coexistence of social and economic goals.

In developing economies, public policies backing regional development have impelled the enthusiasm on entrepreneurial revolution aiming at making a significant shift in the conventional industry models. The growing number of local enterprises has shown remarkable industry attractiveness and market competitiveness, and it is contributing to valuable business-specific applications. The scope of reverse innovation has connected multinational companies with local enterprises to commercialize the bottom-line innovations at the global scale. Local enterprises

have made significant contributions to global markets in the areas of information technology, digital commerce, healthcare, and utilitarian applications to enhance consumer value. Multinational companies like General Electric (Healthcare), Google (Digital Commerce), Hindustan Unilever Ltd. (Ethnic products), Procter and Gamble (Organic product), and many other consumer products and technology companies have attracted startups, and small and medium scale enterprises to leverage a win-win business paradigm spanning beyond boundaries. This bottom-up industrial revolution empowers industries irrespective of their size to adapt to the low-cost logical business frameworks. Accordingly, local enterprises have come together in an entirely hybrid way connecting regional and global industries with the competitive edge in the marketplace.

Entrepreneurship and regional development essentially converge with effective resource planning to highlight ambidextrous growth at micro and macroeconomic levels. Planning for entrepreneurial resources encompasses areas from finance to human resources, and extends further from knowledge management to transfer of technology. The social capital and government financial programs in the destination countries promote, deliver, and manage the entrepreneurial resources as regional development measures. Besides allocating appropriate financial, technological, and human resources, effective regional planning requires accurate and spatially explicit information within the framework of changing natural resource. Natural resources have high pressure of land-use patterns in urban and rural areas apart from the significance of diverse disciplines including hydrology, soil science, geology, biology, biogeochemistry, geography, and engineering ergonomics.

Society today is largely founded on the business environment, which integrates industrial values with societal values from developed to emerging market segments. Changes in the international business governance not only affect the societal and economic development of the region, but also develop new mindsets and behaviors among emerging entrepreneurs, collaborators, and stakeholders at the grassroots level. Many start-up enterprises are aiming to grow along with large industries as their ancillary suppliers to meet the Industry 4.0 challenges. Local enterprises, along with large industries, play significant role in social and economic development of the region by providing backward linkages. However, due to resource limitations and lack of adaptation to appropriate technology, they often contribute marginally to the growth of local developmental economics. The emphasis on co-creation of innovation,

and managing innovation business projects in partnership with the local companies is gradually generating technological breakthroughs, allowing emerging companies to reduce the time to bring innovative products and services to market. Entrepreneurial revolution has driven the challenge towards unifying human elements and digitization for achieving the new generation business growth and economic development in the region. Local enterprises contribute to the new trends in manufacturing, financial, management, marketing, and supply chain management, which induces drastic drift in business practices across the global and local markets. Small innovation-led firms grow as learning organizations. They become inspirational, energetic places to work, where even relationships with customers and suppliers improve. However, a more integrated view can enable companies to innovate for long-term profitability and sustainability.

Entrepreneurs tend to diversify the product line periodically to increase market competitiveness. Overtime entrepreneurs develop industry networks to develop strategic alliances. Entrepreneurs draw up business plans for new ventures to make marketing, pricing, financial, and other projections. More often, their estimates bear little relationship to reality. Planning for new enterprises differs fundamentally from planning for existing companies, given the inherent instability of start-ups. The major challenges with the start-up enterprises (SUE) in emerging markets are to explore right opportunities, co-create value, and identify suitable marketing strategies for sustainable growth. Understanding the business eco-system of SUE is essential to analyze the performance of start-ups in reference to marketing metrics. The metrics constitutes various performance indicators, which can be explained in a marketing-mix. These indicators help the SUEs in identifying the attributes of consumers, and earmarking the potential consumer segments.

Entrepreneurship and hybrid firms have evolved over the growing competitive dynamics in the regional and global markets since the mid-twentieth century. Entrepreneurial firms in emerging markets are engaged in diversified business projects to drive high performance, collaborate with large firms, and gain competitive advantage in the market. Entrepreneurship over the years has developed to manage multiple business projects growing from start-up enterprises to large companies. The micro enterprises are growing rapidly as new growth models and local markets are encouraging smart enterprises. Enterprise modeling in reference to innovation and technology constitute the core focus of enterprise management today, irrespective of its organizational size, investment, and revenue.

The new trends in enterprise modeling constitute high cost implications in digitization, computing systems, and risk management.

Software contribution, services application, and cloud computing are in high demand for managing effective business growth through continuous innovation. In addition, performance evaluation, measurement and manufacturing optimization, critical to quality, and voice of customers form a major part of new business modeling process. Small and medium enterprises are promoted in an integrated way by the local authorities in developing countries. The government support for these enterprises range from land allocation to building the industry infrastructure. Land-use planning for micro, small, and medium sector industries, and facilities planning and management. With the growth of technology, the enterprise analytics system has moved from conventional wisdom to decision-making tools. Automation in manufacturing systems, and new marketing-mix tools used in the small and medium enterprises. Management of logistics and inventory systems have shifted to Internet-based monitoring domains using the radio frequency identification technology, as the technology-oriented enterprise management has turned cost-effective since the early twenty-first century.

This book discusses innovation audit as a control tool for start-up enterprises. Innovation auditing is a well-established practice used by managers to identify strengths and weaknesses in innovation, and to explore new opportunities. Innovation audit in the companies needs to be conducted following the contemporary trends that exhibit market and consumer behaviors towards the innovative products and services. Innovations led by the trends tend to transform the market and consumers' landscape. These trends include shifts from closed to transparent and open models of innovation (openness), shifts from providing only physical products to industrial product-services combination (servitization), and moving from conventional manufacturing and marketing paradigms to industry 4.0 business philosophy (automation).

This edited volume aims at delivering an anthology of articles on entrepreneurship development and raising rich discussion on symbiotic themes of entrepreneurship, resource planning, and regional development and their impact on global-local business imperatives. Discussions in this volume critically analyzes the convergence of entrepreneurship, innovation, technology, business practices, public policies, political ideologies, and consumer values for improving the global-local business paradigm to support regional development. The anthology of selected



papers in this volume also enriches knowledge and skills on contemporary entrepreneurship models, convergence business strategies towards entrepreneurial and industrial alliance in manufacturing, services, and marketing organizations. This book contemplates on developing new business models and hybrid entrepreneurial perspectives to match with the changing priorities of regional economic development in the developing countries. Discussions across the chapters in this volume envisage developing new entrepreneurial visions and business perspectives to match with the changing priorities of industries in the emerging markets. Interestingly, this volume has an exclusive section on case studies, which manifests the ground reality of entrepreneurs in developing economies.

This book is divided into six sections consisting of entrepreneurial development including economics and management, enterprise modeling with innovation and technology, socio-economic and cultural perspectives, global business, entrepreneurial education and organizational behavior, and case studies on entrepreneurship. These sections comprise conceptual and empirical research articles and case studies across the geo-demographic segments of emerging markets. In all, twenty-one Chapters covering India, Mexico, Philippines, and Africa are included in this volume. This book delineates multiple effects of entrepreneurial finance, capabilities and competencies, innovation and technology, the global-local business imperatives, on the entrepreneurial economics and business. The anthology of articles in this book critically analyzes the convergence of entrepreneurial behavior, economics, education, business practices, public policies, and customer values to improve entrepreneurial performance at the global-local paradigm. This edited volume includes broad themes on entrepreneurship, resource planning, and regional development, which will enrich knowledge and skills on economic development. The discussions contemplate on developing new visions and business perspectives to match with the changing priorities of entrepreneurship and enterprises in the emerging markets.

Principal audience of this book are managers, researchers, and students of business economics, business strategy, product development, innovation management, and international trade. The book covers varied studies on entrepreneurship management, economic effects of small enterprises,

and regional development across technology driven farm and non-farm economic sectors. Hence, this book would serve as a guide and think tank for the researchers, management students, entrepreneurs, policy makers, and corporate managers.

Mexico City, Mexico  
Bhubaneswar, India  
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Rajagopal  
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PART I

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Entrepreneurial Development, Economics,  
and Management



# Entrepreneurship, Education, and Economics: A Helix Effect on Business Growth

*Rajagopal*

## INTRODUCTION

Educational programs for entrepreneurs of micro, small, and medium size enterprises (MSMEs) disseminate knowledge and skills for the existing businesses. This chapter aims to contribute to the effect of macroeconomic factors comprising innovation, technology, cost factors, and public policies on entrepreneurial promotion. The functional aspects of enterprises such as market competitiveness, design-to-market business modeling, and socio-economic wellbeing of small entrepreneurs in developing economies have been critically examined in this chapter. In particular, the double and triple helix effects concerning the business performance of the small enterprises have been discussed in the context of strategic alliances, innovation, technology, public policies, and the role of entrepreneurial education. Discussion in the chapter analyzes how these

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components related to MSMEs are being structured to improve their business performance and drive them competitive in the regional or global marketplace.

## ENTREPRENEURSHIP EDUCATION

Entrepreneurship education has emerged as a new area of teaching and research in view of its applied significance and contributions in expediting the socio-economic wellbeing. It is characterized by interactive learning within business and community initiatives, which builds a sense of convergence of industry and market with entrepreneurship education. Therefore, it is largely an experience-based learning approach (Boon et al. 2013). Entrepreneurship in individuals evolves cognitively with the personal abilities to turn ideas into action and build a contextual business model. It is a pool of practice-led knowledge, innovation, and business vision among the entrepreneurs, which they either inherit or learn among social interactions. Entrepreneurs are innovative, and they take the initiative and risks, to plan and manage business projects to achieve predetermined goals. Entrepreneurial competencies are learnt regardless of their current position in business or their professional prospects. Entrepreneurship education helps in enhancing their competencies and capabilities (Strauti et al. 2018). Diffusion of entrepreneurial knowledge promoted through public-private management training modules and social interactions, which is being governed by public policies in the developing countries. Despite the popularity of applied education, the modes of imparting applied education to the entrepreneurs still need to be fully understood within the society. The nature and ability of entrepreneurship education needs a crowd-based diffusion model with a distinctive goal to transform society (Turner and Gianiodis 2018). The design cube explores applied education for entrepreneurship promotion in the context of design-to-market, design-to-society thinking, and design-to-value. Such effort requires substantial investments in entrepreneurship education in terms of money, time, and effort by the public and private organizations, besides the governmental programs. New pedagogies have emerged on digital and workshop-based teaching platforms, which are shifting the entrepreneurial learning from conventional modes to market-oriented domains (Longva and Foss 2018).

Most small and medium enterprises (SME) serve as feeder industries and play key role in the value chain of the large companies. Thus,



these enterprises establish industry connection and seek support on entrepreneurship education through experience-based learning approach. The experience-linked entrepreneurial education drives organizational change with increasing usage of social media (Chawinga 2017). The taxonomy of entrepreneurship education categorically explains causal and effectuation approaches. The causal approach is related to economic plans and strategies as it focuses on entrepreneurial education models that affect business growth and performance. The effectuation approach comprises entrepreneurial experiences that have grown through the uncertain business environments. However, in both the approaches of entrepreneurial education, the underlying challenge is the systematic diffusion and learning of entrepreneurial models (Ilonen and Heinonen 2018). The pedagogic approaches are designed to deliver mixed knowledge on refining entrepreneurship in tune to Industry 4.0 revolution and develop market-oriented approaches based on practical entrepreneurial needs. Working along the automation trend and following digital marketing practices are the most dominating problems for SME entrepreneurs for the survival and growth of their businesses (Amjad et al. 2020). The failure of SME entrepreneurs not only diminishes their business growth, but also damages the initiatives taken by the governments and private institutions for entrepreneurship development as a socio-economic goal (Ogbari et al. 2019).

Most SME entrepreneurs develop design-to-market strategies in view of the lessons learned from market competition and their experience in managing niche market strategies. The design-to-market strategies over time become a common practice as entrepreneurial marketing. Accordingly, entrepreneurs follow bottom-up approach by choosing the target market or segment in the beginning, and later explore the needs and demands of their targeted segment through personal relations to serve them efficiently (Stokes 2000). The entrepreneurial marketing approach involves cost-effective activities by avoiding formal market research or involving mass promotions strategies to promote business. However, entrepreneurs of small and medium business segment significantly depend on their personal networks to collect information about consumers and the market. These entrepreneurs heavily use consumer psychodynamics and the interpersonal communication such as word-of-mouth to promote their products and services (Copley 2013). The social facet of entrepreneurship education has closer proximity to innovation diffusion and business modeling than the formal teaching pedagogy or regulatory

education to entrepreneurs. Though regulatory and social environment resources are external to entrepreneurship education, they can be purposely integrated and aligned with the entrepreneurial touchpoints to expand and enhance customers' journeys, customer experience, and marketability of their products or services in the emerging markets (Homburg et al. 2017).

The growing body of research on entrepreneurship education has revealed that the practice-oriented education to entrepreneurs is focused today on service quality, customer relationship management, customer centricity, and customer engagement (Jiang et al. 2018). Some researchers also suggest that education may even influence individuals' dispositions by signaling social acceptability or desirability of entrepreneurship activities. Entrepreneurship-friendly learning policies and government funding opportunities to promote entrepreneurship education are integrated into the design-to-market practices in the emerging markets. In addition, regulatory policies are linked to the creation of applied atmosphere for entrepreneurs. The institutional theory and the entrepreneurial action model suggest that the outcomes of entrepreneurship education help in building multilevel applications encompassing finance, operations, ad marketing. Therefore, entrepreneurship education has stronger relationships with entrepreneurial activities (Walter and Block 2016).

## MACROECONOMIC MOVES AND SHIFTS IN BUSINESS MODELS

Among many macroeconomic factors and public governance of local enterprises in combination with other factors makes significant impact on the performance of enterprises. In general, government policies in emerging markets support micro, small, and medium enterprises. However, the informal economy mostly lowers entrepreneurship productivity. As governments in countries with large informal economies attempt to promote native enterprises, constraining informal business activities causes potential effects on entrepreneurship productivity (Bruton et al. 2012). Opportunity-led entrepreneurship grows in the region as entrepreneurs look for alternate work options, but still decide to pursue a government promoted business opportunity that offers economic benefits such as capital and infrastructure subsidies, and tax advantages. It is a key construct in understanding the entrepreneurial abilities in a country better as compared to the necessity driven entrepreneurship (Acs et al. 2008).

Global marketplace equipped with the application of global communications has become the focus of the global business arena that enables the world markets to remain open and involve in the fair competitive practices. Global marketplace provides scope for opportunity-based entrepreneurship, which contributes to social, economic, and environmental qualities of economic development. The public policies to promote micro, small, and medium enterprises moderate the relationship between the opportunity-based entrepreneurship and the quality of socio-economic development. The resource-based view and public governance perspectives augment the scope of market-oriented entrepreneurship development (Dimitratos et al. 2016). Efficient multinational companies from the leading countries enter the secured country markets and drain out the regional players from the benefit market segments (Rajagopal 2007). Market competition in the global markets has not only entailed the economic process and free markets in relation to developing the local enterprises, but it also envelops the economic and ecological concerns, corporate power, social rights and needs, and economic wellbeing of marginal and small firms. Such complexity also embraces the social, political, and cultural dimensions of doing business beyond boundaries in the globalization process. Thus, entrepreneurship amidst growing market competition has a complex dynamics of business evolution within the social, economic, and technological diffusion on the interpersonal and digital platforms (Brinkman and Brinkman 2002).

Micro, small, and medium enterprises (MSME) in the global environment require competitive skills to market their products with niche business model in the initial stages, and to restructure business policies later as the market evolves for the enterprises. The phenomenon of the global customer is growing in importance every day, and so is the global-customer-centric organization. Going global is an easy process for firms. Firms need to simulate the impact of their business in global market in reference to their resources, target markets, and operational efficiency. Most firms concentrate on product markets considering the customers, who seek benefits or to be served with the same products, services, innovation and technology regardless of the geo-demographic differences and cognitive behavior. There are a number of paradoxes in communicating the product-marketing strategies in global marketplace. It is imperative to enhance market competitiveness of micro, small, and medium enterprises, which requires enabling innovation and technology with adequate finance

and institutional structures including human capital. Continuous innovation helps these enterprises stay competitive and transform into an agent of reverse globalization. MSMEs must embrace global changes in cultural norms so that they can develop market competitiveness in reference to quality, price, and services to survive and find a place for themselves in the global competitive environment (Anand 2015).

Global markets not only provide multiple goods and services to the customers but also expose their behavior to the cross-cultural differences and innovations. Specialization of the production process has also caused such cultural changes by business penetrations in the low production skills regions across countries. Most small enterprises have succeeded in developing up-stream markets in organic apparel from Asian countries like India, Bangladesh, Indonesia, and Korea. The growth of consumer concern on sustainability and technology has developed dynamic synchronization with the industry today and is converging fast, leading to quick adaptations of local products in global markets. The globalization of customer requirements is resulting from the identification of worldwide customer segments of homogeneous preferences across the territorial boundaries. Business-to-consumers and Business-to-business markets are powered by the consumer demands from the global companies, as they are perceived more value oriented and of added benefits. Innovation and technology played a pivotal role in opening the global avenues for the regional firms.

Incubation of innovations has emerged as a new model of start-up facilitation in most developing economies. Venture capitalists review the incubators and assess the projected growth and profitability in businesses to invest. The venture capitalists review the incubators to diversify risky investment portfolios, while the prospecting entrepreneurs approach the incubators to review the economically viable and technologically feasible support for start-up projects. Entrepreneurial incubators face both challenges and the opportunities to grow competitive enterprises considering the embedded investment and entrepreneurial risks. Broadly, there are five incubator archetypes such as the university incubator, the independent commercial incubator, the regional business incubator, the company-internal incubator, and the virtual incubator (Carayannis and von Zedtwitz 2005). Innovations of local origin are attracted to the global companies as they plan to bring back the local innovation, which is largely frugal in nature, to the mass-market. Therefore, the relational embeddedness of large companies with the external MSMEs appears to be essential

for the evolution of local innovations to the global scale. Turning local innovations into global brands can be identified as innovativeness evoked by the large companies or their subsidiaries at the bottom-of-the-pyramid. However, in this process, transfer of reverse knowledge in the functional areas is a critical perspective (Isaac et al. 2019).

Most studies reveal that the relationship between innovation efficiency and size of the firm play significant role in improving market performance and exploring the prevailing and new market opportunities. Marketing and product innovation strategies are the key contributors to market performance, while the competitiveness has become an indispensable factor for the MSMEs to survive the marketplace rivalry (Blocker et al. 2011). In an open market competition, firms of different types and sizes use upfront marketing strategies and tactics to pull down the competing firms. Such competition forces small firms to struggle for existence against relatively large firms, while large firms strengthen their marketing strategies to sustain the competition and stay fittest in the competitive marketplace. However, large firms at the early maturity stage of their business attempt to consolidate their product-line to stay abreast with market competition and develop product portfolio in tune to the market demand. In order to gain a suitable competitive position in the marketplace, firms pump enormous resources in innovation, technology, advertisement, communication, and sales activities. The low returns on investment builds sunk cost over time.

There are many differences between large firms and MSMEs, which include leadership, autonomy, fragility, ownership, resource limitations, and decision-making processes. Consequently, these enterprises have a high rate of failure. The lack of leadership, resistance to change, and informal planning processes are the primary reasons for the failure of MSMEs. Such organizational attributes drive these enterprises to seeking various ways to improve their performance and gain competitive advantage through innovation, increased productivity, and marketing. In a limited way, MSMEs invest in carrying out innovations to gain a competitive advantage in the marketplace and improve market performance (Aksoy 2017).

In an oligopolistic market competition, there are only a few firms that make up an industry. This select group of firms has control over the price; and like a monopoly, an oligopoly has high barriers to entry. The products that the oligopolistic firms produce are often nearly identical; therefore, the companies competing for market share are interdependent

as a result of market forces. One of the consequences of the growing imperfect competition in the global marketplace is that consumer value and marketing of the firm for products and services are no longer necessarily created through the traditional strategy of vertical integration. Most start-up enterprises and MSMEs tend to develop relationship marketing by sharing consumer experiences to enhance customer values and attract new customers. Experiential marketing has become a part of corporate marketing strategy, which is being adopted by the MSMEs at the bottom-of-the-pyramid alike large companies. Experiential marketing is defined as a process of identifying and satisfying customer needs and aspirations profitably, by engaging them through bidirectional communications to validate brand personalities for social values and lifestyle among the target customers. Feeling, utilitarian or hedonic cognition, and perceived experience include emotions attached to a brand that express happiness, satisfaction, joy, etc. Most MSMEs within the niche stimulate creative involvement with costumers and build top-of-the-mind brand to match with the self-image congruence of customers. Brands communicate with them to build unique perceptual experience (Navratilova and Milichovsky 2015). Firms are increasingly specializing to build competencies and form alliances to augment the value chain and increase their market share. Most large firms are engaged in production sharing to reduce their costs and are successfully using outsourcing of manufacturing from MSMEs (Walters and Rainbird 2004).

## COMPETITIVE INTELLIGENCE

Competitive intelligence (CI) contributes to the learning process, which is embedded in the web-based entrepreneurial business models, of a growing firm. The contemporary research has revealed that information collection techniques with reference to business analytics toward backward and forward linking elements of a business influence the performance of a company. Progressive entrepreneurs reveal positive impact of web-based competitive intelligence, which is embedded in the business models to gain higher business performance within industry (Markovich et al. 2019).

Competitive intelligence is the information available to the competitors for free access to the public resources, which is periodically updated to present the current contents and potential strategic information.

Emerging enterprises can benefit from the spatial and temporal analysis of the CI information to develop appropriate market segments and marketing strategies. CI is common in services industry. However, many companies do not use formal and centralized information analysis in daily operations. In the customer-centric enterprises, the frontline employees might play critical roles in the CI processes and practices. There is no formal system for CI process management followed by MSMEs, which includes data collection, storage, analysis, and dissemination (Köseoglu et al. 2019). The information acquired by the competitors through public sources serves as an important input in formulating marketing strategy. A firm must be aware of the perspectives of its competitors before deciding which competitive moves to make. In order to acquire required information on the competitors, firms must develop an internal fit with its employees, market players, and stakeholders. Managers of the firm should determine information needs and should take the management of the firm to prepare for driving competitive intelligence.

Social media has emerged as an important channel to disseminate user-generated contents and experience-based CI. Recent research studies suggest that social media is an influential channel to share customer-centric information, enhance sales performance, and learn about competitor moves focused on customers. However, its use alone does not guarantee the quality of decision analytics and its role in effective decision-making. In tactical moves, the use of social media affects performance of salespeople through analysis of competitive intelligence information and customer-centric selling (Itani et al. 2017). Increasingly, business-to-business and customer-centric marketing companies are adding social media as a powerful communication channel to the traditional marketing- and promotion-mix tools. Social media can be technically defined as a group of web-based applications that is built on the ideological and technological foundations within the virtual business maxims that allow the creation and exchange of user-generated content and market information. Social media disseminates information interlinking social and professional networking sites, social blogs, micro-blogging, and podcasts (Kaplan and Haenlein 2010). The competitive intelligence includes information beyond industry statistics and trade gossip. It involves close observation of competitors to learn what they do best and why and where they are weak. There are three types of competitive intelligence-defensive, passive, and offensive. The defensive intelligence is the information gathered, analyzed, and used to avoid being caught off-balance. In this process,

a deliberate attempt is made by the competing firm to gather information on the prevailing competition in a structured fashion and to keep track of moves of the rivals that are relevant to the firm's business. The passive intelligence is the temporary information gathered for a specific decision.

Most enterprises rely on competitive intelligence and business analytics for developing appropriate strategies for risk management and toward building base for decision support. A large numbers of customer-generated product reviews often contain information about competitors, and have become a new source of mining competitive intelligence. Based on such information, MSMEs learn the relative weaknesses and strengths of their own products, and design competitive products and campaigns to countervail those of competitors (Xu et al. 2011). Most firms in the global marketplace tend to adopt a more focused business strategy and focus on realizing how the effect of interplay between premium and low-cost rivals on achieving market share and profit can be minimized. Companies today must learn how to take on low-cost competitors in the large consumer segments, develop inimitable market tools, develop organizational leadership, and build sustainable customer (Ryans 2010). Comparison of customer opinions are precious information sources for the enterprises to identify the relative strengths and weaknesses of their products and services. The enterprise risk and threats of competitors need to be analyzed by the small and medium enterprises to develop design-to-market business strategies for their products and services. Mining such comparative opinions need qualitative analysis due to the large amount of customer reviews and their informal style of opinion documentation (Xu et al. 2011).

## COST-BASED DECISIONS

Conventional MSMEs in developing countries search for businesses with low labor costs and availability of high volume of workers to effectively reduce costs and maximize their returns on investment. Such business philosophy forces these enterprises to develop their short-run business models to implement at lower costs and satisfy consumer demands, remain competitive, and retain profitability. This appears to be highly challenging, and for many MSMEs it is impossible to achieve such goals and change traditional production methods to a new manufacturing model that improves production efficiency, decreases labor costs, and solves the environmental issues (Tsai and Jhong 2019).



Industries with high fixed costs tend to be more competitive because competing firms are forced to cut prices to be able to operate at the economies of scale. However, with the differentiation strategy, rivalry is reduced among the products and services offered by the competitors, in both real and perceived senses. Another significant concept, which can be explained through this model, is the associated difficulty of exit from an industry, which may result into struggle for survival and intensified competition among the firms. Further, there remains the threat of entry by new firms into the industry, which may enhance competition. Several barriers, however, make it difficult to enter an industry. Two cost-related entry barriers are: economies of scale, and absolute cost advantage. The absolute cost advantage remains with the long-standing firms in the market, which possess technological and brand advantages for their products and services. The activity-based costing (ABC) approach has been adopted by many large industries such as aviation, metal manufacturing, and construction, as it helps companies to directly calculate the various costs and resources instead of using a single factor as the basis of financial proposition (Tsai et al. 2017). The convergence of ABC and the theory of constraint (TOC) could be learned by the managers adequately to find solutions for long-range problems concerning management costs and short-range problems for resource constraints to decrease operational costs effectively. The combined application of ABC and TOC measures the costs of related activities with a holistic approach of resources that are used in manufacturing and marketing of products at MSMEs. This method also is helpful in cost administration by cost centers or departments within the company (Park and Simpson 2008).

Most competing companies control their costs to the lower end-user prices and stay competitive in the marketplace. MSMEs fail to catch-up with the customer with large enterprises, as they do not operate on the economy of scale. Small enterprises widely function as demand-led-suppliers rather than working on the supply-led business model. Consequently, these enterprises often fail to control time-cost effects on consumer pricing and substitution effect. With time-cost substitutability, a potential competitor in the market gains advantage in customer acquisition and sales against the small enterprises (Wang and Hu 2017). Most MSMEs have high experimental intensity with high cost and relatively lower rate of success of products and services in the market. These enterprises, therefore, suffer from lower cost advantage, which usually drives down the new product's quality and first-mover advantage (Time element in cost).

### *Industry Attractiveness*

New entrants, substitution effects, and bargaining power of customers and suppliers within an industry broadly portrays the attributes of industry attractiveness. Substitute products in the market adversely affect the industry potential, and pose threat to the customer preferences. Bargaining power of buyers refers to the direct or indirect pressure tactics to force the industry to reduce prices, or increase product features, in view to optimize the customer value. Buyers gain power when they have choices-when their needs can be met by a substitute product or by the same product offered by another supplier. In addition, high buyer concentration, the threat of backward integration, and low switching costs add to buyer power. Similarly, the bargaining power of suppliers refers to their ability to force the industry to accept higher margins or reduced services, in the interest of augmenting or securing their profits. The factors influencing supplier power are the same as that of buyer power. In this case, however, industry members act as buyers.

Firms, which simultaneously engage in a high degree of both innovation and efficiency, follow an ambidextrous strategy by adopting both exploitative and explorative strategies in the innovation process. However, few firms are able to balance between these two emphases despite internal conflicts for resources, and external risks over innovation and its economies of scale. Though the ambidextrous strategy in nurturing the product or service innovation is complex for most of the firms, the turbulent nature and intense competition of today's markets reinforce the need for firms to consider this dual approach for longer-term success (Sarkees and Hulland 2008). An innovation breakthrough in firms can deliver a strong advantage to the overall posture of the company in the marketplace and drive a major shift in industry leadership. However, not all companies show the ability to foster management innovation due to lack of generating unique ideas. A management innovation creates long-lasting advantage if it is based on a novel principle that challenges the traditional wisdom, is systemic in processes and methods, and is supported by a program of the company to carry out innovation (Hamel 2006).

### THE HELIX EFFECT

Broadly, the shift from conventional- to new-generation organizational structure and business modeling can be delineated as the helix effect in business. The core of the helix lies in disaggregating the traditional

management hierarchy into two separate, parallel lines of accountability-equal in power and authority, but philosophically holding a new perspective. Successfully adopting the helix requires a transformational leadership, customer-centric business philosophy, and co-designing business models. The convergence of the shifts in management mind-sets and a talent infrastructure lays the foundation of helix, which emerges out of entrepreneurship education and bottom-up business economy that many businesses do not currently possess (Smet et al. 2019). Most companies in the emerging markets are transforming their global value chains and planning to coevolve domestic enterprises with advanced economy multinational enterprises (AMNE) as a helix effect. Strategies like enhancing the capability and competence; investment in internal research and development; and globalization through strategic alliances, and mergers and acquisitions push local enterprises toward helix effect. These enterprises not only succeed in local markets over time, but can also build global value chains. The helix effect is visible to the companies as vertical partnerships with large firms while horizontal collaborations with local network are jointly orchestrated (Saranga et al. 2019). Figure 1.1 exhibits the helix effect in small businesses.

Commonly, two types of helix, double helix and triple helix, are observed in the development of small enterprises as exhibited in Fig. 1.1. The co-evolution of small firms with large business organization through developing strategic alliances on production, technology, distribution, or finance can be explained as double helix. Convergence of technology, entrepreneurship education, and public policies including the skill development programs and financial incentive to promote small entrepreneurs are the active elements in the entrepreneurial helix process. Exploring new opportunities; right decision-making in business; and developing a design-to-market strategy by building alliances with large companies have been the major focus of double helix approach of the small enterprises. In addition, the MSMEs also seek the patronage of large companies to lower the cost-risk ratio and augment profit. The success of double helix approach needs a transformational leadership at both business organizations to help in redesigning organization, creating value chain, developing global standards, investing in business process improvement, and strengthening the backward and forward business linkages. The co-evolution of small and big companies enhance investment on innovation, technology, and research and development. Such mergers or acquisitions in the double helix approach help companies strengthen their marketing

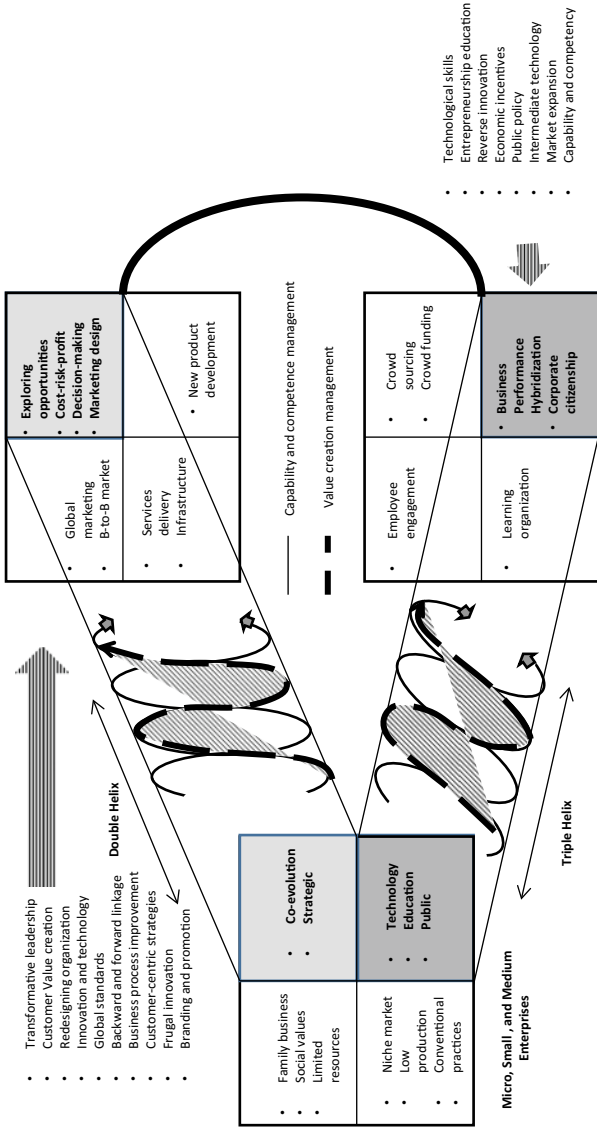


Fig. 1.1 Attributes of the felix effect in small business management

strategies by developing customer-centric branding and promotion strategies. The convergence of technology, entrepreneurship education, and public policies on entrepreneurship development programs promote hybridization, business performance, and corporate citizenship behavior ambidextrously between small and large enterprises. These factors are associated with the triple helix business-development concept as shown in Fig. 1.1.

The helix concept has been managed discretely in MSMEs as some enterprises serve as feeder companies to the large industries. It is often challenging for the small companies to adapt to a structural business model over the traditional family-based organizational structure. Relatively larger companies also tend to replace complex matrix structures, and redesign organizations and their decision-making processes. The helix effect helps the enterprises move ahead quickly to exploit new market opportunities. In the helix process, the transformative leadership drives the value-creation and augments objectives, discusses business priorities, and improves performance against the goals and targets. The clear distinction of enterprise management and leadership helps in constructing the helix with agile structures (Smet et al. 2019). However, organizational and business transformations in small companies are more challenging as compared to the large corporations due to *command and culture* disintegration. Moreover, the complex nature of the transformational necessitates in an organization often increases its overhead costs and administration process. Therefore, MSMEs prefer to operate through their established business route instead of following the change to explore new markets (Horn et al. 2010).

### *Double Helix*

Small firms operating in niche markets often face the problems of conventional manufacturing process, obsolete technologies, capital limitation, and lack of updated knowledge. These attributes drive firms to compromise with the product quality and stay non-competitive in the regional or global markets. Such business confinement needs small firms in emerging markets to coevolve with large firms and catch-up with them to improve the manufacturing and marketing processes, and improve productivity rather than engaging in frugal innovations for niche markets (Awate et al. 2015). Small firms in emerging economies often face the challenge to break the *glass ceiling* to explore market competitiveness with the

frugal innovation strategies, and develop tactical marketing approaches to override close business rivals. MSMEs often fail in establishing the regional or global value chains and enhancing their business performance (McDermott and Corredoira 2010). However, Chinese small and medium enterprises have co-evolved as local to global firms over time by establishing mutually beneficial arrangements. These positive outcomes demonstrate the double helix effect in business through carefully orchestrated market reforms. In a large industrial segment of automobile manufacturers of India, the double helix effect has been clearly visible. Many domestic auto-manufacturing companies including Tata Motors, Mahindra & Mahindra, TVS Group, and Bharat Forge have developed international strategic alliances with auto manufacturers and survived the transition in their business (Saranga et al. 2019). Most of these local auto-manufacturing companies have achieved market competitiveness in global markets. Broadly, China and India have survived the transition to open markets and have co-evolved as big-emerging markets amidst the business space of many developing markets.

The business transformation process for MSMEs appears to be a difficult proposition due to the limitation of resources and lack of leadership drive. As this process continues, business leaders, along with the public policy implementers, begin to approach global standards of manufacturing, marketing, and services. However, in any industry, there are a few laggards, who remain moored in the old ways, although most domestic firms tend to make some progress and exhibit new business opportunities (Kumaraswamy et al. 2012). These firms develop sophisticated backward and forward networks using technology-led supply and retailing operations. Transformation of business model of small companies include technology-driven customer services with focus on reducing the tangible and intangible cost to customer, provide convenience, lower conflicts, and disseminate effective communications (4Cs). The helix effect is an integration of business operations of small and large firms encompassing strategic alliances and processes improvements, and adapting to customer-centric management with a view to explore new markets and achieve competitiveness in existing marketing (Jonnalagedda and Saranga 2017). The forward helix concept indicates that the local companies with standardization aiming to develop alliances with external companies to reach global markets. The reverse helix interprets the association of international companies with local firms to explore reverse innovations at a global scale. With the support of public policies and economic incentives to promote

local firms in the emerging markets like China, India, and Brazil have upgraded their process technologies and manufacturing capabilities for developing alliances with large companies. The small enterprises adopt latest production and management technique to improve their business performance.

### *Triple Helix*

Alike double helix, the triangulated factors in business cause triple helix effect. The theory of triple helix postulates that factors comprising entrepreneurship education, industry, and government are critical to converge technological skills, entrepreneurship education, and public policies to improve the business performance. The advanced management techniques moderate the triple helix to drive the business performance of small companies. In this helix, innovation and knowledge play critical role to connect the local firms to a wider marketplace (Philips 2014). The key features of the triple helix model in the context of business include tri-lateral networks and hybrid organizations converging technology, entrepreneurship education, and public policies. These triadic factors dynamically act across the competitive marketplace and consistently stimulate innovation, bringing in new technologies, new business avenues, or new types of business relationships with a sustained and systemic effort (Etzkowitz 2003).

Entrepreneurial education provides scope for exploring innovative ideas, which contribute in developing new markets and enhancing business performance. The technology space in the triple helix helps entrepreneurs and government institutions to draw relevant players from different organizational sizes, destinations, and various levels of business performance. The purpose of this helix is to formulate new strategies and ideas to achieve out-of-the-niche business performance. An innovation space emerges as combined outcome of the triadic factors of triple helix (Kim and Lee 2016). The triple helix system focuses on promoting innovation through homegrown (intermediate) technology, entrepreneurship education and support of public policies. The triadic factors promote frugal innovations among the small enterprises, while this system has been most frequently used as a technological incubator. The triple helix model and its indicators have been used to stimulate social innovations to improve the attributes of corporate citizenship and carry out the need-based corporate social responsibility (Cajaliba-Santana 2014).

## CONCLUSION

The new pedagogies of entrepreneurship education are aimed at improving competencies and capabilities of MSMEs through digital and workshop-based teaching platforms. The new education system helps entrepreneurs in shifting the entrepreneurial learning from conventional modes to market-oriented domains that categorically explains causal and effectuation approaches. These pedagogic approaches are designed to deliver knowledge that is compatible with Industry 4.0 revolution and reorient them toward market-oriented approaches based on practical entrepreneurial needs. The entrepreneurial marketing approach involves cost-effective activities with the underlying objective of business expansion and augmentation of profit. In addition, many macro-economic factors, such as public governance of local enterprises also show significant impact on the business performance of these enterprises. Opportunity-led entrepreneurship is also growing in the emerging markets as entrepreneurs choose alternate work options to add value to the entrepreneurial performance. Broadly, the global marketplace provides scope for opportunity-based entrepreneurship, which contributes to social, economic, and environmental quality of economic development. Most small enterprises have succeeded in developing up-stream markets in organic apparel from Asian countries like India, Bangladesh, Indonesia, and Korea. Incubation of innovations has emerged as a new model of start-up facilitation in most developing economies. Innovations of local origin enterprises have significantly attracted the global companies as they plan to bring back the local innovation, which is largely frugal in nature, to the mass-market. Most start-up enterprises and MSMEs tend to develop relationship marketing by sharing consumer experiences to enhance customer values and attract new customers.

The competitive intelligence includes information beyond industry statistics and trade gossip. Most enterprises rely on competitive intelligence and business analytics to develop appropriate strategies for risk management and building base for decision support. The activity-based costing (ABC) approach has been adopted by many large industries, such as aviation, manufacturing, and construction, as it helps companies to directly calculate various costs and resources instead of using a single factor as the basis of financial proposition.

Most MSMEs have high experimental intensity with high cost and relatively lower rate of success of products and services in the market.



Broadly, the shift from conventional to new-generation organizational structure and business modeling can be delineated as the helix effect in business. The core of the helix lies in disaggregating the traditional management hierarchy into two separate, parallel lines of accountability-equal in power and authority, but philosophically holding a new perspective. It is often challenging for the small companies to adapt to a structural business model over the traditional family-based organizational structure. Such business confinement needs small firms in emerging markets to co-evolve with large firms and catch-up with them to improve the manufacturing and marketing processes, and the productivity rather than engaging in frugal innovations for niche markets. In the large industrial segment of automobile manufacturers of India, the double helix effect has been clearly visible. These firms develop sophisticated backward and forward networks using technology-led supply and retailing operations. The triangulated factors in business cause triple helix effect. The theory of triple helix postulates that factors comprising entrepreneurship education, industry, and government are critical to converge technological skills, entrepreneurship education, and public policies to improve the business performance.

Entrepreneurial education provides scope for exploring innovative ideas, which contribute in developing new markets and enhance business performance.

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# Significance of Microfinance in Entrepreneurship Development: A Study of South Rajasthan

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## INTRODUCTION

Robinson (2001) defines microfinance as small-scale financial services primarily credit and savings-provided to people who farm, fish or herd and adds that it refer to all types of financial services provided to low-income households and enterprises. Microfinance refers to the provision of financial services, including small business loans, to lower-income clients, generally in poor communities, with the aim of supporting economic development through the growth of entrepreneurial activity (Bruton et al. 2011; Khavul et al. 2013).

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India is one of the fast-growing economies of the world. Though the other fact is, India still have large population below poverty line. The main reason behind this is the inequality between the rich and poor. If each section of society receive the benefit of economic growth then only equal and inclusive development can be possible. Generally, the poor and illiterate segment of our society is left out and remains unattended from growth process, as they are not aware of how to get benefit of economic growth. They are not aware about financial system, financial instruments, they do not have collateral securities and even they do not know how to reach the banks and funding agencies. For holistic economic development of the nation it is needed that both rural and urban population should have equal opportunities and benefits of the different schemes and facilities provided by the government. In the recent years, microfinance has come up as a very effective development tool of social development as it provides funds and covers a large population. It is a small-scale financial service that provides credit for self-employment, savings, and technical assistance to the poor persons. It includes variety of financial services like microcredit, microsavings, and microinsurance. Microfinance provides small amount and covers a large population.

In this research paper, an attempt is made to explore the role of microfinance in promoting entrepreneurship in South Rajasthan. The target population for this research is microfinance beneficiaries from South Rajasthan. The questionnaire is used to collect the information from the respondents. To explore the role of microfinance to promote entrepreneurship in South Rajasthan. The respondents experience related to microfinance facilities, role of financial institution providing microfinance, amount of microcredit, knowledge about microfinance initiatives of government, duration of microcredit, repayment schedules, etc., are collected through the questionnaire from South Rajasthan. Data is analyzed by using R programming to generate descriptive statistics, correlation, and regression analyzes. This research provides interesting insights about the significance of microfinance to promote entrepreneurship in South Rajasthan. The study will help the policymakers to analyze the existing microfinance initiative and find the ways to make them more useful and effective.

## ENTREPRENEURSHIP

Gartner (1988) defines “Entrepreneurship as the creation of organizations. What differentiates entrepreneurs from non-entrepreneurs is that entrepreneurs create organizations, while non-entrepreneurs do not.” Josef Schumpeter (1949), the Austrian economist, associated entrepreneurship with innovation. Drucker wrote in *Innovation and Entrepreneurship* (1986). “It’s not magic; it’s not mysterious; and it has nothing to do with genes. It’s a discipline and, like any discipline, it can be learned.” Drucker argued that entrepreneurship extends to all types of organizations. Ozigbo (2014) says that “entrepreneurship can be viewed as the formation of a new firm that uses innovation to enter existing markets” (or to create new ones) and “grow by making the new demand while taking market share away from existing suppliers” (Stefanović et al. 2011). On the other hand, Collins et al. (2004) define “an entrepreneur is someone who independently owns and actively manages a small business.” An entrepreneur is someone who introduces new ideas and improves enterprise growth. Dragan and Grigore (2015) also focuses on sizing the entrepreneurial resource for those who represent certain example of successful individuals who manage, through determining the levels of their inventive—creative and confidence dimension, as well as the attitude toward risk, taking and acceptance of change.

(Lahimer et al. 2013), Further differentiates entrepreneurship into two (i) necessity entrepreneurship and (ii) opportunity entrepreneurship, where necessity entrepreneurship provides resources for, survival and subsistence production. While opportunity entrepreneurship focuses on market needs and gaps, which can be exploited to produce financial gains.

## RELATIONSHIP BETWEEN MICROFINANCE AND ENTREPRENEURSHIP

The Government of India is making constant efforts for upliftment of marginalized rural masses with the help of financial inclusion. Microfinancing plays a significant role in Entrepreneurship Development. The motive of Indian Government is to overcome the problem of unemployment. Hence, entrepreneurship development with the microfinance provides a chance to dynamic persons with their excellent ideas to be pursued in their ownership and simultaneously providing employment to other persons.

Both microfinance and entrepreneurship development programs are supporting Government of India for the betterment of the living standards of citizens by providing them entrepreneurial opportunities and financial assistance through microfinance so that they not only live their life with dignity but also they will become the creator of new jobs. Hence, we can say that microfinance and entrepreneurship development are closely related to each other. Microfinance is important as it brings the unattended rural masses in the mainstream of social-economic development; similarly, entrepreneurship is important for development, poverty eradication, and employment generation, which leads to uniform growth of the nation. A number of studies have been carried out on the impact of microfinance on entrepreneurial development and to establish linkage between them.

Microfinance service offers not only the microcredit but also the allied services such as consulting and training for the microenterprises as well as market information and access to wider market which is very often not in reach of micro-entrepreneurs due to their lack of knowledge and bureaucratic hurdles. Since the last decade, the role of microfinance has received significant attention, from both policymakers as well as academicians (Bartual Sanfeliu et al. 2013; Hermes and Lensink 2007). Amin et al. (2003) examine the ability of microfinance to reach the poor and vulnerable. They concluded that the microfinance is serving people slightly below or above the line of poverty, though the really poor and deprived are being systematically excluded. In the other hand, Copestake et al. (2010) analyze the impact of microfinance on firms and individual wellbeing. Copestake et al. (2010) emphasis on business performance and household income to establish a linkage between the accessibility of microfinance and overall welfare of the poor. Ryne and Holt (2000) provide a meta-analysis of microfinance and emphasis on women empowerment. Park (2001) evaluates the actual microfinance programs in China using three key measures (targeting, sustainability and overall impact).

Chatterjee et al. (2018) found that group-based financial services to microenterprises empower women borrowers and translate into economic upliftment. On the other hand, Morduch (1998) argues that microcredit has only minimal impact on poverty reduction because it rather supports borrowers to create basic incomes instead of driving fundamental economic shifts. One reason for these contradicting results could be the indicators that are used to measure impacts because they are influenced by the view of the respective analyst (Duvendack and Maclean



2015). Only few researches provide sufficient justification for the link between microfinance and entrepreneurial development in developing countries. Besides, the empirical evidence emerging from different studies about the role of microfinance to provide entrepreneurship has extracted mixed results that are unconvincing and inconclusive. Thus, the question of whether microfinance improves or worsens entrepreneurship is still worthy of further research. In addition, the impact of microfinance on entrepreneurial development has not received adequate research attention in developing countries. This means that there is a major gap in the relevant literature on developing countries including India, which has to be covered by this research study. This research attempts to fill this gap by studying the situation in India and providing more empirical evidence on the effects of microfinance to provide entrepreneurship.

Today, with over 45 million end clients with a loan outstanding of over US\$15.38 billion across the private JLG (Joint Liability Group) and the public SHG (Self Help Group) programs, employing over 120,000 people across 10,000 branches in 28 states of India, it is a key force for financial inclusion in the country. However, this level of progress is still lower than 25% of the demand across India and indicates the potential for growth (*Economic Times*). Collins (2009) attested that microfinance could be defined as a development tool that grants or provides financial services and products such as very small loans, savings, micro leasing, microinsurance, and money transfer to assist the very or exceptionally poor in expanding or establishing their businesses. Copestake and Williams (2011), stated that “micro financial services include the provision of a much bigger range of financial services such as deposits, loans, payment services, money transfers and insurance products to the poor and low-income households, for their microenterprises and small businesses, to enable them to raise their income levels and improve their living standards.” Alabi et al. (2007) said that the term microfinance refers to the provision of financial services to low-income households and micro-entrepreneurs (both urban and rural) for productive purposes.” In the idea of productivity, Microfinance can be defined from the social community perspective as Schreiner and Colombet (2001), defines microfinance from the unbanked perspective as “the attempt to improve access to small deposits and small loans for poor households neglected by commercial or formal banks.” Finscope Swaziland (2011) said that to facilitate the development and sustainability of the microfinance sector in the country. The objectives of the unit are to facilitate the provision of efficient and effective financial services for

enabling and enhanced environment for business development in rural areas.

## BENEFITS OF MICROFINANCE IN SOCIO-ECONOMIC DEVELOPMENT

The Microfinance works at ground level by providing financial inclusion through banks and SHG Bank linkage programs; it works with no collateral security on loans and provides the service of microsaving that makes MFI's to make banking activities easily accessible. Loans are easily available to the individuals or the groups to start the business. MFI's also help in growth and development of business which results into increase in employment opportunities. It also addresses one of the major problem in rural India that is taking the loans from indigenous money lenders on a very high rates and eventually losing all their wealth in repayment of loans and sometime losing their live by suicidal attempts in case of increased burden of non- repayment of loans. Microfinancing provides loans for agriculture, business growth, and development covering their loans, making the owner independent with entrepreneurial earnings, and hence providing easy and fast financial development. It also helps in skill development. Entrepreneurship enhancing their leadership skills and the entrepreneurs open new businesses, which leads to new employment opportunities. As production increases the development, exhibits increase in standard of living. Consequently, a positive impact on per capita income and henceforth social and economic development takes place.

## OBJECTIVES OF THE STUDY

The objective of this study is to examine the impact of microfinance bank on entrepreneurship development in South Rajasthan.

- i. To examine the role of microfinance in entrepreneurship development in South Rajasthan.
- ii. To examine the relationship between microcredit, microsavings, microinsurance, business support, skills development programs, and entrepreneurship using microfinance services in South Rajasthan.

## HYPOTHESIS

The following null hypotheses were constructed and tested.

Hypothesis 01: There is a significant relationship between microcredit and entrepreneurial development in using microfinance services in South Rajasthan.

Hypothesis 02: There is a significant relationship between microsavings and entrepreneurial development using microfinance services in South Rajasthan.

Hypothesis 03: There is a significant relationship between microinsurance and entrepreneurship using microfinance services in South Rajasthan.

Hypothesis 04: There is a significant relationship between skills development and entrepreneurship using microfinance services in South Rajasthan.

Hypothesis 05: There is a significant relationship between business support and entrepreneurship using microfinance services in South Rajasthan.

Hypothesis 06: There is a significant relationship between toolkits and capacity building and entrepreneurship using microfinance services in South Rajasthan.

## RESEARCH METHODOLOGY

The area of research is confined to South Rajasthan. In South Rajasthan the area of study is chosen as Udaipur district which comprises seven sub-divisions: Girwa, Kherwada, Mavli, Vallabhnagar, Kotda, Jhadol, and Salumber. These sub-divisions are further divided into 11 tehsils. Girwa sub-division consists of two tehsils: Girwa and Gogunda. Kherwada sub-division also comprises two tehsils: Kherwada and Rishabhdev. Each of the sub-divisions, Mavli, Vallabhnagar, Kotda, and Jhadol comprises only one tehsil of same name. Salumber sub-division comprises three tehsils (counties)- Lasadia, Salumber, and Sarada. For research study, 30 respondents were selected from each sub-division the total number of respondents were 210. These respondents were beneficiaries of microfinance services and engaged in their own business like artisans, retailers, manufacturers at small scale, producers of agricultural and related products, etc.

The non-probability sampling technique is used for data collection. Primary data is collected with the help of structured questionnaire and interview of the respondents. Secondary data is collected from related websites, government reports, newspapers, and magazines. The collected data is analyzed by the descriptive analysis for which mean, median, mode, skewness, kurtosis, standard deviation, maximum, minimum, and proportion. Pearson correlation coefficient is used to test correlation among the dependent and independent variable, to test the autocorrelation among the variables Durbin Watson test was conducted and it was found that the variables are in significant range, i.e.,  $-1.5$  to  $+1.5$  after that multiple regression analysis was conducted.

## VARIABLES FOR RESEARCH

Dependent variable is entrepreneurship development and independent variables are microcredit, microsavings, microinsurance, skill development, business assistance, toolkits, and capacity building. With the help of structured questionnaire the data is collected from the respondents and the questions were judged on the basis of five point scale which have strongly agreed, agreed, neutral, disagreed and strongly disagreed attributes which ranges from  $+2$ ,  $+1$ ,  $0$ ,  $-1$ , and  $-2$ , respectively.

### *Dependent Variable*

*Entrepreneurship Development:* Judged on the basis of the questions like increase in assets of business, family income, turnover of the business, number of buyers, and loan repayment capacity.

### *Independent Variables*

*Microcredit:* Judged on the basis of the questions loan amount is sufficient, interest is reasonable, repayment schedule is appropriate and sufficient and the loan repayment is easy.

*Microsavings:* Judged on the basis of the questions like the saving products are good, saving procedure is customer friendly, rates of interest on saving products are reasonable, withdrawal and loan facility on savings are customer friendly.

*Microinsurance:* The questions were asked to the respondents like the premium is reasonable, the claim is settled promptly, insurance benefits are appropriate and variety of policies are available as per the requirement.

*Skill development:* The questions which were asked to the respondents were skills development programs are useful in running my business, duration and frequency of skills development programs are enough, are these programs are useful in improving the earning capacity and are these programs are useful in improving living standard.

*Business assistance:* The questions, which were asked to the respondents, were business assistance for marketing provided or not, assistance for product improvement was sufficient, assistance for operating the enterprise was useful, knowledge given to improve product is sufficient and knowledge given on marketing is sufficient.

*Toolkits and Capacity Building:* The questions which were asked to the respondents were business whether toolkits are provided along with trainings, capacity building trainings are conducted or not. Leadership training was useful, training related to behavioral aspects was sufficient.

## SPECIFICATION OF THE MODELS

The following multiple-regression model has been used to test the theoretical relation between the Entrepreneurship development and other independent variables.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Y = ED = Entrepreneurship Development.

X<sub>1</sub> = MC = Microcredit

X<sub>2</sub> = MS = Microsavings

X<sub>3</sub> = MI = MicroInsurance

X<sub>4</sub> = SD = Skill development

X<sub>5</sub> = BS = Business Assistance

In the above equation  $\varepsilon$  is the error term.

The descriptive statistics of the dataset used for analysis in the study is presented in Table 2.1.

Pearson correlation analysis establishes relationship between the independent variables and the one dependent variable as illustrated in Table 2.2. Correlation analyzes provide an early sign that there is significant positive correlation between all the independent variable and

**Table 2.1** Descriptive statistics

	<i>ED</i>	<i>MC</i>	<i>MS</i>	<i>MI</i>	<i>SD</i>	<i>BS</i>	<i>TC</i>
Mean	167.14	155.86	144.57	135.57	152.00	156.86	145.60
Standard Error	3.65	4.52	3.40	4.29	3.30	1.88	2.32
Standard Deviation	9.65	11.96	9.00	11.36	8.72	4.98	4.56
Skewness	-0.72	-0.77	-0.37	-1.79	1.15	1.68	2.10
Range	30.00	33.00	24.00	33.00	23.00	15.00	17.00
Minimum	150.00	135.00	132.00	112.00	145.00	152.00	143.00
Maximum	180.00	168.00	156.00	145.00	168.00	167.00	164.00
Sum	1170.00	1091.00	1012.00	949.00	1064.00	1098.00	1023.00
Count	210.00	210.00	210.00	210.00	210.00	210.00	210.00
Confidence Level (95.0%)	8.93	11.07	8.32	10.50	8.06	4.61	3.21

*Source* Author's computation

**Table 2.2** Correlation matrix

	<i>ED</i>	<i>MC</i>	<i>MS</i>	<i>MI</i>	<i>SD</i>	<i>BS</i>	<i>TC</i>
ED	1.000						
MC	0.885	1.000					
MS	0.397	0.513	1.000				
MI	0.108	0.308	0.215	1.000			
SD	0.862	0.302	0.289	0.328	1.000		
BA	0.787	0.332	0.366	0.152	0.495	1.000	
TC	0.684	0.323	0.361	0.142	0.568	0.781	1.000

*Source* Author's computation

*Notes* ED-entrepreneurship development, MC-microcredit, MS-micro-savings, MI-micro-insurance, SD-skill development, BS-business assistance and TC-toolkits and capacity building

dependent variable except Microinsurance which is  $r = 0.108$ . There is also correlation between the independent variable microsavings and microcredit which is  $r = 0.513$ , there is positive correlation between independent variable skill development and business assistance which is  $r = 0.495$ , toolkits and capacity building and skill development as  $r = 0.568$ , toolkit and capacity building and business support  $r = 0.781$ . The analysis also shows that there is significant correlation between several independent indicating possible multicollinearity problem.

Regression Analysis presented in Table 2.3 observes that from h the R square value is 0.632. It means that 62.3% of the dependent variable ED, i.e., entrepreneurship development is explained by independent variables. When we analyze The results of analysis of variance (ANOVA) as exhibited in Table 2.4 reveals that F statistics is 5.730, which is highly significant at 0.004. Hence, as the p-value is less, 0.05, there can be a linear regression relationship between the dependent (represented by ED) and independent variables. It is also observed from the regression analysis in Table 2.5 that MI ratio has a  $p$ -value of 0.061 and the corresponding,  $t$ -value of 0.698, MS has a  $p$ -value of 0.081 and the corresponding,  $t$ -value of 0.293. It signifies that these particular variables are not important in the model. While MC i.e. microcredit ( $p$ -value of 0.052 and the corresponding  $t$ -value of .0940), skill development ( $p$ -value of 0.040 and the corresponding  $t$ -value of .505), business assistance ( $p$ -value of 0.052 and the corresponding  $t$ -value of  $-0.594$ ) are in significant range which signifies entrepreneurship development in rural India.

**Table 2.3** Regression coefficients

<i>Regression statistics</i>	
Multiple R	0.365
R <sup>2</sup>	0.632
Adjusted R <sup>2</sup>	0.590
Standard Error	0.006
Observations	210.000

*Source* Author's creation based on the data analysis results

**Table 2.4** ANOVA results

<i>Parameters</i>	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression		520.714	104.143	5.730	0.004
Residual	1	38.143	38.143		
Total	210	558.857			

*Source* Author's creation based on the data analysis results

**Table 2.5** Parameters and probabilities

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	65.270	216.093	0.302	0.081
MC	0.137	1.467	0.940	0.052
MS	0.356	1.215	0.293	0.081
MI	0.709	1.017	0.698	0.061
SD	0.521	1.031	0.505	0.040
BA	-0.933	1.570	-0.594	0.052

*Source* Author's creation based on the data analysis results

## TESTING OF HYPOTHESES

The null hypotheses framed earlier have been accepted or rejected as illustrated in the following text:

Hypothesis 01: There is a significant relationship between microcredit and entrepreneurial development in using microfinance services in South Rajasthan. (H01 is accepted as there is significant relation between microcredit and entrepreneurial development)

Hypothesis 02: There is a significant relationship between microsavings and entrepreneurial development using microfinance services in South Rajasthan. (H02 is accepted as there is significant relation between microcredit and entrepreneurial development)

Hypothesis 03: There is a significant relationship between microinsurance and entrepreneurship using microfinance services in South Rajasthan. (H03 is accepted as there is significant relation between microinsurance and entrepreneurial development)

Hypothesis 04: There is a significant relationship between skills development and entrepreneurship using microfinance services in South Rajasthan. (H04 is accepted as there is significant relation between skill development and entrepreneurial development)

Hypothesis 05: There is a significant relationship between business support and entrepreneurship using microfinance services in South Rajasthan. (H05 is accepted as there is significant relation between business support and entrepreneurial development)

Hypothesis 06: There is a significant relationship between toolkits and capacity building and entrepreneurship using microfinance services in South Rajasthan. (H06 is accepted as there is significant relation between business support and entrepreneurial development)



## DISCUSSION AND CONCLUSIONS

This study examine the significance of microfinance in entrepreneurship development in South Rajasthan. It has been found that microfinance implementation tools- microcredit, microsavings, skill development, business assistance have the significant relationship with entrepreneurship development. The Microfinance works at ground level by providing financial assistance, it works with no collateral security on loans and provides skill development assistance to the marginalized rural masses. The loans are easily available to the individuals or the groups to start the business, which leads to new employment opportunities, which address the unemployment problem, it also leads to improvement in standard of living and positive impact on per capita income, overall society and economic development takes place. Finally, financial assistance through microfinance leads to entrepreneurship development so that marginalized rural mass will become the part of mainstream of development.

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# Testing the Indirect Effects on Entrepreneurial Orientation and Enterprise Performance

*Subhasish Das and Manit Mishra*

## INTRODUCTION

The research on entrepreneurial orientation (EO) dates back to 1960. The Aston group carried out the first study on this concept. However, the results were not very clear. Then, the first and true EO study was conducted by Miller in 1983 and was about the company's business activities. First, he defined a business organization as one that has a proactive nature, innovation and risk-taking. EO is the proactive, innovative, and risky decisions (Merz and Sauber 1995; Covin and Wales 2011). EO is a concept that covers important decisions made throughout the organization (Lumpkin and Dess 1996; Covin and Wales 2011). Entrepreneurs must have managers with business styles and innovative strategies (Miller and Friesen 1982 p. 1; Covin and Wales 2011). Subsequent studies

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also show a positive relationship of EO with the company's performance (Pugh et al. 1963, p. 291; Covin and Wales 2011).

It is always extremely necessary to control the EO of any company. Miller, Covin, and Slevin design a scale to measure EO on a corporate scale, Covin and Slevin (1989). The review of the literature reveals that there have been several studies to measure EO in companies, but there are no studies to measure EO in educational or technical institutions. Therefore, this study attempts to measure the effect of EO on EP in microenterprises in one of the states of Odisha, Rayagada with the help of the Miller, Covin and Slevin scale (1989). This study will seek to strengthen the literature on EO and the applicability of the Miller, Covin and Slevin scale (1989), while examining the applicability of the scale in technical institutions. EO is "a managerial temperament in the search for new possibilities through which it is possible to achieve remarkable growth" (Covin and Wales 2011; Mintzberg 1973). It is a panache of business management linked to risky and aggressive decision-making (Covin and Wales 2011; Khandwalla 1976/1977). The first studies of Mintzberg and Khandwalla proposed EO as a managerial temperament to make a decision and this is considered a basis for the rest of the studies.

The main objective of the study is to understand the mediation effect of the entrepreneurial intention of employees on the relationship between entrepreneurial orientation (EO) and enterprise performance (EP). The study first investigates the relationship between EO and EP, secondly, it tries to test the indirect or mediation effect of entrepreneurial intention of employees. The results of the study are based on the responses of 391 employees of selected microenterprises in southern Odisha, collected through a self-administered questionnaire. The study provides empirical evidence on the positive influence of EO on EP and the study finds a significant mediation effect of employee's entrepreneurial intention on the relationship between EO and EP. Extant literature shows that there are few studies that establish the relationship between EO and EP, but none of them clearly explain how and when EO affects EP. In addition, previous studies have focused on large and small and medium-sized enterprises, but studies on microenterprises are very limited. Therefore, this study has selected the microenterprise sector to fill the literature gap.

## LITERATURE REVIEW

Many studies have revealed the holistic nature of EO and concluded that it is a phenomenon at the corporate level (Covin and Slevin 1989; Covin and Wales 2011; Lumpkin and Dess 1996; Miller and Friesen 1982). The study by Miller and Friesen (1982) linked EO for the first time with a series of organizational behaviors such as innovation, proactivity and risk-taking. Covin and Slevin (1989) proposed innovation, proactivity, and risk appetite as scales to measure EO (Slevin and Tarjesen 2011). Miller believes that these three dimensions must match to state that EO or EO is a shared variation of these dimensions. The study conducted by Lumpkin and Dess (1996) defines EO as the practices, processes, and activities that lead to a new entry. New entry indicates a new activity or new products or services in the existing business. Autonomy and competitive aggressiveness may be measures of EO, but subsequent studies have confirmed that competitive aggression is part of the proactive dimension and autonomy is part of the organizational climate (Hough and Scheepers 2008; Chang and Lin 2011). Therefore, the Miller (1983) scale is the undisputed and most accepted scale for the measurement of EO. The study by Taatila and Down (2012) measured EO in university students graduated in Finland and concluded that business desires among academic programs may differ, but EO results do not.

Business-oriented companies (SO) are defined as those dedicated to technological innovation, risk-taking and proactive research of opportunities (Miller and Friesen 1982). EO refers to processes, practices, and decision-making activities that lead to new voices (Lumpkin and Dess 1996). EO is a level of corporate phenomenon that demonstrates the processes, practices, and decision-making activities that will lead the company to become a leader in new entry activities. From a behavioral point of view, Covin and Slevin (1989) showed the conceptual model of EO based on business activity, which includes innovation, proactivity and risk-taking. Business-oriented organizations will improve EO behavior in innovative ways, be available in risk-taking activities and always look for new products through proactive behavior to take advantage of market opportunities (Covin and Slevin 1989; Wiklund and Shepherd 2005). Based on the above explanation, we can illustrate that companies must be consistently innovative, proactive, and aware of the risk of being labeled entrepreneurs.

Performance is a measure of the level of success of a company to achieve its objective. The level of success can be seen in the financial, marketing, operational, and human resources results. Good performance may increase the prosperity of stakeholders. Business performance is also related to the performance of several functional units that work well in a company. We recommend using a growth approach to measure business performance, since small businesses are generally not transparent and difficult to interpret. The appropriate business performance measures have not been agreed. Several studies have explained different dimensions in measuring business performance. For example, Wiklund and Shepherd (2005); described that the corporate performance indicator is sales growth, while Abdullah and Beal (2003) suggested that performance can be seen from profit-earning capacity. Performance capacity should not be measured only with a single indicator (for example, financial indicator), but also includes indicators of growth, profit efficiency, and market share.

Covin and Wales (2011) explored the concept of EO, the challenges and decision criteria of formative and reflective measurement approaches and concluded that EO as a “latent construct exists beyond its measures and that researchers are free to choose which approach or measurement scales (unidimensional or multidimensional) suitable for your research purpose.” Kusa (2016) measured the EO in the social context and concluded that the EO can be measured with the help of existing scales, but there should be a change in competitive aggressiveness and in the dimension of autonomy. Therefore, this study chooses the scale of Covin and Wales (2011) to measure OE, since it is widely accepted and indisputable compared to other scales.

The measure of the study is the well-defined scale of Covin and Wales (2011), that is, innovation, pro-activeness, and risk-taking. The responses were obtained from a five-point Likert scale.

## RESEARCH METHODOLOGY

### *Sampling and Hypotheses*

This is a descriptive study and is based on primary data. The respondents of the study are the employees or owners of the micro-retail stores. In all information from 391 respondents have been collected for analysis in this study. The hypotheses of the study have been constructed as detailed below:

- $H_1$ : Innovativeness positively affects Enterprise performance  
 $H_2$ : Pro-activeness positively affects Enterprise performance  
 $H_3$ : Risk-taking positively affects Enterprise performance  
 $H_4$ : Entrepreneurial intention moderates the above relationships

### *Data Analysis and Interpretation*

SEM is used to establish structural relationships between latent constructs. SEM consists of measurement and structural model.

#### *Measurement Model*

The measurement model includes CFA (Confirmatory factor analysis) (Teo 2011) and it is useful in understanding the extent to which measured variables represent the constructs (Hair et al. 2010). To have a good model fit the value of the root mean square of approximation (RMSEA) should be less than 0.08 and the values of goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI) and comparative fit index (CFI) all should be more than 0.9. The ratio between chi square ( $\chi^2$ ) and degrees of freedom (df) that means  $\chi^2/df$  should be less than 2.5 (Gerpott et al. 2001; Homburg and Baumgartner 1995). The measurement model of the study is exhibited in Fig. 3.1.

The Table 3.1 shows that, all the values of fit indices are within the threshold values. It ensures a good model fit and allows for the structural analysis (Teo 2011).

## ANALYSIS AND FINDINGS

### *Construct Validity*

Construct validity can be checked with the help of convergent validity and discriminant validity. Table 3.2 shows that all the values of CR and AVE for the items are above 0.7 i.e. a strong convergent validity. And AVE's are greater than MSV for all constructs which ensures discriminant validity. Therefore the measurement model shows good construct validity.

### *Structural Model*

Table 3.3 shows that, all the values of fit indices are within the threshold values. Therefore, the structural model is also showing a good model fit (Teo 2011). The structural model used for data analysis is exhibited in Fig. 3.2.



**Table 3.1**

Measurement model summary

<i>Fit indices</i>	<i>Obtained value</i>	<i>Threshold value</i>
<i>P-Value</i>	0.00	>0.05
<i>CMIN/DF</i>	2.692	1 < CMIN/DF < 5
<i>GFI</i>	0.923	>0.9
<i>AGFI</i>	0.902	>0.9
<i>NFI</i>	0.923	>0.9
<i>CFI</i>	0.939	>0.9
<i>RMSEA</i>	0.056	<0.08
<i>SRMR</i>	0.049	<0.05

*Source* Author’s creation based on the data analysis results

*Note* *P-Value*: Probability value; *CMIN/DF*: Chi-square minimum/Degrees of freedom; *GFI*: Goodness-of-fit index; *AGFI*: Adjusted goodness-of-fit index; *NFI*: Normed-fit-index; *CFI*: Comparative-fit-index; *TLI*: Tucker-Lewis-index; *RMSEA*: Root mean square error of approximation; *SRMR*: Standardized root mean square residual

**Table 3.2** Construct validity

<i>Constructs</i>	<i>CR</i>	<i>AVE</i>	<i>MSV</i>
Enterprise performance	0.943	0.845	0.803
Innovativeness	0.882	0.882	0.469
Proactiveness	0.889	0.730	0.052
Risk-taking	0.942	0.844	0.247
Entrepreneurial Intention	0.969	0.886	0.803

*Source* Author’s creation based on the data analysis results

*Note* The Goodness of Fit indices are as explained in Table 3.1

**Table 3.3** Structural model Summary

<i>Fit indices</i>	<i>Obtained value</i>	<i>Threshold value</i>
<i>P-Value</i>	0.002	>0.05
<i>CMIN/DF</i>	1.692	1 < CMIN/DF < 5
<i>GFI</i>	0.959	>0.9
<i>AGFI</i>	0.933	>0.9
<i>NFI</i>	0.974	>0.9
<i>CFI</i>	0.989	>0.9
<i>TLI</i>	0.985	>0.9
<i>RMSEA</i>	0.049	<0.08
<i>SRMR</i>	0.031	<0.05

*Source* Author’s creation based on the data analysis results

*Note* The Goodness of Fit indices are as explained in Table 3.1

## REGRESSION WEIGHTS

Table 3.4 shows that Innovativeness, Pro-activeness, and Risk-taking all positively affect enterprise performance. It can also be seen that innovativeness has the highest influence on enterprise performance with a beta weight of 0.567, followed by risk-taking by 0.185 and pro-activeness with 0.077.

### *Testing Mediation*

Mediation is tested by introducing entrepreneurial intention as a mediator in the relationship between innovativeness, pro-activeness and risk-taking and enterprise performance. The testing model is exhibited in Fig. 3.3.

### *Mediation of Entrepreneurial Intention (Bootstrapping Results)*

Table 3.5 confirms mediation of entrepreneurial intention on the relationship between innovativeness, pro-activeness and risk-taking; and enterprise performance. It can also be seen that after introducing entrepreneurial intention as a mediator the direct relationship between innovativeness, pro-activeness and risk-taking; and enterprise performance, which was significant earlier (Table 3.4) has become insignificant. It confirms full mediation of entrepreneurial intention on the relationship between innovativeness, pro-activeness, and risk-taking; and enterprise performance (Baron and Kenny 1986).

**Table 3.4** Estimates for regression weight

<i>Relationships</i>	<i>Weight</i>	<i>P-value</i>	<i>Significance</i>
Enterprise performance ← Innovativeness	0.567	0.000	Significant at $p = 0.000$
Enterprise performance ← Proactiveness	0.077	0.012	Significant at $p < 0.05$
Enterprise performance ← Risk taking	0.185	0.000	Significant at $p = 0.000$

*Source* Author's creation based on the data analysis results

*Note* The Goodness of Fit indices are as explained in Table 3.1

**Table 3.5** Mediation of entrepreneurial intention

<i>Total Effects</i>	<i>Risktaking</i>	<i>Proactiveness</i>	<i>Innovativeness</i>
Entrepreneurial Intention	0.33	0.168	0.644
Enterprise performance	0.187	0.083	0.568
<b>Two Tailed Significance (At 95 Per Cent Confidence Interval)</b>			
Entrepreneurial Intention	0.001	0.012	0.001
Enterprise performance	0.001	0.113	0.001
<b>Direct Effects</b>			
Collaboration	Risktaking	Proactiveness	Innovativeness
Entrepreneurial Intention	0.33	0.168	0.644
Enterprise performance	-0.016	-0.02	0.173
<b>Two Tailed Significance (At 95 Per Cent Confidence Interval)</b>			
Entrepreneurial Intention	0.001	0.012	0.001
Enterprise performance	0.662	0.54	0.001
<b>Indirect Effects</b>			
	Risktaking	Proactiveness	Innovativeness
Entrepreneurial Intention	0	0	0
Enterprise performance	0.202	0.103	0.395
<b>Two Tailed Significance (At 95 Per Cent Confidence Interval)</b>			
Entrepreneurial Intention	...	...	...
Enterprise performance	0.001	0.013	0.001

Source Author’s creation based on the data analysis results

### CONCLUSION

The study reveals that the entrepreneurial orientation has a positive effect on enterprise performance. Innovativeness has the highest influence followed by risk-taking and Pro-activeness. Therefore, H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> are accepted. The study also reveals that there exists a full mediation effect of entrepreneurial intention on EO and EP. Entrepreneurial

intention completely mediates the relationship between EO and EP. Hence, H4 is accepted. The primary purpose of the study was to understand the effect of EO on EP and the mediating role of EI. The study concludes that entrepreneurial characteristics such as innovativeness, pro-activeness, and risk-taking significantly influence enterprise performance and entrepreneurial intention mediates the same relation. Put in another way EO such innovativeness, pro-activeness and risk-taking influences entrepreneurial intention and entrepreneurial intention influences enterprise performance.

This study is limited to the selected microenterprises in southern Odisha, India. The study participants are employees of the microenterprises. Around 500 employees answered the questionnaire, but only 391 answers were complete in all aspects, so the number of respondents in the study is 391. The study uses the structural equation modeling approach to establish relationships between EO and EP. The study finds that EO has a significant influence on the EP and concludes that the employee's entrepreneurial intention mediates EO and EP. The study would be extremely useful for academics and professionals to understand the effect of EO on EP and how EO affects EP.

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# Role of Entrepreneurial Capability in the Performance of Sustained SMEs

*Neha Sharma and Sumit Kumar*

## INTRODUCTION

Small and Medium Enterprises (SMEs) have become indispensable for Indian economy over last few decades. Many researchers across world have studied SMEs thoroughly in different context and established their critical and vibrant role in the growth of the economy (Aris, 2007). SMEs greatly contribute to economic competitiveness, equity and redistribution, employment creation and innovation (Salavou et al., 2004). Due to which there is a need not only to create more SMEs, but survival of all and more importantly to ensure that they sustain their growth for a long period of time (Wakkee et al., 2015).

SMEs are, however, failing miserably due to several reasons (Ganesh and Mehta, 2010). In the past few years failure rate of SMEs fluctuates from 70 to 90%, dependent on a country and industry (Kaminskaite, 2017). Millions of start-ups are being started every year, and of those who

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survive, 96% remain small (Kaminskaite, 2017). Furthermore, the average life span of many SMEs is five years (Jones, 2009). Therefore, it is important to study factors responsible in improving chances of sustainability of SMEs.

Sustenance and growth of the firm leads to the economic development and small and medium-sized enterprises (SME) have proven records in the transition of developing country. For survival and long-term growth, it is important to utilize all the available resources effectively. In addition, the role of the firm's entrepreneurs is crucial in leveraging firm's sustainability. Entrepreneurial activities such as planning, strong decision-making, risk-taking ability, innovativeness, which are efficient and healthy for the economy, leads to the sustainable growth of SMEs (Wingwon, 2012). It is also a prominent indicator of success for SMEs (Salojärvi et al., 2005), and prosperity of the society.

A firm's survival is fundamental requisite for economic growth and is dependent on its business performance (Hopenhayn, 1992). A firm's sustainable growth, though, can never be achieved by a singular or definite factor but through a combination of different aspects like strong governance, framework and functions, effective strategy that work in combination (Normann, 2001). It is observed that entrepreneurial growth post start-up has numerous challenges which are more difficult than simply creating a venture. Therefore, there is a need to bring changes at the policy level and shift in the entrepreneurial approach for creating sustainable and scalable businesses (Zajko, 2017). Thus, the sustainability of a business is more important than just creating a business, as starting a new business will not boost the economy, but a sustainable and growing business can (Isenberg and Onyemah, 2016). Focusing specifically on the entrepreneurial capabilities approach, a new outlook on entrepreneurship theory suggests that individuals are ought to chase and create entrepreneurial opportunities to explore the freedoms (Wilson and Martin, 2015). In entrepreneurship, freedom of an individual to chase and create an entrepreneurial opportunity within his or her environment is termed as entrepreneurial capability (EC).

Traditionally, the capability is considered more as an internal resource of the individual. Examples can be found in respect of the psychology of the entrepreneur (Arthurs et al., 2007); entrepreneurial learning (Rae and Carswell, 2001); entrepreneurial perceptions (Kor et al., 2007) and entrepreneurial self-efficacy (Chen et al., 1998). It is necessary for an entrepreneur to develop capabilities such as autonomy, innovativeness,

risk-taking and proactiveness to survive the competition amid high stress of the dynamic environments that distinguish the emerging economies. The empirical result of the study indicates that the effect of EC dimensions are both positive and significant on the business performance of sustained enterprises.

A critical review of previous studies suggest that though the SMEs are an integral part of an economy, however, their survival and sustainable growth remain unaddressed. Many research show that the SMEs are facing problem in sustaining their growth. In this scenario, an entrepreneur must develop capabilities such as autonomy, innovativeness, risk-taking, and proactiveness to survive the competition and sustain the growth. The purpose of this paper is to establish the impact of entrepreneurial capability in the growth of sustained small and medium enterprises. The quantitative data of 161 sustained enterprises is collected and analyzed to verify the relationship between EC and business performance of sustained enterprises. The findings indicate that the EC significantly and positively impacts the growth of sustained SMEs. This study has practical implications for the theoretical advancement of entrepreneurial capability and firm sustainability.

## THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

### *Business Performance*

Accomplishments of the firm because of its management activities are referred to as Business performance. In general, business performance is measured on two counts—financial and nonfinancial methods (Venkatraman and Ramanujam, 1986). Quantitative results of the management activities are defined as financial performance. However, others stress significance of nonfinancial information as short-term financial performance has a limited ability to assess corporate competitiveness in a competitive environment (Roure and Keeley, 1990). Therefore, this study defines the concept of business performance due to management activities as a combination of financial and non-financial performance to consider in SMEs' long-term growth based on previous studies (Gupta and Govindarajan, 1984). In the current study, we have discussed about market share, customer satisfaction, employee satisfaction, service quality and gross profit (Mahmoud et al., 2016).



### *Entrepreneurial Capability*

Many researchers have considered entrepreneurial capability as an individual entrepreneur's capability of identifying and seizing market opportunities (Cao et al., 2017). Entrepreneurs play different functional roles in modern enterprise theories. In each school's theory, entrepreneurial capability has a different connotation. Marshall (1890) argued that entrepreneurs could make use of capital management capacity. Schumpeter (1934) argued that entrepreneurs should be separated from capitalists, and innovation is a must-have capability for entrepreneurs. From the perspective of the management level, entrepreneurs should have a spirit of adventure, the capability to take risks, innovation capability, organizational and coordination capability, and decision-making and strategic management capabilities. From the perspective of the economic level, entrepreneurs should have good solvency, production capacity, capital management capacity, and keen insight into the market. Different scholars studied the component dimensions of entrepreneurial capability from different perspectives. Entrepreneurial capability was incorporated into the theoretical framework of enterprise competition. Researchers have argued that entrepreneurial capability consists of the capability of acquiring resources, the capability of taking risks and leadership (Kor et al., 2007). Yao Xiang and Xu Yan-Mei (2013) considered that entrepreneurs are at the heart of a network formed by an enterprise's own characteristics and development needs; the network includes shareholders, employees, government officials, upstream and downstream enterprises, technology collaborators, officials of financial institution and so on. Entrepreneurs can use various key knowledge and resources in the network to meet the needs of their enterprise based on the influencing mechanism of entrepreneurial capability on enterprise innovation and corporate performance. Yang Yang (2014) considered relevant research and the actual conditions of SMEs, and summarized five entrepreneurial abilities, which are relational capability, organizational capability, strategic capability, learning capability and innovation capability. To sum up, there is no consistent view in the area of entrepreneurial capability evaluation and measurement. Therefore, an entrepreneur's capability of seizing opportunities and innovation capability are proposed based on previous research results. In the current research we have considered four factors comprising entrepreneurial capabilities such as autonomy, innovation, risk-taking and proactiveness (Cui et al., 2016).

### *Entrepreneurial Autonomy and Firm's Performance*

Autonomy is defined as an independent action by a person or a group of people dedicated to creating a business concept or a vision and pursuing it till completion (Lumpkin and Dess, 1996). According to Mintzberg and Waters (1985), decisive and risky actions collectively form the decision-making process of strong entrepreneurs, and therefore entrepreneurial autonomy is related to freedom of entrepreneurs, free actions and independent decision-making (Lumpkin and Dess, 1996).

Autonomy is a state of being where an individual makes decisions and take actions independently, and the organization puts no restrictions (Lumpkin and Dess, 1996). It also involves a strong desire of the individual to have freedom in developing an idea and in its implementation (Li et al., 2009). Several scholars (Coulthard, 2007; Prottas, 2008; Lumpkin et al., 2009) recommend that autonomy to all players in the organization may encourage them to act entrepreneurially, and result into improved firm performance. While acknowledging autonomy's role in enhancing firm performance, some studies could not establish a positive effect of this relationship (e.g., Hughes and Morgan, 2007). Accordingly, the following hypothesis has been constructed.

$H_1$ : Autonomy of an entrepreneur significantly impact firm performance

### *Innovativeness and Firm's Performance*

A firm's ability to engage in new ideas and creative processes that may result in new products, markets, or technological process is referred to as Innovativeness (Hult et al., 2004; Rauch et al., 2009). Entrepreneurship cannot exist without innovation as it is a crucial part of a strategy (Covin and Miles, 1999). Innovativeness in literature has proved its uniqueness and ability to provide significant solutions to many business problems which impact firm's performance and growth in the long run (Panayides, 2006). Many research established the role of innovation in giving the competitive advantage to the firm (Otero-Neira et al., 2009). Zahra and Garvis insisted that product innovation and process innovation in the firm can even lead to revival of overall operations as well as improving profitability of the firm (Zahra and Garvis, 2000). However,

the existing literature is inconclusive regarding the impact of innovativeness on firm performance (Massa and Testa, 2008). In the view of the above discussions, following hypothesis has been derived:

*H<sub>2</sub>*: Innovativeness of an entrepreneur significantly impact the firm performance

### *Risk-Taking and Firm's Performance*

An entrepreneur is defined as a person who takes risks and initiatives for business profits (Burns, 2016). An entrepreneur is also considered as a person who organizes and manages the available resources of business and takes possible risks for the better returns (Mariotti and Glackin, 2012). Literature suggests each firm deals with some sort of risk at some level. It is explained that there are firms, which take calculated or moderated risks with low ambiguity, and lesser resource commitments remain in safe risk zone, whereas few remain in high-risk zone (Lumpkin and Dess, 1996). It is believed that firms, which take high risk, get better chances of high performance (Naldi et al., 2007). Risk-taking ability of an entrepreneur can therefore be summarized as an individual characteristic that help entrepreneurs deciding where to take or avoid risks. Both theoretical discussions and empirical research have identified the influence of risk-taking activities on business performance. Theoretically, it is believed, in order to grab gainful opportunities SMEs require the readiness of entrepreneurs to involve in high levels of risk-taking behaviour (McGrath, 2001). Discussions on the previous literature, endorses the following hypothesis:

*H<sub>3</sub>*: Risk-taking capability of an entrepreneur significantly impact firm performance

### *Proactiveness and Firm's Performance*

Proactiveness means to pursue new possibilities and opportunities in the market (Venkatraman, 1989). It is expected that proactive firms get an advantage over rivals because of being the first one to explore the opportunities (Lumpkin and Dess, 1996) and gain an insight to respond market

fluctuations promptly (Eisenhardt et al., 2000). Proactiveness characterizes the environment instead of just reacting to the environment with the help of launching new products, technologies, and administrative processes at right time (Miller and Friesen, 1978). In view of the above discussion, the hypothesis has been framed as stated below:

*H<sub>4</sub>*: Proactiveness of an entrepreneur significantly impacts the firm performance

## METHODOLOGY

### *Research Goal and Sampling*

In this paper, we aim to examine the role of entrepreneurial capability in overall business performance of established and sustained small and medium manufacturing enterprises.

The data was collected through the sustained manufacturing small and medium enterprises. Sustained enterprises (SMEs) are those which are established for more than seven years.

### *Data Collection and Scale*

The questionnaire was emailed to more than 200 SMEs. Due to low response rate we also gathered data through telephonic interview and personal visits. We collected around 183 samples out of which 161 were considered for analysis. Most of the respondents were entrepreneurs themselves and few were the senior professionals from SMEs. In order to examine the Entrepreneurial Capability, we have used 13 items scale prepared by (Cui et al., 2016) examining four dimensions Autonomy, Innovativeness, Risk-Taking and Proactiveness of an Entrepreneur or the senior manager of the firm. In order to examine the business performance of an organization the validated scale from Agarwal et al. (2003) is used to measure Service quality, Customer satisfaction, Gross profit margin, Employee satisfaction and Market share.

## DATA ANALYSIS AND RESULT INTERPRETATION

The PLS-SEM based analysis is conducted in two phases using SmartPLS3.0 software. The first stage discusses the evaluation of the

measurement model and the second phase relay on the testing of structural model.

### *Evaluation of Measurement Model*

The PLS-SEM is originally designed for prediction purpose (Hair et al., 2017) and multivariate normal data is no compulsion for the analysis (Henseler and Sarsedt, 2013). In this research, the quality of the measurement model is assessed by using various models. The convergent validity is measured by using outer loading and AVE values. In Table 4.1, the outer factor loading for the construct found satisfactory as they crossed the threshold value of 0.70 ( $p < 0.001$ ), except for one item EC10RT04 but revels in acceptable zone as (Hair et al., 2017) mentioned. The AVE values for all construct also found satisfactory as they cut off the threshold value of 0.50 (Henseler et al., 2016). Similarly, Table 4.1 exhibtes that

**Table 4.1** Measurement Information

<i>Construct</i>	<i>Items</i>	<i>Outer loading</i>	<i>Average variance extracted (AVE)</i>	<i>Cronbach's Alpha</i>	<i>Composite reliability</i>
Business Performance	BP01	0.810	0.632	0.854	0.895
	BP02	0.814			
	BP03	0.816			
	BP04	0.823			
	BP05	0.706			
Proactiveness	EC11PA01	0.929	0.610	0.707	0.820
	EC12PA02	0.765			
	EC13PA03	0.617			
Autonomy	EC1AU01	0.988	0.946	0.971	0.981
	EC2AU02	0.978			
	EC3AU03	0.951			
Innovativeness	EC4INN01	0.808	0.682	0.767	0.865
	EC5INN02	0.887			
	EC6INN03	0.778			
Risk-taking	EC7RT01	0.819	0.569	0.759	0.839
	EC8RT02	0.805			
	EC9RT03	0.789			
	EC10RT04	0.580			

*Source* Author's creation based on the data analysis results

**Table 4.2** Fornell-Larker criterium results

	<i>BP</i>	<i>ECAU</i>	<i>ECINN</i>	<i>ECPA</i>	<i>ECRT</i>
BP	0.795				
ECAU	0.283	0.973			
ECINN	0.239	0.199	0.826		
ECPA	0.143	0.001	-0.001	0.781	
ECRT	0.323	-0.033	0.053	0.274	0.755

Source Author's creation based on the data analysis results

**Table 4.3** Heterotrait-Monotrait ratio (HTMT) of structural model

	<i>BP</i>	<i>ECAU</i>	<i>ECINN</i>	<i>ECPA</i>	<i>ECRT</i>
BP					
ECAU	0.306				
ECINN	0.289	0.243			
ECPA	0.155	0.069	0.052		
ECRT	0.366	0.124	0.083	0.429	

Source Author's creation based on the data analysis results

the Cronbach's Alpha and Composite Reliability are greater than 0.820 which indicates the acceptability of all variables (Hair et al., 2014).

The discriminant validity was observed based on Fornell-Larker Criterium (Table 4.2) and Heterotrait-Monotrait (HTMT) Ratio (Table 4.3).

The results from Fornell-Larker Criterium and cross-loading fulfil the condition of discriminant validity.

Henseler et al. (2016) discussed the HTMT ratio threshold limit of 0.850; the most significant HTMT ratio was 0.429 observed between ECRT > ECPA. Here in this study, the Highest HTMT ration (0.429) occur between those latest constructs "ECRT" and "ECPA" which are firmly attached and were proposed for same conceptual construct "entrepreneurial capabilities".

## STRUCTURAL MODEL VALIDATION

The standardized path coefficient and  $R^2$  value of latent construct (endogenous variable) estimate the structural model quality and its

**Table 4.4** Path coefficient and *t*-values of the structural model

<i>Hypothesis</i>	<i>Path</i>	<i>Path coefficient</i>	<i>T value</i>	<i>P Values</i>	<i>Description</i>
Hypothesis 1	ECAU - > BP	0.259	3.416	0.001	Supported
Hypothesis 2	ECINN - > BP	0.172	2.378	0.017	Supported
Hypothesis 3	ECPA - > BP	0.059	0.764	0.445	Not Supported
Hypothesis 4	ECRT - > BP	0.306	4.768	0.000	Supported

*Source* Author (based on the results of the study)

predictive relevance. The bootstrapped method with 5000 subsamples is applied to test the relationship between constructs and predictive capabilities of the model (Hair et al., 2014). PLS-SEM specifies for model fit using SRMR = 0.078 (0.08),  $d_{ULS} = 1.041$  ( $< 0.95$ ),  $d_G = 0.429$  ( $< 0.95$ ), Chi-Square = 401.937 and NFI = 0.772 demonstrate a significantly reliable and adequate fit (Henseler et al., 2016; Aboelmaged, 2018). Result shows that 22.2% of the variance, adjusted  $R^2$ , in business performance is explained by four factors of firm capabilities; autonomy, proactiveness, innovativeness and risk-taking.

Hypothesis  $H_1$ ,  $H_2$  and  $H_4$  predicted that autonomy, innovativeness and risk-taking positively impact business performance in sustained SMEs. Table 4.4 highlighted the impact of proactiveness ( $\beta = 0.059$ ,  $t = 0.764$ , ns) is not significant. The impact of autonomy ( $\beta = 0.259$ ,  $t = 3.416$ ,  $p < 0.001$ ), innovativeness ( $\beta = 0.172$ ,  $t = 2.378$ ,  $p < 0.05$ ) and risk-taking ( $\beta = 0.306$ ,  $t = 4.768$ ,  $p < 0.001$ ). Thus,  $H_3$  is not supported.

## DISCUSSION AND CONCLUSION

In this study, we have measured the relationship between entrepreneurial capabilities and business performance. A conceptual model is drawn from relevant entrepreneurship literature and on the theory of resource-based view. In our model, entrepreneurial capabilities were measured by considering subdimensions of entrepreneurial orientation. The various research highlights the positive relationship between entrepreneurial orientation and performance of the firms (Dess et al., 1997; Wiklund and Shepherd, 2005). The findings show positive impact of innovativeness, autonomy and risk-taking on business performance. It clarifies that the entrepreneurs who have higher level of innovativeness, desire for autonomy and risk-taking capability will enhance the performance of business.

Here, risk-taking capability was observed the major contributor to business performance. This finding shows that the entrepreneurs perceived that their business performance is an output of their risk-taking ability. Risk-taking includes making large and risky resource commitments, to seize the opportunity in the market, which requires exploring, and investing in new technologies, creating new products, exploiting new market, bringing new strategies to promote business in the interest of obtaining high returns (Lumpkin and Dess, 1996).

However, the proactiveness does not affect business performance. This finding is contradictory to previous research findings (Kraus et al., 2012). Kraus et al. (2012) has found the positive impact of proactiveness on SME business performance. Being proactive a firm can anticipate changes in future demand (Lumpkin and Dess, 1996), and prepare effectively to face the turbulence in the market (Buss, 1987). Proactiveness at the mature stage of the life cycle of the business requires to managing resources from operations and products and investing in new products and processes (Venkatraman, 1989). This may require reinvestments and would be easier if the firm has access to more financial capital.

This research adds some new insights with regard to existing literature. Firstly, the research delivers deep understanding of individual-level variables: Autonomy, proactiveness, innovativeness and risking behaviour to address the business performance. In this way, the identified relations overcome with more clarity, because all-subdimensions of entrepreneurial capabilities (Autonomy, proactiveness, innovativeness and risking behaviour). Secondly, the researchers focused on methodology used to understand the relationship. We have used partial least square structural equation modelling, known as PLS-SEM. This technique quickly provides all explanations for any complex structural model and also helpful for research policy and managerial practices (Wiklund and Shepherd, 2005; Hair et al., 2019).

Nevertheless, this research also highlights some limitations. First, we have measured the business performance of the firm based on a scale (Agrawal et al., 2003) which measures five dimensions market share, gross profit, customer satisfaction, service quality and employee satisfaction. There are some other essential constructs used by other researchers to predict business performance. Therefore, we believe those constructs may consider getting more in-depth understanding of business performance in sustained enterprises. Second, to maintain the frugality of the research, we have excluded various control variables such as age of the



entrepreneur and firm, location of the firm, education of the entrepreneur and designation (CEO/MD/Director/Proprietor) of the entrepreneurs. Similarly, we have limited our study to sustained enterprises. The comparison between sustainable and non-sustainable enterprises may provide a clear understanding of business performance in Indian SMEs.

These limitations provide various future research opportunities for potential research in entrepreneurship context. So, it would be interesting to investigate this relationship using the qualitative research approach. This research model could be replicated, changing or adding new variables in business performance dimensions. The comparison between sustainable and unsustainable enterprises to understand the association between entrepreneurial capabilities and business performance could be an excellent research gap. The multi-group analysis using PLS-SEM to understand the influence of various factors like age of the entrepreneur and firm, firm's location, education, experience and designation of the entrepreneur may also use for further research exploration. In our research findings, proactiveness does not impact on business performance of the firm which is contradictory to the previous research. In order to understand the relation between proactiveness and business performance of sustained enterprises, future researchers should use qualitative research design.

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# Herd Behavior Analysis in Crowdfunding Platforms in Mexico

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## INTRODUCTION

Crowdfunding in Mexico constitutes an adequate alternative for financing business initiatives and projects at an early stage, since the electronic means through which this alternative is developed, substantially reduce the entry and operating costs of the anchoring platforms. In this context, the focus of this research is to evaluate the decision-making of individuals when investing in a project, determining if it is carried out based on herd behavior. Consequently, it is expected to determine the relationship between the decision to select a crowdfunding investment project and the number of investors already integrated into the project.

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The financial services provided by the institutions that make up Mexico's financial system constitute an essential tool to allow the flow of money since there are functions of intermediation of resources that enable the existence of a payment system in which the offer interacts and the demand for financing instruments (Naranjo 1995). In this regard, the chief financial intermediaries that offer financing instruments are credit institutions, which channel money deposits made by agents with surplus resources to people who require financing sources for various purposes. Credit financing is one of the leading financial instruments through which economic agents obtain capital. To ensure the viability of the device above, commercial actors require having as much information as possible that allows them to evaluate the behavior of the participating agents since the risk of default on payment is a decisive factor in granting a loan. Consequently, not all the actors that go to the financial sector in search of financing obtain a loan that adjusts to their credit needs or their income level. The economic model of credit rationing establishes that not all consumers can have access to credit within the financial market. The interest rate set by the lender is maintained at a level at which the demand is higher to the offer of credit, a mechanism from which the lender can reduce the risk of default (Stiglitz and Weiss 1981).

In this context, asymmetric information acts as a determining factor in the rationalization of credit, which is why the segment rationalized by commercial banks seeks other financing alternatives. Technological development has generated an opening to new business models that represent an alternative to expand the supply and demand of financial services according to the requirements detected by the market. In this sense, the new digital technologies have generated that the Internet constitutes a meeting place for providers and applicants of capital, which translates into an instrument called "crowdfunding." It is defined as a process in which a party requests the financing of a project by receiving contributions from a group of people in exchange for in-kind or economic remuneration (Agrawal et al. 2013).

According to the existing literature, financial crowdfunding has the elements that allow it to promote the promotion of business and innovation initiatives. In this context, financial crowdfunding represents a viable alternative to traditional sources of financing, addressing the market segment that is streamlined by commercial banking, offering an affordable financing opportunity for business projects or start-ups. However, crowdfunding entails high credit risk, liquidity risk, and legal risk, because this

mechanism is developed in a market in which the quality of information between claimants and bidders is incipient or void. Therefore, the Fintech law grants legal certainty to the participating agents, since the Financial Technology Institutions must have a corporate governance structure, operating systems, accounting, security, risk control policies, prevention of fraud and documents that certify the development of the interface or platform. However, derived from the nature of the participants and the means in which the collective funding platforms are developed, it leads to the generation of problems of information asymmetry in its two aspects- a) adverse selection (*ex ante*) and b) moral hazard (*ex post*) (Akerlof 1970).

Hence the capital offering party in a financial crowdfunding scheme is a scenario of asymmetric information regarding the projects available to be financed, besides some investors, do not have the technical knowledge and the experience that allow them to carry out a risk assessment. In this sense, the previously stated premises suggest the appearance of social behavior called “herd behavior” which, from its rational and irrational aspects, generates that an individual makes the selection of an alternative under the decision taken by the majority of the investors (Zhang and Liu 2012). The behavioral analysis of the agents participating in a crowdfunding platform allows evaluating how the determinants of behavior influence individual investment decisions, since, according to behavioral finance, heuristics, mood, and emotions, are elements that influence the choice of investors (Madaan 2016).

In this sense, it is necessary to assess whether herd behavior prevails in the crowdfunding project investors, as well as the factors that determine their decision-making. Therefore, the research question addressed is set as. Is there a herd behavior in investors, in the decision-making process to join a crowdfunding campaign? In this regard, the following hypothesis is established to answer the research question:

$H_1$ : Herd behavior prevails in the decision-making of investors in a crowdfunding campaign.

Then, it is desired to find evidence to affirm that projects that have a higher number of investors will have a greater probability that new investors will be integrated into the project. Also, being a market where



asymmetric information prevails, not all investors can carry out a risk analysis that allows them to weigh the risk of the project versus the return received.

## LITERATURE REVIEW

The financial system is conceptualized as “the group of people and organizations, both public and private, through which the financial resources that are negotiated between the various economic agents are captured, managed, within the framework of the legislation corresponding” (Díaz and Hernández 1999). In Mexico, the financial system is made up of (i) regulatory institutions, (ii) financial institutions, (iii) people and organizations that carry out operations and (iv) all the organizations that collectively capture, regulate and direct the country’s investment, an activity called financial intermediation. Hence, the population that has no access to the formal financial system, either because of their income level, lack of credit history or remote geographical location, represents a broad market for financial institutions alternatives (Wenner 2002).

In this sense, the granting of credit constitutes one of the primary operations that the bank carries out, based on the so-called active processes, legal rights and obligations are established in charge of who demands the financing and who provides it. Consequently, credit constitutes a possibility for companies to expand their consumption, technology, work, and productivity alternatives, increasing the likelihood of incubation, growth, and development of productive units. In this context, commercial credit represents an instrument that enhances the development of investment projects. However, companies, in general, have limited access to bank financing, the financing of developing companies being particularly relevant. In this sense, entrepreneurs who do not have formal loans finance their businesses with alternative sources such as supplier credit and loans from friends and family. This scenario generates that the rationed companies of the traditional financing schemes of the business sector look for alternative consumer credit or microcredit products for individuals (Bruhn and Love 2014).

According to Stiglitz and Weiss (1981), credit rationing prevails when not all financing applicants can access credit within the formal financial market. Consequently, financial crowdfunding represents a viable alternative to traditional sources of financing, targeting the market segment that is rationalized by commercial banks, offering an affordable financing

opportunity to business projects or start-ups. Consequently, financial crowdfunding represents a viable alternative to traditional sources of financing, targeting the market segment that is rationalized by commercial banks, offering an affordable financing opportunity to business projects or start-ups. Specifically, a crowdfunding platform is conceptualized as obtaining small amounts of money from a large number of individuals or organizations to fund a project, a business, or acquire a personal loan, among other financing needs, to through an Internet platform. Therefore, the contributions made may represent a non-representative amount in individual terms; however, the accumulation of these contributions can be significant for the funding of a project (Kirby and Worner 2014).

Besides, Esposti and Barisonzi define crowdfunding as a model of capital formation and market share where financing purposes are widely disclosed through an open call, generally, through the Internet, and obtain the support of collective contributions from various donors or independent investors (Esposti and Barisonzi 2014). Similarly, Agrawal et al. (2013) argue that “crowdfunding platforms” are structured using the following elements:

- Provide a predefined platform for borrowers to submit their proposals for potential investors who have access to the Internet,
- Allow risky transactions to be made with a broader payment commitment,
- Provide comprehensive information on investment projects,
- Financing campaigns and investors are not geographically limited, and
- Borrowers and investors are initially optimistic about the results of the project and the capital raised in crowdfunding campaigns can replace traditional sources of financing.

In turn, the number of individuals or companies that accessed financing for their projects based on debt or capital grew 38%. In comparison, the number of people funding the initiatives inserted in the crowdfunding platforms grew by 41% in one year (CNBV 2017).

Finally, from the perspective of commercial banking, in collective funding platforms, a large number of individuals making small contributions to a project, making a significant contribution as a whole. The financial return crowdfunding platforms, in formats similar to those used

by social networks, serve as a meeting point between financing applicants and investors, who receive an economic consideration by their contribution of funds and the risk assumed (Rubio 2014).

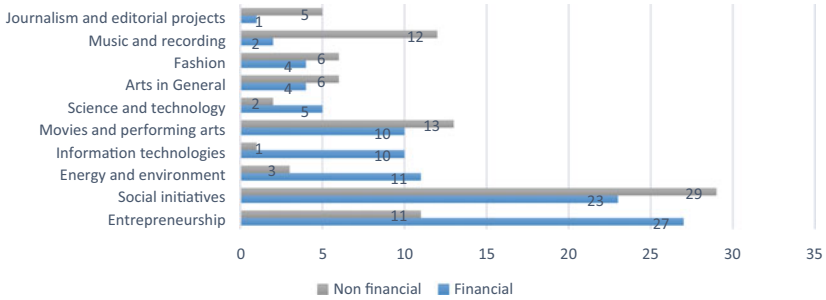
From a general perspective, “crowdfunding” is classified according to the destination nature of the resource, differentiating two primary modalities depending on the status of the investor:

- Non-financial “crowdfunding” and
- Financial “crowdfunding”.

These modalities are configured to from the relationship between the person who provides the financial resource (lender or “crowdfunder”) and the recipient of the capital (borrower or owner of the campaign). However, financial crowdfunding meets the characteristics to represent a viable alternative or complement to traditional sources of financing, since its business model allows it to cover those market niches not covered by conventional banking. (Rubio 2014).

Financial crowdfunding platforms are an appropriate option for business initiatives and new projects. Within the electronic nature of the instrument, it can substantially reduce the costs of entry and operation of funding platforms, facilitating the rapprochement between investors and promoters of projects, diversifies risk among investors, expands the supply of financing, has a massive scope and eliminates geographical and cultural barriers. Consequently, crowdfunding is an opportunity for both entrepreneurs and micro-investors. Entrepreneurs can use the mechanism to extend the call for financing to the entire society. In Mexico, it is estimated that in 2015 the industry-funded 4081 campaigns for an amount of 256 million pesos through 53,276 investors as exhibited in Fig. 5.1. Derived from the above, the category that is most financed in Mexico through financial crowdfunding is entrepreneurship (27% of total campaigns) (CNBV 2017).

Although financial crowdfunding represents an innovative model with essential benefits for the financial inclusion of SMEs, said mechanism still poses a high risk for both investors and project owners, since endogenous uncertainty factors and exogenous in the development of the model. Among the main risks associated with the instrument are asymmetric information, low investor sophistication, risk of fraud, insolvency or bankruptcy, liquidity risks, and possible closure of the platform.



**Fig. 5.1** Activities financed through crowdfunding in Mexico (percentage of campaigns) (*Source* [CNBV 2017])

Hence, in the next section, the theories that support the variables and the relationship studied in this research work will be presented.

## THEORETICAL FRAMEWORK

Crowdfunding can be studied from the perspective of asymmetric information because, according to economic theory, the neoclassical rationality model establishes that the individual possesses all the relevant information on the problem on which he must decide in such a way that his utility function is maximized. The neoclassical model considers two essential assumptions: (i) rational actors make decisions based on complete information on the existing alternatives and their consequences and (ii) their preferences will remain stable in the future (Vergara 1994). Regarding the financial sector, a consensus prevails that the price of assets does not register a role of balance between supply and demand, because they are not transmitters of complete information about the quality of the assets exchanged (Sánchez-Daza 2001).

In the case of financial crowdfunding, there is an asymmetry of information between investors and funded projects because the borrowers have complete information regarding the quality of the product and its profitability. In contrast, investors make decisions only based on the information published on the platform. Therefore, the value and payment capacity of the company or project to be funded cannot be calculated accurately, generating uncertainty regarding the company's payment capacity or the success of the campaign. The asymmetric information

problem is especially aggravated in small and medium businesses, since the financial information generated by the economic unit is generally scarce. According to the National Micro-business Survey, in Mexico, 65% of micro-businesses do not have an accounting record of their transactions, and 85% do not have proof of sales (Banxico 2015).

Within this context, there are at least problems with the instrumentation of financial crowdfunding:

- Adverse selection,
- Moral hazard and
- Herd behavior.

This work will focus on herd behavior since in the presence of asymmetric information; investors will seek mechanisms that allow them to make an investment decision based on a certain level of certainty. Therefore, rationally or irrationally, investors can try to follow the initiative of those who believe they are better informed about the probability of success of the funded project. The speculative behavior of a mass of individuals with little information about the project or low financial education is led by precarious or conventional valuations, generating that the projects with a higher number of investors have a greater probability of completing the amount. Consequently, actors in the financial sector are influenced by psychological factors in their decision-making, deviating from the traditional model in three ways (Mullainathan and Thale 2000):

- Limited rationality,
- Limited will and
- Selfishness.

Generally speaking, Abhijit Banerjee (1992) indicates that herd behavior occurs when an individual makes a decision based on the behavior of a group of people over some time, even when their private information and personal motivation suggest that they take a different choice. In particular, herd behavior can be analyzed from two perspectives; rational and irrational.

Rational herd behavior is the result of information obtained and observational learning; that is, lenders can make reasonable inferences about the borrower's ability to pay from observing and learning the decisions

of other lenders. In the particular, the lenders do not have information on the borrower's ability to pay; however, each lender looks for a private signal of the borrower's solvency, in order to collect as much information as possible that allows him to make an objective evaluation of project risk (Delgado 2015). In addition to the above, Parker and Prechter (2007) start from the idea that individuals in conditions of uncertainty tend to repeat the behavior patterns of other people. Thus, in the case of financial markets, the irrational herd behavior effect gives the impression that investors have made a decision with complete information and through a risk analysis. However, this perception could be false, since a high probability prevails that the group of investors does not have accurate information, reflecting that their decision may be associated with psychological factors of repentance.

Consequently, irrational herd behavior is characterized by the appearance of the following patterns:

- Individuals passively imitate the decisions of other investors, since the information and practice of other people represents a descriptive social norm of the correct alternative,
- They do not have sufficient information or,
- They do not have the technical knowledge to assess the risk associated with the project (Lin et al. 2013).

In particular, the financial market in Mexico lags in terms of access to credit and the percentage of financing to the private sector respect the GDP is close to 30% that highlight the inequality in the granting of credit concerning the size of the economic agent to be financed (CNBV 2017). In this sense, crowdfunding represents an attractive financing mechanism for borrowers, since the income requirements are more flexible compared to commercial banks, in addition to the fact that collective funding platforms contribute to the interest rate offered is attractive to lenders and affordable for borrowers.

By the previous, an elemental difference between a loan obtained through crowdfunding and another through commercial banking is the internalization of the risk of loss, since, in crowdfunding, the lender assumes the entire risk, giving relevance to the ex-ante evaluation of the risk associated with the loan (Delgado 2015). Hence, the cost associated with collecting relevant information on the quality of the project and the

borrower's payment capacity is borne by the lender, generating an incentive for the marginal profit of the lender to be higher, this by reducing costs associated with the search for information on the quality of the project. Therefore, the problem of asymmetric information in the financial markets generates an incentive for investors to adopt herd behavior since crowdfunding takes place in a context in which the borrower can hide relevant project information.

The factors that are considered to influence the generation of herd behavior in a crowdfunding campaign are (i) individuals passively imitate the decisions of other investors and (ii) individuals do not have sufficient information about the quality of the project. Consequently, the following section presents the set of estimates and results to verify if one of the behavior patterns generated by asymmetric information is herd behavior on crowdfunding platforms in Mexico, from which a group of investors makes decisions whether rational or irrational, based on the reasoning and knowledge of the community (Lin et al. 2013).

## ESTIMATES AND RESULTS<sup>1</sup>

The information set is based on a survey carried out on a representative sample (stratified design) of individuals belonging to higher-level study institutions in Mexico (see Annex 1). The objective of the survey was to collect information to analyze the behavior of investors in crowdfunding platforms.

The population framework is made up of approximately 200,000 active investor users, and the following formula was used to calculate the sample size:

$$n = \frac{N \times Z_{\alpha}^2 \times p \times q}{d^2 \times (N - 1) + Z_{\alpha}^2 \times p \times q}$$

Where  $N$  is the size of the population,  $Z_{\alpha}$  is the critical value of the normal distribution with  $(1 - \alpha)100\%$  confidence,  $p$  is the probability of success,  $q = 1 - p$ ,  $d$  refers to the maximum precision.

The substitution of the formula is shown below:

$$n = \frac{(200000)(1.96^2)(0.5)(0.5)}{(0.05^2)(200000 - 1) + (1.96^2)(0.5)(0.5)} = 384$$

<sup>1</sup>All financial estimates and results are mentioned in Mexican Pesos (MXN \$).

The operational design for the collection of information was based on surveys in electronic format carried out through the electronic portal [www.surveymonkey.com](http://www.surveymonkey.com). The survey was carried out between June to November 2017, and a sample of individuals who have participated in “crowdfunding” projects of 400 people was obtained.

The information set consisted of a random sample of 400 respondents, 227 men and 173 women. Regarding the civil status of the respondents, the group with the highest number of observations corresponds to the single marital status with 44.93% in the case of men and 47.98% of women, followed by married marital status and in a third position free Union. Regarding the place of residence, the most significant number of respondents reside in the State of Mexico with 24.75%, in second place is Mexico City with 21%, and in a third-place the state of Nuevo León with 12% (see Table 5.1).

On the other hand, the variable level of schooling reported that 62.11% of men have studied at an undergraduate degree, while women represent 56.07%. Secondly, there is the level of postgraduate education, representing 26.87% for men and 33.53% for women. Thirdly, there is the level of “high school” education with 11.01% for men and 10.4% for women. About the monthly income level of the respondents, the income level range that groups the highest number of observations are; between \$25,001 pesos and \$40,000 pesos with 38.33% for men and 39.31%

**Table 5.1** Place of residence

<i>Location</i>	<i>Men</i>		<i>Women</i>		<i>Total</i>	
	<i>Obs.</i>	<i>%</i>	<i>Obs.</i>	<i>%</i>	<i>Obs</i>	<i>%</i>
Estado de México	60	26.43	39	22.54	99	24.75
Ciudad de México	48	21.15	36	20.81	84	21.00
Nuevo León	28	12.33	20	11.56	48	12.00
Jalisco	25	11.01	16	9.25	41	10.25
Querétaro	17	7.49	12	6.94	29	7.25
Chihuahua	9	3.96	12	6.94	21	5.25
Puebla	5	2.20	7	4.05	12	3.00
Other	35	15.4	31	17.95	66	16.50
Total	227	100	173	100	400	100

*Source* Author(s)



for women, secondly, between \$15,001 pesos and \$25,000 pesos with 27.31% for men and 31.79% for women.

Regarding the frequency of internet use, more than 90% of the respondents access the internet daily, from which it is inferred that they are active users of various technological tools. In addition to the above, respondents were asked what their level of confidence is? Regarding providing your information online. In the case of men, 44.93% partially trust to ensure their data through the internet, being 39.31% in the case of women. Now, 61.23% of men have invested in a crowdfunding project, and women 54.91%. Regarding the use of crowdfunding as a financing option, 73.13% of the men and 77% of the women answered that they would not use the said instrument as a financing mechanism.

Likewise, the respondents were asked if they have had any disappointment in a crowdfunding project that they have financed. According to the survey, 68.28% of men answered that they had not had any displeasure in the funding of a crowdfunding project, while in the case of women, it was 74.5% as exhibited in Table 5.2.

In general, 34.75% of the surveyed persons have financed at least one crowdfunding project; secondly, 23% of the interviewed persons have financed 2–3 crowdfunding projects, and thirdly, 3.50% have funded four or more crowdfunding projects. The average amount of the monetary contribution made by men was \$1048.70 pesos, while, in the case of women, the average contribution amount was \$480.60 pesos.

One of the questions asked of the respondents is aimed at analyzing what the central aspect that motivated you to finance a crowdfunding project was? In this case, 38.77% of the men surveyed were motivated by

**Table 5.2** Trust in providing your information online

<i>Confidence in providing information online</i>	<i>Men</i>		<i>Women</i>		<i>Total</i>	
	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>
Little trust 1	34	14.98	35	20.23	69	17.25
2	19	8.37	18	10.40	37	9.25
3	102	44.93	68	39.31	170	42.50
4	24	10.57	21	12.14	45	11.25
I totally trust 5	48	21.15	31	17.92	79	19.75
Total	227	100	173	100	400	100

*Source* Authors' calculations

**Table 5.3** Crowdfunding as a financing option

<i>Crowdfunding as a financing option</i>	<i>Men</i>		<i>Women</i>		<i>Total</i>	
	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>
No	166	73.13	142	82.08	308	77
Yes	61	26.87	31	17.92	92	23
Total	227	100	173	100	400	100

*Source* Authors' calculations

the popularity of the project, while women, 32.37%, indicated that the demand for the project drove them as illustrated in Table 5.3.

Finally, the respondents were asked if you have ever considered not supporting a crowdfunding project, why did it generate mistrust? In this sense, 64.76% of the men answered that they had no doubt when considering financing a crowdfunding project while in the case of women it was 69.36%. Now, the procedure that is proposed to verify the hypothesis of this research work is a non-linear probability specification, where the variable  $Y$  can take the value of one for those who have participated in crowdfunding campaigns and zero in another case. The model considers the probability of occurrence conditional on a set of explanatory variables  $X$ .

Formally, a cumulative probability distribution  $G$  is introduced, such that  $P[Y = 1|X] = G(X\beta)$ . There are a wide variety of cumulative probability distributions that can take the place of  $G$ . However, normal and logistic probability distributions have been found to have robust statistical properties (Stock and Watson 2012).

Furthermore, if the normal cumulative distribution is chosen, then the model will be called probit, and the coefficients are estimated using maximum likelihood, so the marginal effect of the explanatory variable  $X_i$  on the probability that  $Y = 1$  is:

$$\partial P[Y = 1|X]/\partial X_i = g(X\beta)\beta_i$$

Where  $g(X\beta)$  is the probability density function, that is, the derivative of  $G$  (Wooldridge 2015). Table 5.4 describes the conceptual and operational definitions of the dependent and independent variables.

**Table 5.4** What motivated you to finance the project?

<i>Reasons for the decision to finance a project</i>	<i>Men</i>		<i>Women</i>		<i>Total</i>	
	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>	<i>Obs</i>	<i>%</i>
Detailed information that explains what the project consists of	22	9.69	13	7.51	35	8.75
Project popularity (number of investors already supporting the project)	88	38.77	56	32.37	144	36.00
Project financial information	21	9.25	22	12.72	43	10.75
Opinion of other users of the collective funding platform	11	4.85	7	4.05	18	4.50
None in particular	85	37.44	75	43.35	160	40.00
Total	227	100	173	100	400	100

*Source* Authors' calculations

Two probit models were estimated using the variables more relevant described in Table 5.5, where the marginal effects of each explanatory variable were calculated (see Table 5.6).

According to the estimated marginal effects and statistical significance, various comments and interpretations can be made at least at 90% confidence, where the following statements stand out. Likewise, it is noted that the coefficients of the variables of income, the proportion of the saving-income level and proportion of the debt-income level are not significant; therefore, there is not enough statistical evidence to infer that they help to explain the financing of a popular crowdfunding project. In contrast, the coefficient of the variable *DebtTest1* is positive and significant. Consequently, compared to the base category *DebtTest 4* (cash payment on delivery/all at once), it can be inferred that people who prefer to pay a debt weekly in the long term have a higher probability of financing a popular crowdfunding project.

Additionally, the coefficients of the income level and debt-income level ratio variables are not significant; therefore, there is not enough statistical evidence to affirm that they help explain the financing of a crowdfunding campaign. Concerning the coefficient of the variable, *LowSavings* is negative and significant; hence people with a low saving range have a lower probability of participating in the financing of a crowdfunding project. Furthermore, the coefficient of the variable *DebtTest1* is positive and significant. Consequently, people who prefer to pay a

Table 5.5 Conceptual and operational definition of the variables

<i>Dependent variable</i>	<i>Description</i>	<i>Operational definition</i>
Popular project financing (Y1)	Decision making based on the behavior of a group of people over a period of time	Dummy variable (binary) that takes the value of 1 if the respondent chose to finance a popular project and takes the value of 0 if it does not
Inverted crowdfunding (Y2)	The surveyed person has invested in a crowdfunding project	Dummy variable that takes the value of 1 if the respondent has invested in a crowdfunding project and takes the value of 0 if it has not
Independent variables	Description	Operational definition
Income level	Classification of the individual's income level <ul style="list-style-type: none"> <li>a. <i>Low income</i></li> <li>b. <i>Middle income</i></li> <li>c. <i>High income</i></li> </ul>	The individual's monthly income range is represented by three categories, where three dummy variables are defined that take the value of 1 if the person has a monthly income corresponding to each of the ranges and 0 if he has another income range
Income-saving ratio	Classification of the savings percentage of each individual in terms of their income <ul style="list-style-type: none"> <li>a. <i>Low savings</i></li> <li>b. <i>Middle savings</i></li> <li>c. <i>High savings</i></li> </ul>	The individual's monthly savings range is made up of 3 categories, where three dummy variables are defined that take the value of 1 if the person has a monthly savings corresponding to each of the ranges and 0 if they have another range of income-savings
Proporción de deuda-ingreso	Classification of the debt percentage of each individual in terms of their income <ul style="list-style-type: none"> <li>a. <i>Low debt</i></li> <li>b. <i>Middle debt</i></li> <li>c. <i>High debt</i></li> </ul>	The individual's debt is made up of 3 categories, where three dummy variables are defined that take the value of 1 if the person has a debt corresponding to each of the ranges and 0 if he has another range of debt-income

(continued)

Table 5.5 (continued)

<i>Dependent variable</i>	<i>Description</i>	<i>Operational definition</i>
Savings test	The respondent had three savings performance alternatives, of which the variable <i>TestSaving1</i> represents the performance option with the highest benefit Variable categories: a. <i>SavingsTest1</i> b. <i>SavingsTest2</i> c. <i>SavingsTest3</i>	The Savings Test variable is made up of 3 categories, where three dummy variables are defined that take the value of 1 if the person chooses a savings performance option and 0 for the other options
Debt test	The surveyed person had four alternatives of forms of payment of a debt, of which the variable <i>DebtTest2</i> represents the option with the lowest payment of interest a. <i>DebtTest1</i> b. <i>DebtTest2</i> c. <i>DebtTest3</i> d. <i>DebtTest4</i>	Dummy variable that takes the value of 1 if the person prefers to choose a debt term and 0 if the person does not prefer to get into debt (prefers to pay the product in a single exhibition)
Trust in Internet Opinions	Confidence level regarding consulting Internet information	Dummy variable that takes the value of 1 if the person feels confident in consulting information online and 0 if the person does not trust
Knowledge of crowdfunding	The surveyed person has general knowledge regarding crowdfunding	Dummy variable that takes the value of 1 if the person has knowledge of crowdfunding and 0 if he does not
Family relationship	The promoters of the project included friends or family of the person surveyed	Dummy variable that takes the value of 1 if, among the promoters of the project, there were friends or relatives of the person surveyed and 0 if not

*Source* Author's calculation

**Table 5.6** Marginal effects of probit models

	<i>Model 1: Y1</i>			<i>Model 2: Y2</i>		
	<i>dy/dx</i>	<i>Standard error</i>	<i>p-value</i>	<i>dy/dx</i>	<i>Standard error</i>	<i>p-value</i>
LowIncome	-0.02	0.170	0.90	0.13	0.160	0.43
MiddleIncome	0.15	0.130	0.25	0.13	0.100	0.20
LowSavings	-0.88	0.070	0.00	0.25	0.190	0.19
MiddleSavings	0.32	0.100	0.15	0.16	0.210	0.43
LowDebt	0.14	0.120	0.22	-0.07	0.090	0.44
MiddleDebt	0.05	0.120	0.70	-0.13	0.120	0.25
SavingsTest1	0.27	0.150	0.07	-0.33	0.190	0.08
SavingsTest2	0.07	0.170	0.68	-0.39	0.170	0.02
DebtTest1	-0.50	0.120	0.00	0.29	0.100	0.01
DebtTest2	-0.23	0.120	0.10	0.15	0.080	0.07
DebtTest3	0.16	0.220	0.48	-0.21	0.420	0.62
KnowledgeCrowdfunding	0.27	0.100	0.01	0.28	0.080	0.00
TrustCrowdfunding	0.85	0.040	0.00	0.07	0.090	0.46
FamilyRelationship	0.46	0.080	0.00	0.05	0.070	0.46
Wald chi2(24)	136.74	<i>p-value</i> = 0.000		34.32	<i>p-value</i> = 0.000	
Log-likelihood	-78.47	<i>p-value</i> = 0.001		-139.38	<i>p-value</i> = 0.001	

Source Authors' calculations

debt every week in the long term have an associated higher probability of financing a crowdfunding campaign. Likewise, the coefficients of the variables *KnowledgeCrowdfunding*, *TrustCrowdfunding* and *FamilyRelationship* are positive and significant. These three variables link the individual to the crowdfunding project; therefore, it is expected that the higher the affinity of the individual with the instrument or the project, the probability that the latter will participate increases.

Similarly, the variables *SavingsLow*, *TestDebt*, *KnowledgeCrowdfunding*, *TrustCrowdfunding* and *FamilyRelationship*, help explain why the individual invests in a crowdfunding campaign. However, it is not possible to affirm that they are the only factors that influence their decision. The coefficients associated with the variables *KnowledgeCrowdfunding* and *FamilyRelationship* have a positive sign and are not significant; therefore, there is not enough statistical evidence to suggest that

they help explain the dependent variable. Whereas, the variables *TestSavings2*, *TestSavings1* and *TrustCrowdfunding* help explain the individual adopting herd behavior in a crowdfunding campaign.

## CONCLUSIONS

The research hypothesis states that “herd behavior prevails in the decision-making of investors in a crowdfunding campaign.” In this sense, according to the statistical information collected, of the individuals who responded having financed a crowdfunding project, 57% indicated that the reason for having funded the project was its popularity within the platform, and this proportion is significant with at least 90% of confidence. Consequently, it can be inferred that there is statistical evidence to affirm that herd behavior prevails in the individuals belonging to the study sample.

Regarding the *TestSavings* variable, the coefficient associated with the *TestSavings2* variable is negative and significant; therefore, the people who selected the highest performance option have a lower probability of financing a crowdfunding project. In general, it can be inferred that people with little financial knowledge have a higher probability of following herd behavior. Likewise, a priori, it can be inferred that the variable *TestDebt* can capture the debt management preferences that an individual has. In this sense, the variable *TestDebt4* represents those individuals who choose long-term financing, which entails a higher cost of credit. Therefore, a positive relationship between the choice of long-term debt repayment and low financial knowledge may prevail, which makes individuals more likely to adopt herd behavior. Finally, the level of trust in the opinions or comments expressed on the Internet is another element that has a positive impact on the financing of a popular crowdfunding project. The individuals who trust or take as a reference to the opinions or information contained on the Internet are likely to finance a popular crowdfunding project.

## APPENDIX: ELECTRONIC SURVEY ON THE HABITS OF USE OF CROWDFUNDING PLATFORMS

### A. General information

1. What is your sex?  
 Female  
 Male
2. What is your current marital status?  
 Married  Widower/Widow  Divorced  Separated  Single  Union free
3. In which state of the Mexican Republic do you reside?  
 \_\_\_\_\_
4. What is the highest school level you have completed?  
 Elementary school  Secondary school  High school  Bachelor's degree  
 Postgraduate  None
5. Do you have children?  
 Yes  No
6. How many children do you have?  
 \_\_\_\_\_

### B. Savings Mechanisms

7. What is your approximate monthly income?  
 a) Less than \$ 10,000  
 b) Between \$ 10,500 and \$ 15,000  
 c) Between \$15,001 and \$25,000  
 d) Between \$25,001 and \$40,000  
 e) Between \$40,001 and \$60,000  
 f) Between \$60,001 and \$80,000  
 g) Greater than \$ 80,000
8. What is your approximate monthly savings?  
 a) Less than \$2,500  
 b) Between \$2,500 and \$5,700  
 c) Between \$5,701 and \$11,500  
 d) Between \$11,501 and \$17,300  
 e) Between \$17,301 and \$28,000  
 f) Between \$28,001 and \$43,000  
 g) Greater than \$43,001
9. Are you financially independent?  
 a) Yes, I am financially independent.  
 b) I have my income, but I still need help.  
 c) I depend on someone else almost entirely.  
 d) I depend on someone else entirely.
10. What type of housing do you live in?  
 Department  
 House  
 Other
11. In what situation is your home?  
 The place is own  
 The place is rented  
 Pay some credit  
 With family / friends  
 Other: \_\_\_\_\_



12. Do you currently have a debt?

- I have no debts
- a) Less than \$ 3, 000.  b) Entre \$3, 000 and \$ 6,000.  c) Entre \$6,001 and \$15,000.
- d) Between \$15,001 and \$25,000.  e) Between \$ 25,001 and \$ 40,000.
- f) Between \$40,001 and \$60,000.  g) Greater than \$ 60,000.

13.- Are you in the habit of saving?

- a) Yes, I save a part of my income.
- b) Sometimes I save, but later I spend it.
- d) No saving.

14. What are the reasons why you don't save?

- a) My income is very low, I can't save.
- b) I do not know how to manage my income.
- d) I can't help but spend my total income.
- e) Other.

15. What do you motivate saving?

- a) Invest to generate more income.
- b) Buy me something I like.
- c) Buying a property.
- d) Aging
- e) Go on vacation.
- f) Invest in my studies.
- g) Other.

16. Suppose you have a \$ 1,000 savings fund, which return on saving is best for you?

- a) 6% annual.
- b) 1% monthly.
- c) I am indifferent
- d) I do not know.

17. Suppose you want to purchase an object with a cost of \$ 5,000, how would you prefer to pay?

- a) Weekly for many weeks.
- b) Monthly but in a few months.
- c) Depending on how you can (sometimes a lot, sometimes little or even nothing).
- d) Cash on delivery; all at once.

**C. Use of technologies.**

18.- How often do you usually access the Internet?

- a) All day.
- b) Several times a day.
- c) Several times a week.
- e) Sometimes in the month.

19.- Which Internet Service do you use most frequently?

- a) Browse the web
- b) E-mail
- c) Financial services management (payments, transfer, investments, among others)
- d) Consultation of social networks.
- e) Make purchases online.

20.- Do you feel confident in providing your information online?

- a) A lot.
- b) Enough.
- c) Little.
- d) Nothing.

21.- In the last month, have you consulted other people's opinions or comments made on the internet about any product or service?

- a) Yes, and I give you high confidence.  
 b) Yes, but they don't inspire much confidence.  
 c) No.

#### D. Use of "Crowdfunding" platforms

22. Have You Ever Invested Through "Crowdfunding"?

- Yes  
 No  
 I am currently considering it.

23.- Select the term you know best:

- |  |  |
|--|--|
| <input type="checkbox"/> a) Crowdfunding.                  | <input type="checkbox"/> b) Crowdfunding platform. |
| <input type="checkbox"/> c) Crowdsourcing.                 | <input type="checkbox"/> d) Crowdlending.          |
| <input type="checkbox"/> e) Investment-based crowdfunding. | <input type="checkbox"/> f) Crowdfunding campaign. |
| <input type="checkbox"/> g) Loan-based crowdfunding.       | <input type="checkbox"/> h) Initial capital.       |
| <input type="checkbox"/> i) Donation-based crowdfunding.   | <input type="checkbox"/> j) Risk analysis.         |
| <input type="checkbox"/> k) Return on investment.          | <input type="checkbox"/> l) Colateral              |
| <input type="checkbox"/> m) Payment capacity.              | <input type="checkbox"/> n) Credit rating.         |
| <input type="checkbox"/> g) Shadow bench.                  |  |

24. Would you consider Crowdfunding as an option to obtain financing?

- Yes I have already done it.  
 Yes, I am thinking it today.  
 Do not  
 I do not know

25.- Do you think that the population in Mexico are prepared for this new type of online collective financing?

- a) Yes.     b) No.     c) It can be.

26.- Regarding Crowdfunding would you say that:

- a) I have extensive knowledge of how the instrument works.  
 b) I have general knowledge of the instrument.  
 c) It is the first time that I use it.  
 d) I don't know what it is.

27.- Regarding Crowdfunding with which of these descriptions do you feel most identified?

- a) I am not interested in Crowdfunding.  
 b) I am not normally attentive to crowdfunding platforms, and very rarely do I pay attention to it.  
 c) I consider myself an observer with some interest in Crowdfunding but, I am not very active.  
 d) I follow a crowdfunding platform; I am interested in the phenomenon, I pay attention to it, but I have not yet actively supported any crowdfunding project or campaign.  
 e) Crowdfunding interests me. I support or have supported a crowdfunding campaign, but I do it sporadically.  
 f) I usually support and participate in all kinds of crowdfunding projects or campaigns.  
 g) I consider myself quite active.  
 h) I not only support crowdfunding projects but I also actively promote the participation of other people.  
 i) I consider myself quite active, and I continuously encourage my friends and acquaintances to join and support crowdfunding projects.  
 j) None of these phrases.

28.- Have you been disappointed with any Crowdfunding project?

- a) Yes.     b) No.     c) I prefer not to answer.

29.- Imagine that you are invited to support with money a Crowdfunding project that you find interesting and that generates confidence, ¿what situation defines you best?

- a) I usually invest in the Project
- b) I think about it a little bit, and it is quite likely that I will invest.
- c) I evaluate the risk of the project and I am quite selective.
- d) I don't usually collaborate with money.
- e) I do not know.

30.- Approximately how many projects have you financed through "Crowdfunding" in the last two or three years?

- a) 1.
- b) 2 or 3.
- c) 4 or more.
- d) None.

31.- Of the Crowdfunding project (s) that you financed, what was the average amount of your contribution?

\_\_\_\_\_

32.- For the last project you financed, please indicate if any of the following circumstances occurred:

- a) The promoters of the project included friends or family.
- b) In the project I had someone I knew, but without a relationship of friendship or family.
- c) It can be said that he did not know the people promoting the project.
- d) I do not know.

33.- What element do you consider less important when financing a project?

- a) The interest rate offered is attractive.
- b) The project is profitable for more anchors.
- d) You identify with the purpose of the project.
- e) It is a popular project on the crowdfunding platform.
- f) You have previously funded projects of this kind.
- g) None.

34.- What was the central aspect that motivated you to finance a crowdfunding project?

- a) Detailed information that explains what the project consists of.
- b) Financial information of the project.
- d) Opinion of other users of the collective funding platform.
- e) Project popularity (number of investors already supporting the project).
- f) None.

35.- Have you ever considered not supporting an interesting "Crowdfunding" project for you because it generated mistrust?

- a) Yes.
- b) No.
- c) I do not know.

36.- What are the aspects that you can personally mistrust in a "Crowdfunding" project?

- a) Low popularity of the project.
- b) Little information describing the project.
- d) Lack of financial information on the project.
- e) Negative opinions of people on the funding platform.

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PART II

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# Enterprise Modelling: Innovation and Technology



# Entrepreneurial Epistemologies and Design-to-Market Modelling: A Latitudinal Discussion

*Ananya Rajagopal*

## INTRODUCTION

The start-up enterprises (SUEs) tend to maintain a posture of strategy development and implementation by means of maintaining an equilibrium between the market exploitation and exploration (Lee and Kreiser 2018). In this equilibrium, SUEs orient their unique selling proposition to satisfy the needs of ambidextrous (B2B and B2C) market segments. Though theories in entrepreneurship focus on capitalistic models such as profit, acquisitions, technology, and innovation; these enterprises, in reality, are based on developing design-to-market innovative products and services and consumer education (Stewart et al. 2016). Entrepreneurial research on this subject has evolved over prominent entrepreneurial theories that address entrepreneurial knowledge, market ecosystem, economic growth,

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creativity, and continuous learning platforms to support entrepreneurial dynamics (Rajagopal 2020).

In the classical school of thought, Marshall (1948), emphasizes that entrepreneurship is based on the synergy of capital-labor cohesive economic theory. Marshall also discusses the pattern of consumer preferences and technology innovations for accelerating the entrepreneurial productivity. Marshallian theory critically reviews the role of economic environment toward entrepreneurship development. The theory outlines the importance of enterprise management during the stage of market uncertainty and consumer dynamism. Although it is a classical contribution of the theory, such situations affect the entrepreneurial growth in the contemporary economic environment. Taking into consideration the foundations laid by Marshall's classical school of thought, the attention-based-view (ABV) of a firm outlined by Hambrick and Mason (1984) emphasizes that the decision-makers of SUEs lay their attention on myopic issues leading to an impact on the strategic choices of the firm. Limitations in the economic and human resources of a SUE are attributed to the myopic vision of the decision-makers leading to the bigoted strategies that hinder the organizational growth process (Stea et al. 2015).

Schumpeter (1991) argues that entrepreneur is a pivot to mobilize new business by developing new products or to make existing products in a new perspective. Therefore, entrepreneurship, in context of a dynamic marketplace, may be considered as creativity and as a creative disruption to pave the path for new products. Schumpeter defines entrepreneur as an economic entity, who takes over the center stage of socio-economic development and evolves against organized competition by exhibiting his creative abilities and innovative differentiation (Rajagopal 2020). Schumpeterian theory differs from the Marshallian theory, and emphasizes on the factors of production comprising land, labor, capital, managerial know-how, and technology as key determinants to mark the economic progress. Schumpeter also focuses on entrepreneurial equilibrium explaining the critical factors of innovation, technology, production, services, and consumer value. His theory prompts capitalism where entrepreneurship is considered as a contractual trade to support large industries (Rajagopal 2020).

Based on the fundamental principles laid by Schumpeter (1991), Kirzner (1997), considers an entrepreneur to be the main component that drives organizational growth in the micro-scenario, and economic



progress in the macro-scenario, as SUEs offer innovation and undertake economic activities at the bottom of the pyramid consumer segments. SUEs grow in emerging economies by adopting a risk-taking approach in the hope of gaining market share by offering frugal- and disruptive-innovation products (Ocasio and Joseph 2005). Kirzner emphasizes that entrepreneurial equilibrium is based on two major factors: innovation, and market economy. He claims that market competition alerts entrepreneurs and offers cues to establish near-equilibrium even in volatile market conditions (Rajagopal 2020). Therefore, this research proposes a conceptual approach based on theories of Schumpeter, Marshall, Hambrick and Mason, and Kirzner to develop marketing strategies for SUEs based on design-to-market approach. In previous studies, the design-to-market concept has not been explored in the context of SUEs and their strategy building process for frugal innovative products. Hence, this study significantly contributes to the existing literature by linking entrepreneurial epistemologies with the design-to-market strategies through latitudinal discussion comprising of selected emerging markets such as India, China, Brazil, and Mexico.

SUEs are considered the backbone of emerging economies but they face many difficulties due to limited resources, economic-political agendas, and financial institutions lack trust in SUE. This research proposes a conceptual approach, based on classical and neo-classical theories, to develop marketing strategies for SUEs based on design-to-market approach. This study significantly contributes to the existing literature by linking entrepreneurial epistemologies with the design-to-market strategies through latitudinal discussion comprising emerging markets such as India, China, Brazil, and Mexico. In view of the findings of the study, it can be stated that the low-cost transaction-based approach of SUEs offers competitive end-user prices, and builds brand awareness and trust among consumers. SUEs promote market-based pricing approach in order to maintain a balanced price-quality relationship leading to enhanced organizational performance.

## LITERATURE REVIEW

Developing effective marketing strategies in SUEs poses a challenge to the intellectual capacity (Wang and Tarn 2018) of the leaders of the organization. The development and implementation of strategies is a

dyadic function of organizational design and business model of the enterprise. Therefore, it can be inferred that the organizational design of an enterprise determines its functional and strategic needs like marketing, resources optimization, and functional attributes that guide the firm toward innovation, technology, manufacturing, and marketing mix (Visscher et al. 2010; Worren 2016). Building effective organizational design is a major challenge for SUEs as they tend to have an exploitative and explorative growth and strategy implementation behavior. This dyadic alliance between growth and strategy is one of the key components in determining the rate of success or failure of the SUE in the marketplace. SUEs are high-tech and knowledge-intensive (Raza-Ullah and Eriksson 2017) firms with limited resources leading to develop pro-market organizational designs. These enterprises tend to co-create organizational and business designs by utilizing customer experience to determine the power of brand value to influence market (Venkat and Kerimcan 2013; Millspaugh and Kent 2016). Therefore, the research studies discussed above significantly motivate the theoretical perspectives in carrying out the proposed objectives of this research and analyze relevant dimensions.

SUEs tend to lean toward developing short-term marketing strategies to gain immediate market share, but they lack tactics and long-term strategies to sustain against the market dynamism. Chikweche (2013) has emphasized that small enterprises can develop sustainable business, and increase their market share and profitability across differentiated geodemographic segments, provided these enterprises consider to be strategic, and integrate multi-channel operations for delivering their products and services within a minimum viable segment (Rajagopal 2020). The attributes of marketing strategies discussed in the previous studies provide considerable methodological inputs in developing research design for this study. Generally, SUEs are an outgrowth of local business environment. Hence, they have a profound understanding of the socio-cultural and ethnocentric consumer perception, which helps them understand the consumer buying behavior. The strategic decision-making ability of SUEs is crucial for their survival and growth in the emerging economies (Huang 2009). The strategic decision-making ambiance of SUEs is ethnic to a large extent as they are considered to be family business firms. These enterprises develop their business propositions and strategic decisions through user-generated contents and social media in order to stay consumer-centric (Huang 2009; Atwood and Morosan 2015; Bertol et al. 2017).

SUEs implement marketing strategies niche, which are focused on the minimum viable segments. This helps the micro and small enterprises to carry out their business operations in narrow market segments and gain market share and profitability in a short span of time (Nasir and Karakaya 2014; Hellwig et al. 2015). The minimum viable segments are oriented toward transaction-based approach, which involves a reduction in the cost of business deals and optimization of end-user price to gain relative advantages over the competing products and services. In this approach, SUEs engage in experimenting different pricing approaches with an aim to control costs and increase profits, which often runs into unforeseen inconsistencies (Luzzini et al. 2012; Lowe et al. 2014).

### *Conceptualizing Design-to-Market*

SUEs are the foundation of the local industry and serve to the industrial segments through innovation and technology. However, SUEs are oriented toward offering disruptive-innovation products to enhance the customer value and positioning themselves as consumer-centric enterprises. Consumer-centric approach leads the SUE to elevate the customer-company relationship leading to a new way of differentiation and customer value generation (Niininen et al. 2007). SUEs implement the consumer-oriented strategies by linking sensory, innovative, and technological newness to the consumption patterns of the target niche market segments. Innovative and technology-oriented products are perceived as emotional brands and trigger the curiosity and experimentation attributes of the consumers (Marques et al. 2016; Jaeger et al. 2017). Developing consumer-centric approach and determining consumer touch points is an uphill task for most small enterprises with limited resources. Therefore, a major marketing challenge with the SUEs is developing an appropriate business model incorporating product attractiveness, competitive pricing, availability and serviceability, product promotions, and enterprise posture; and creating psychodynamics in the digital space would help SUEs (Blank and Dorf 2012; Mann and Kohli 2012; Rajagopal 2020).

Consumer-centric approach help companies in consumer retention, consumer satisfaction, and improving consumer value by identifying the consumer needs, preferences, and associated use values (Bolton 2004; Rajagopal 2020). Consumer-centric approach canalizes the perceptions of consumers into a trust-based relationship through regular and open

communication with the consumers, flexibility in customization of products and services, and inculcating consumer experience that whets even the most reluctant potential consumers (Niininen et al. 2007). Therefore, SUEs that are successful in implementing consumer-centric approach develop strategies for acquiring consumers, developing buying behavior, and creating consumer value. This approach is largely based on the philosophy of knowing the needs of consumers, developing appropriate products to satisfy consumer requirements (Niininen et al. 2007; Marques et al. 2016). Analyzing the contents of previous studies on consumer-centric approach, the proposition has been derived as:

*P1*: Consumer-centric approach in SUEs leads to demand creation and consumer-value generation towards products and services to build trust-based relationship and repeat buying behavior.

Consumer-centric approach provides the SUEs to analyze affective, attitudinal, situational, and emotional dynamics of preferences their consumers in the minimum viable segment. Implementation of strategies pertaining to consumer-centric approach are specific to consumer segments and their consumption patterns. These approaches are linked to sensory, innovative, and situational appropriateness of consumption, which helps in determining the perceptual and emotional associations of consumers with specific brands (Jaeger et al. 2017; Rajagopal 2020). SUEs that use digital platforms as the foundation of their operations, develop consumer-centric design by diffusing comprehensive knowledge to identify the underlying consumer needs and value generation propositions (Rajagopal 2020). Consumer-centric design helps SUEs in gathering and grouping the consumers based on their cognitive attributes, converting them into functional business models, and implementing each concept strategically to deliver sustainable consumer value (Chi 2009).

### *Marketing Strategies*

Marketing strategies in SUEs are often restricted by the lack of economic resources, lack of marketing expertise, and niche-based market segment. In order to achieve an impact on consumer-enterprise relationship, the marketing strategies need to be co-created based on consumer engagement, corporate values, and competitive posture. This tactic will help SUEs in formulation and implementation of long-term strategies in

order to gain market share and profitability across differentiated and rapidly growing market segments (O'Dwyer et al. 2009; Chikweche 2013). Effective convergence of marketing strategies and segmentation process of consumers is based on the analysis of the profiles of target consumers, competitive differentiation, and value-based positioning strategy (Rajagopal 2020). Hence, consumers within the minimum viable segment can be served effectively by reducing the risk of operational cost and supply chain management leading to optimization of costs and profitability within the consumer segment (Carson and McCartan-Quinn 1995; Woodall 2007; Baker 2008).

As discussed above, SUEs lack experience in development and implementation of marketing strategies and tend to experiment different strategies in the pre-determined minimum viable segment. This is a learning process for SUEs, in which they experiment developing pro-competition marketing strategies, and improve the product attributes through the involvement of consumers in the process of ideation, designing, and creation of the marketing and organizational capabilities (Jin and Cho 2018). The continuous learning process helps to track failures and modify product attributes to serve the needs of the consumers. The learning process improves innovation capability across innovation types, which improves the organizational performance as well (Govindarajan and Trimble 2005; Rajapathirana and Hui 2018). The long-term marketing strategies may also involve third-party intermediaries and multi-channel operations to integrate logical function of delivering products and services within and outside minimum viable segments (Paswan et al. 2011; Kotler and Achrol 2012). The critical appraisal of the above literature leads to the following proposition:

*P<sub>2</sub>*: SUEs gain competitive advantage through co-creation of marketing strategies within a minimum viable segment to promote organization growth.

One of the major challenges for SUEs is to explore potential consumers, develop minimal viable segment, and implement design-to-market strategies to drive cost-effectiveness and organizational growth (Solberg and Durrieu 2008; Jin and Cho 2018). In order to explore potential consumers, SUEs need to explore co-creation strategies to acquire consumers, and generate awareness, interest, and desire toward innovative products of the enterprise. Acquiring new consumers unbridles a series of strategies and tactics for creating demand through MVS,

retaining existing consumers to provide growth, and identifying transitioning consumers to leverage competitiveness (Blank and Dorf 2012). SUEs can grow competitive with innovative marketing strategies associated with technological development, and co-creation of products and services. Marketing strategies of these enterprises should be focused on geodemographic segments across temporal dimensions to stay sustainable and competitive in the marketplace (O'Dwyer et al. 2009; Rajagopal 2020).

### *Transactional Dynamics*

SUEs generally follow market-based pricing process, contrary to the scientific pricing models, due to limited resources and myopic strategic approach (Rajagopal 2020). SUEs in emerging economies act as feeder industry for providing fast-moving-consumer-goods (FMCG) to the large industrial segments, and base their unique selling proposition on high-tech low-cost innovative products. These consumer-centric enterprises base their differentiation propositions on price-quality relationship and sustainability capacity to meet the dynamic consumer needs (Thakkar et al. 2008). However, the smart, low-cost enterprises invest in long innovation lifecycles, target mass consumers with price-led business models, and improve the delivery efficiency to make their products omnipresent (Liozu and Hinterhuber 2012; Olbrich and Jansen 2014; Child et al. 2017; Rajagopal 2020). SUEs tend to develop transaction-based approach aimed at cost-reduction, price optimization, and serviceability. The low-cost transaction approach of SUEs results in a closer co-creation of operations with consumers with an aim to optimize the price-quality relationship and provide relative advantages over their products and services. The transaction-based approach helps SUEs in developing product portfolios and consumption preferences (Hobbs 1996; Luzzini et al. 2012). In view of the above discussion, the proposition can be formulated as stated below:

*P*<sub>3</sub>: Low-cost transaction-based approach leads to reduction in cost, optimization of end-user price, and increase in serviceability of innovative products and services of SUEs.

Frugal- and disruptive-innovation products have led the way for the SUEs. According to Spulber (2002), SUEs make use of these new transaction technologies at low cost with the aim of offering products and

services to the ambidextrous market segments (B2B and B2C). Disruptive innovations can be identified in the services and product segments, which add value to the existing business models. Uber taxi application on mobile devices, which offers customer value in reference to cost and convenience over the existing public transport paradigms, can be cited as an example of disruptive-innovation in context of services (Rosenbalt et al. 2017; Rajagopal 2020). Decrease in the transaction cost of SUEs triggers price-promotion opportunities, which affect both consumer prices and reference prices for new and innovative products. Price-promotion opportunities allow SUEs to control costs and manage inconsistencies in pricing and promotion dyadic effect (Lowe et al. 2014). However, limited resources and niche markets develop consumption and investment risks in the long run (Puopolo 2017).

## THEORETICAL MOTIVATION AND RESEARCH MODEL

SUEs in emerging markets aim to generate consumer value by offering innovative products and unique consumer experience. It is very difficult for a SUE to forecast the consumer value as it is a dynamic proposition and based on customer perceptions associated with the new and unfamiliar brands (Holbrook 1986; LeBlanc and Nguyen 1999). Hence, consumer value is considered as a trade-off between the perception of cost-benefit and the price-quality relationship. Value of the innovative design-to-market products and services is directly proportional to their quality, and inversely proportional to the end-user price (Babin et al. 1994; Rust and Oliver 1994). According to the theory of consumption values discussed by Sheth et al. (1991), five basic consumption values drive the consumers to choose products/services are as listed below:

- Functional value (based on economic utility perceived by the consumers such as price, reliability, and durability),
- Social value (consumers perception of peer influence and peer acceptance),
- Emotional value (customer satisfaction, arousal, and social self-concept),
- Epistemic value (ability of the product to provide novelty and awareness and moulding consumer's behavior toward innovative products), and

- Conditional value (socio-cultural values, consumption habits, pre-coded consumer bias, and many other).

The SUEs also attribute consumer value to the effective implementation of marketing strategies and co-creation of products and services. As discussed by Cravens et al. (1999) effective marketing strategies can be developed through branding, efficient pricing, and transaction-based approach that includes efficient distribution channel and technology and innovation. These attributes guide the SUEs toward developing a synergy between marketing strategies and product innovation. Innovation along with co-creation in a mutually conducive environment leads the SUEs toward co-ideation, co-designing, and design-to-market strategies aimed at increasing the organizations utility performance and growth (Gilbert 1994; Hsu 2016).

## LATITUDINAL DISCUSSION

For the past few decades, innovation is considered as the foundation of domestic growth in emerging markets. However, it has been observed that despite the benefits of innovation-based growth, SUEs in emerging markets struggle to grow and expand organically. This has been observed across various emerging markets, some of which have been discussed in this section. In order to understand the success of SUEs in emerging markets, a close understanding of emergence of disequilibrium, management of knowledge transfer, domestic pro-small business public policies, and modernization of family business firms is imperative. Emerging markets are coming up with innovative ideas to bridge the gap in the market segments is a challenge. However, SUEs that succeed in bridging this gap face enormous difficulties in sustaining an organic growth in the emerging economies. The factors affecting the life cycle of the SUEs have been discussed in this section through a latitudinal discussion on four emerging economies.

### *Entrepreneurial Perspectives in India*

During the decade of 1990–2000, Indian economy witnessed disruptive changes in terms of local economy, globalization policies, and privatization approach leading to the creation of many SUEs in the sectors of IT, ethnic products, and non-agricultural products (Chhabra



et al. 2020). Information technology (IT) is one of the sectors with the highest number of SUEs as they have based their foundations on the new transnational capitalist class (Upadhy 2004) and have led the emergence of disequilibrium (Welter and Smallbone 2003) and exogenous changes (Schumpeter 1934; Kirzner 1973). The growth of Indian SUEs, especially in IT sector, has been exponential and can be attributed to the strategic manipulation of resources to generate consumer value. Also, the strategic orientation of leadership and management through collective decision-making (Rajagopal 2020) process leads to innovative design-to-market model. This model enables the reconfiguration of resources of the SUEs to fit the needs of the business environment and to identify consumer preference (Wiklund and Shepherd 2003). In view of the above discussion, it can be stated that disruptive economic changes in India have facilitated the creation and sustenance of SUEs with focus on manipulation of resources to attain design-to-market approach.

### *Entrepreneurial Outlook in Brazil*

The concept of entrepreneurship in Brazil and Latin American countries is based on informal businesses as they tend to nurture the attributes of flexibility, adaptability, and efficiency in supply chain management. The concept of informal business, which forms a part of SUE sector within the industrial segmentation, leads to customer value creation, diversification of economic activities (Gurău et al. 2015), and easy access to raw materials for the designing and producing innovative products and services. The informal sector in Brazil needs administrative and regulatory measures in order to maintain the low end-user price of the innovative products and services (Dana 2012). This behavior of informal businesses is attributed to many domestic economic factors such as barriers to easy access to small business loans, high administrative fees for regularization, and bureaucratic procedures. Such behavior of entrepreneurs is also based on low literacy rates, biasness in the credit approval process, and stability in the financial sector (Maloney 2004; Straub 2005; Marques et al. 2018). Therefore, based on the above discussion, the informal businesses lead the way of SUE in Brazil, and strict domestic measures are required to formalize the informal businesses.

### *Entrepreneurship in China*

In the recent decades, there has been an increase in the SUEs in China. This exponential growth in Chinese SUEs can be attributed to the domestic transaction cost and feasibility in finding competitive markets. These SUEs base their operations on the theory of input-process-output model (Hitt et al. 2011), which embed various factors critical to the sustainable growth of SUEs. The factors based on the above-mentioned theory include environmental factors, resource-based view of the firm, and strategic entrepreneurship, aimed at optimizing the resources and making the process efficient in order to satisfy the latent and incipient needs of the consumers (Sirmon et al. 2011; Chen et al. 2013). Chinese entrepreneurs have evolved from creative destruction to innovative creation (Harbi and Anderson 2010), leading to an increase in the creation of rural infrastructure, jobs, and living standards of the entrepreneurs (Naminse et al. 2019). This change in the ideology of entrepreneurship has been an outgrowth of the open-door policy adopted by the Chinese government over the past three decades aimed at increasing profits and reducing the associated social and political risk (Yang 2004; Smallbone and Welter 2012). Hence, based on the findings of the studies discussed above, the SUEs in China have succeeded based on family social structure and informal social interactions in the business environment.

### *Entrepreneurial Growth in Mexico*

As any emerging market, SUEs make up a vast majority of the industrial economy in Mexico, making them the foundation for employment and domestic production opportunities. Most of the start-ups in Mexico are family-business-firms (FBFs) leading to a more leader-centered decisions and traditional owner-employer relationship (Rajagopal 2020). The path from ideation to concept design to implementation of marketing strategies is generally defined by a single person, making it difficult for the SUE to sustain in the market even though the products/services offered are innovative. Hence, adapting a design-to-market approach is difficult in Mexican SUEs given the presence of heterogeneous market, lack of knowledge of modern organizational structures, and paucity in the timely adoption and implementation of innovation. However, new generation

of SUEs is emerging in the economy that base their business proposition on knowledge management and collective decision-making process in order to satisfy the latent and incipient needs of the consumers (Fink and Ploder 2009; Perez-Soltero et al. 2016). Mexican SUEs, as in any other emerging market, suffer to grow after a certain period, and tend to get into the decline stage of the life cycle sooner than the ones in developed economies. This decline in their growth is attributed to many reasons such as lack of resources, lack of subsidies and governmental support, few financial organizations willing to offer small business credits to the emerging firms, among others.

## GENERAL DISCUSSION

SUEs are the backbone of emerging economies. However, they face innumerable challenges to succeed and expand in the marketplace. These enterprises promote frugal- and technology-led innovation to bridge gap in the consumer needs vs market offer. In order to do so, SUEs tend to operate in minimum viable segment by creating product awareness, knowledge-led market practices, low-cost transaction-based approach, and value for money. The low-cost transaction-based approach of SUEs offers competitive end-user price and builds brand awareness and trust among consumers. SUEs promote market-based pricing approach in order to maintain a balanced price-quality relationship leading to enhanced organizational performance. As discussed in this study, start-ups promote their unique selling propositions in minimum viable segments in order to gain market share and brand loyalty. It is observed that the optimization of distribution operations in MVS supports the cost-effective and market-competitive practices.

Once SUEs survive the introduction stage of their life cycle, managing the growing competition poses a challenge in their manufacturing and marketing channels. In this stage, the key to success of SUEs lies in the effective management of leadership and decision-making process. The study reveals that most SUEs demonstrate centralized leadership and implement top-down strategy, leading to employee demotivation. Hence, SUEs need to transform the traditional leadership pattern from individualistic decision-making process to collective decision-making. Successful transformation will facilitate employee engagement, better

understanding of market forces, and effective implementation of operational and marketing strategies. Effective management of frugal innovation will lead to accuracy in price-quality relationship leading to customer satisfaction and brand loyalty. Therefore, SUEs need to develop and implement programs to monitor quality to increase market performance and overcome frequently faced issues such as lack of brand awareness, stagnated market share, and decrease in working capital.

As discussed in this study, SUEs are considered the backbone of emerging economies but face difficulties due to limited resources, economic-political agendas, lack of trust of financial institutions in SUEs, etc. Despite these limitations, SUEs tend to offer demand-led innovations, concept tests and prototypes, and high price-quality relationship as compared to the large companies prevailing in the industrial segments. Therefore, it is recommended that SUEs should establish strategic outlook for gaining differentiation, competitive advantage, and collective leadership in the MVSs. SUEs that invest in exploring latent and incipient demand can control their market dynamics and enhance market shares by providing value-driven products to the niche-based consumers. SUEs should develop a model to fit product-price-quality pyramidal relationship to create product attractiveness and market-competitiveness within and outside minimum viable segments (Rajagopal 2020). Such model will offer enhanced customer value leading to trust and loyalty of customer toward the new generation emerging enterprises.

Due to centralized leadership and individualistic decision-making process, SUEs face enormous challenge in achieving efficient knowledge-transfer process through consumer awareness and consumer education. SUEs that succeed in propagating the innovative ideas and prototypes tend to promote the co-creation of new products achieving unique brand proposition and differentiation across the existing market segments. One of the issues observed in the study relates to the organic growth of the SUEs. In order to overcome this issue, SUEs should explore sustainable industrial alliances and act as the foundation of the established industries by offering them frugal innovation products.

## FUTURE RESEARCH

As discussed in this research study, SUEs in emerging markets tend to outgrow from family businesses and lack in a formal and systematic development and implementation of their business model. These firms are

based on traditional, leader-centered decision making process with low-flexibility employee engagement and resource management. In view of the attributes highlighted in this research, future research can be pursued on improving the leadership pattern and implementing collective decision-making process to drive high employee engagement. The future research can also be focused on improving the entrepreneurial leader's abilities for effective management of strategies in emerging markets.

Future research can be oriented toward adapting best practices from large companies established in the industrial segments and exploring the possibilities of implementation of strategic innovation model for execution of successful marketing and new product development strategies. As discussed in the study, SUEs need to understand the latent and incipient consumer needs. Future research can also be directed toward exploring modern strategies such as co-creation and crowdsourcing to attain design-to-market products and services for both B2B and B2C market segments. Price-quality relationship is associated with consumer knowledge, consumer awareness and understanding of market competitiveness. Hence, future research may can be focused to explore consumer-maker dynamics, transaction-based approach, price-quality relationship based on voice-of-consumers (VoC) identified through crowdsourcing.

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# Entrepreneurial Behavior, Attitude, and Framework Conditions: An Analysis of Efficiency, Factor, and Innovation-Driven Three Asian Economies

*Ravi Kiran and Abhimanyu Goyal*

## INTRODUCTION

Entrepreneurship has emerged as a growing trend contributing to prosperity and economic growth of a nation. Entrepreneurship has enthused various researchers to focus on different aspects of Entrepreneurship. Entrepreneurial Behavior, Entrepreneurial Attitude, Entrepreneurial Motivation, and Entrepreneurial Intentions are the buzzwords today forcing many institutions to impart entrepreneurial education. Moving from traits model to situational models and then to intention-based models of entrepreneurship, there has been a constant focus on identifying the factors that shape the entrepreneurial decision. Predicting

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entrepreneurial activities by modeling only situational or personal factors offered little explanatory power and smaller predictive validity.

Why people demonstrate entrepreneurial behavior and what factors affect their decision to become entrepreneurs has been and still remains a topic of intense research interest. There is extensive literature highlighting intentions as best predictor of planned behavior. Undoubtedly, new businesses take both time and ample amount of planning to sprout. In this regard, entrepreneurship is a type of planned behavior (Bird 1988; Katz and Gartner 1988) for which intention models are preferably best suited.

There have been studies on regional entrepreneurial ecosystems covering different aspects of the entrepreneurial ecosystem like culture, formal institutions, infrastructure and amenities, IT, Melting Pot, demand, etc. These studies cover the contextual features of socio-economic, institutional, and information environment in cities. Thus, it is important to cover Entrepreneurial Behavior, Attitude, and Framework Conditions in cross-country context. Global Entrepreneurship Monitor (GEM) Survey categorizes the world economies into three categories, viz., Factor-Driven Economies, Efficiency-Driven Economies, and Innovation-Driven Economies. This paper is focusing to examine Entrepreneurial Behavior, Attitude, and Framework Conditions in three countries, viz., China, India, and Japan. China is categorized as Efficiency-Driven Economy, India as a Factor-Driven Economy, and Japan as an Innovation-Driven Economy. The study tries to identify whether the entrepreneurial behaviors and attitudes differ across China, India, and Japan. It also endeavours to find out whether the entrepreneurial framework conditions differ across China, India, and Japan.

The present study aims to explore why some countries show high levels of entrepreneurship engagement than other countries using a cross-country analysis. This is based on Entrepreneurial Behavior and Attitude and Framework Conditions data taken from Global Entrepreneurship Monitor (GEM). It classifies China as an Efficiency-Driven Economy, India as a Factor-Driven Economy, and Japan as an Innovation-Driven Economy. The ANOVA Analysis of Entrepreneurial Behavior and Attitude factors yields 11 significant factors, namely: Perceived Opportunities, Perceived Capabilities, Entrepreneurial intentions, Total early-stage Entrepreneurial Activity (TEA), Entrepreneurial Employee Activity, Motivational Index, Female/Male TEA, High Job Creation Expectation, Business Services Sector, High Status to Successful Entrepreneurs, and Entrepreneurship as a Good Career Choice. ANOVA Analysis

of Entrepreneurial Framework Condition factors yields six significant factors, namely: Basic school entrepreneurial education and training, Post-school entrepreneurial education and training, R&D transfer, Commercial and professional infrastructure, Physical and services infrastructure; and Cultural and social norms.

## LITERATURE REVIEW

There are a plethora of studies on Entrepreneurial Behavior and Attitude and Entrepreneurial Framework Conditions. However, there are limited studies covering the cross-country analysis aspect of Entrepreneurial Behavior and Attitude and Entrepreneurial Framework Conditions. A review of these past studies is essential to proceed further in the research. Krueger et al. (2000) compared two intention-based models that include Ajzen's theory of planned behavior (TPB) and Shapero's model of the entrepreneurial event (SEE) by using a competing models approach and comparing the regression results of the two models. As per Ajzen's model intentions depend on perceptions of personal attractiveness, social norms, and feasibility while as per Shapero's model intentions depend on perceptions of personal desirability feasibility, and propensity to act. Results offered strong statistical support for both the models. The study found that Attitudes influence behavior by their impact on intentions and Intentions are the single best predictor of any planned behavior, including entrepreneurship.

Liñán and Chen (2009) also uses Ajzen's TPB to build an entrepreneurial intention questionnaire (EIQ) and analyze its psychometric properties. The entrepreneurial intention model is then tested on a 519-individual sample from two rather diverse countries: Spain and Taiwan; and specially considers the role of culture in explaining motivational perceptions. Results of the study indicated that EIQ properties are satisfactory and strong support for the model was found. Relevant insights were derived about how cultural values modify the way individuals in each society perceive entrepreneurship.

Van Gelderen et al. (2008) investigated the entrepreneurial intentions of business students by using TPB. From the analysis, entrepreneurial alertness and importance attached to financial security emerged as significant variables that explained entrepreneurial intentions. The study also gives suggestions on how entrepreneurial alertness and apprehensions related to financial security can be worked upon. Buttar (2015)

subsumes social capital into a cognitive entrepreneurial intention model. The study finds that social capital shapes the entrepreneurial intentions of young people through the cognitive infrastructure and contributes in determining the influences of social and cognitive factors on the entrepreneurial intention process.

Torres and Augusto (2019) try to understand the connection between culture and entrepreneurship in proposing and testing complex configurations of culturally endorsed implicit leadership theories (CLTs) and cultural practices that lead to entrepreneurial behavior by studying entrepreneurial intentions (EI) and early-stage entrepreneurial activity (TEA) separately. The study uses secondary data from Globe Leadership and Organizational Behavior Effectiveness (GLOBE) and GEM studies, for gathering data for a sample of 44 countries. The results show that there is no ideal context—the path to stimulate entrepreneurship that works best for one country does not necessarily works the same for other countries. There are multiple paths to achieve the desired outcome. The study expands an understanding of the entrepreneurial process by showcasing the different complex antecedent conditions for EI and TEA; and further suggest the policymakers to invest in the dimensions that enable their society to align with the model that best suits their own culture.

Lewellyn and Muller-Kahle (2016) explore entrepreneurial activity for men and women across 40 countries and propose a configurational approach to explore how effects of different causal conditions are interdependent in explaining gender-specific entrepreneurial activity. Results showed that no single causal element is sufficient for promoting entrepreneurial activity. Instead micro-level attributes of entrepreneurial self-efficacy and opportunity recognition in combination with macro-level business environment formal institutions and national culture create configurations of conditions that lead to high levels of entrepreneurial activity among men and women. Moreover, the causal factors configured in different ways for male and female entrepreneurs.

Martínez-Fierro et al. (2015) analyzed the relationship between entrepreneurial framework conditions with different stages of economic development of countries by using secondary data of National Experts Survey (NES) of the GEM project for 67 countries participating in the edition of 2013. The results validate the existence of relationship between entrepreneurial framework conditions and different stages of economic development of countries. Audretsch and Belitski (2017) focuses on

regional entrepreneurial ecosystems and offer a complex model of start-ups, Regional Entrepreneurship and Development Index (REDI) and six domains of the entrepreneurial ecosystem (culture, formal institutions, infrastructure and amenities, IT, Melting Pot, and demand). Altogether the six domains of the entrepreneurial ecosystem captured the contextual features of socioeconomic, institutional, and information environment in cities. The study uses exploratory factor analysis and structural equation modeling for explaining the variations in entrepreneurship in a cross-section of 70 European cities. The study also supports policymakers and scholars in development of new policies conducive to regional systems of innovation and entrepreneurship and serves as a basis for future research on urban entrepreneurial ecosystems.

Apetrei et al. (2019) illustrate how entrepreneurship may contribute to enhancing economic growth and prosperity by reducing inequality and exclusion. The study proposes a theoretical model by using fsQCA. Further, by assessing the existing relationships between new ventures and reduction of inequalities, they try to find out how entrepreneurial processes may contribute to societal transformations. The findings of the study suggested that sustainable development through entrepreneurial attitude was strongly linked to the existence of inclusive institutions, and avoidance of extractive ones. The study provides a framework for understanding the relationship between entrepreneurship and societal development. Based on the review it was felt that though there are studies on entrepreneurial behaviors and attitude and also on the entrepreneurial framework conditions, however, there is still a need to relate these with countries for a cross-country analysis using uniform parameters and factors as used in GEM Survey across different world economies. Further, categorization of world economies by GEM Survey as Factor-Driven Economies, Efficiency-Driven Economies, and Innovation-Driven Economies will lend depth to these parameters in a cross-country specific context. The present study tries to work on this aspect.

## OBJECTIVES OF THE STUDY

The main objectives for undertaking this research are as follows:

1. To identify whether the entrepreneurial behaviors and attitude differ across China, India, and Japan.

2. To identify whether the entrepreneurial framework conditions differ across China, India, and Japan.

## RESEARCH DESIGN AND METHODOLOGY

### *Sampling and Data Collection*

Data for the study was collected from secondary sources. Data for 3 years, i.e., 2018, 2017, and 2014 was used to achieve the objectives of the study. Secondary Data was collected for two parameters for doing the cross-country analysis, namely as: Entrepreneurial behavior and attitudes and Entrepreneurial Framework Conditions. All the data for various factors used in the study is derived from the GEM Survey comprising of Adult Population Survey (APS) and NES. The present study is only confined to three Asia and Oceania countries, namely, China, India, and Japan.

### *Research Methods*

Research techniques were focused on achieving the objectives of study by using appropriate statistical analysis methods like ANOVA and Post Hoc. Data was analyzed with the help of SPSS.

## ANALYSIS AND INTERPRETATION

Table 7.1 shows the different variables that are used in the study and Table 7.2 shows the description of each variable. The variables are grouped into two categories for the study, namely: Entrepreneurial Behavior and Attitude and Entrepreneurial Framework Conditions, using the original indicators classification of APS and NES surveys of GEM Survey. Entrepreneurial Behavior and Attitude Category has 15 variables or factors in it whereas Entrepreneurial Framework Conditions has 12 variables or factors in it.

## ENTREPRENEURIAL BEHAVIOR AND ATTITUDES

This sub-section deals with the analysis and interpretation part of first category of variables/factors of the study, i.e., Entrepreneurial Behavior and Attitudes.

The results as shown through Table 7.3 depict the ANOVA anal-



**Table 7.1** Variables of the study

	<i>Entrepreneurial behaviour and attitude</i>	<i>Entrepreneurial framework conditions</i>
	Perceived Opportunities	Financing for entrepreneurs
	Perceived capabilities	Governmental support and policies
	Fear of failure rate	Taxes and bureaucracy
	Entrepreneurial intentions	Governmental programs
	Total early-stage Entrepreneurial Activity (TEA)	Basic school entrepreneurial education and training
	Established business ownership	Post school entrepreneurial education and training
	Entrepreneurial employee activity	R&D transfer
	Motivational index	Commercial and professional infrastructure
	Female/male TEA	Internal market dynamics
	Female/male opportunity-driven TEA	Internal market openness
	High job creation expectation	Physical and services infrastructure
	Innovation	Cultural and social norms
	Business services sector	
	High status to successful entrepreneurs	
	Entrepreneurship as a good career choice	

*Source* Author

ysis for three countries, namely, China, India, and Japan; classified by GEM (Global Entrepreneurship Monitor) as efficiency-driven economy, factor-driven economy, and innovation-driven economy, respectively. The ANOVA analysis applied for these three countries will help in analyzing whether there is a significant difference among the three countries for the different entrepreneurial behavior and attitude factors.

Results of ANOVA analysis in Table 7.3 suggest that out of total 15 factors of Entrepreneurial Behavior and Attitude, 11 factors are significant on the basis of  $p$ -value (Some at 1% and other at 5% Level of Significance). The significant factors include perceived opportunities (at

**Table 7.2** Description of the variables used in the Study

<i>S. no.</i>	<i>Variable name</i>	<i>Measure</i>
1.	Perceived opportunities	Percentage of 18–64 population who see good opportunities to start a firm in the area where they live
2.	Perceived capabilities	Percentage of 18–64 population who believe they have the required skills and knowledge to start a business
3.	Fear of failure rate	Percentage of 18–64 population perceiving good opportunities to start a business who indicate that fear of failure would prevent them from setting up a business
4.	Entrepreneurial intentions	Percentage of 18–64 population (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years
5.	Total early-stage Entrepreneurial Activity (TEA)	Percentage of 18–64 population who are either a nascent entrepreneur or owner-manager of a new business
6.	Established business ownership	Percentage of 18–64 population who are currently an owner-manager of an established business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months
7.	Entrepreneurial employee activity	Rate of involvement of employees in entrepreneurial activities, such as developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary
8.	Motivational index	Percentage of those involved in TEA that are improvement-driven opportunity motivated, divided by the percentage of TEA that is necessity-motivated

(continued)

**Table 7.2** (continued)

<i>S. no.</i>	<i>Variable name</i>	<i>Measure</i>
9.	Female/male TEA	Percentage of female 18–64 population who are either a nascent entrepreneur or owner-manager of a new business, divided by the equivalent percentage for their male counterparts
10.	Female/male opportunity-driven TEA	Percentage of those females involved in TEA who (i) claim to be driven by opportunity as opposed to finding no other option for work; and (ii) who indicate the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income, divided by the equivalent percentage for their male counterparts
11.	High job creation expectation	Percentage of those involved in TEA who expect to create 6 or more jobs in 5 years
12.	Innovation	Percentage of those involved in TEA who indicate that their product or service is new to at least some customers AND that few/no businesses offer the same product
13.	Business services sector	Percentage of those involved in TEA in the Business Services sector-Information and Communication, Financial Intermediation and Real Estate, Professional Services or Administrative Services, as defined by the ISIC 4.0 Business Type Codebook
14.	High status to successful entrepreneurs	Percentage of 18–64 population who agree with the statement that in their country, successful entrepreneurs receive high status

(continued)

**Table 7.2** (continued)

<i>S. no.</i>	<i>Variable name</i>	<i>Measure</i>
15.	Entrepreneurship as a good career choice	Percentage of 18–64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice
16.	Financing for entrepreneurs	The availability of financial resources—equity and debt—for small and medium enterprises (SMEs) (including grants and subsidies)
17.	Governmental support and policies	The extent to which public policies support entrepreneurship—entrepreneurship as a relevant economic issue
18.	Taxes and bureaucracy	The extent to which public policies support entrepreneurship—taxes or regulations are either size-neutral or encourage new and SMEs
19.	Governmental programs	The presence and quality of programs directly assisting SMEs at all levels of government (national, regional, municipal)
20.	Basic school entrepreneurial education and training	The extent to which training in creating or managing SMEs is incorporated within the education and training system at primary and secondary levels
21.	Post school entrepreneurial education and training	The extent to which training in creating or managing SMEs is incorporated within the education and training system in higher education such as vocational, college, business schools, etc.
22.	R&D transfer	The extent to which national research and development will lead to new commercial opportunities and is available to SMEs
23.	Commercial and professional infrastructure	The presence of property rights, commercial, accounting and other legal and assessment services and institutions that support or promote SMEs

(continued)

**Table 7.2** (continued)

<i>S. no.</i>	<i>Variable name</i>	<i>Measure</i>
24.	Internal market dynamics	The level of change in markets from year to year
25.	Internal market openness	The extent to which new firms are free to enter existing markets
26.	Physical and services infrastructure	Ease of access to physical resources-communication, utilities, transportation, land or space-at a price that does not discriminate against SMEs
27.	Cultural and social norms	The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income

Source <https://www.gemconsortium.org/>

1%), perceived capabilities (at 1%), entrepreneurial intentions (at 5%), Total early-stage Entrepreneurial Activity (TEA) (at 5%), entrepreneurial employee activity (at 5%), and motivational index (at 5%), female/male TEA (at 5%), high job creation expectation (at 5%), business services sector (at 1%). In addition, high status to successful entrepreneurs(at 5%), and entrepreneurship as a good career choice (at 1%) also impact the entrepreneurial behavior and attitude. This means that the three countries, namely: China, India, and Japan (Efficiency-Driven Economy, Factor-Driven Economy, and Innovation-Driven Economy, respectively) vary among each other in terms of above 11 factors of entrepreneurial behavior and attitude in the Asia and Oceania region of the world.

The above ANOVA analysis results suggest that the three countries varied among themselves for the 11 factors of Entrepreneurial behavior and attitudes but fails to tell whether a country varies significantly from the other country for those 11 factors or not. To overcome this shortfall and for a deeper analysis, Post Hoc Analysis is performed to shed light upon the type (classification) of country (Efficiency-Driven Economy, Factor-Driven Economy, or Innovation-Driven Economy) which significantly varies from the other type(classification).

Table 7.4 shows the results of Post Hoc Analysis for Entrepreneurial

Table 7.3 ANOVA table results for entrepreneurial behavior and attitudes

ANOVA		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F-value</i>	<i>Sig.</i>
Perceived opportunities	Between groups	2176.846	2	1088.423	97.030	.000***
	Within groups	67.305	6	11.217		
	Total	2244.151	8			
Perceived capabilities	Between groups	1599.282	2	799.641	28.758	.001***
	Within groups	166.833	6	27.805		
	Total	1766.114	8			
Fear of failure rate	Between groups	68.971	2	34.486	1.138	.381
	Within groups	181.871	6	30.312		
	Total	250.843	8			
Entrepreneurial intentions	Between groups	264.564	2	132.282	7.355	.024*
	Within groups	107.907	6	17.984		
	Total	372.471	8			
Total early-stage Entrepreneurial Activity (TEA)	Between groups	81.594	2	40.797	7.558	.023*
	Within groups	32.386	6	5.398		
	Total	113.980	8			
Established business ownership	Between groups	3.685	2	1.842	.263	.777
	Within groups	42.019	6	7.003		
	Total	45.704	8			
Entrepreneurial employee activity	Between groups	4.145	2	2.072	5.869	.039*

ANOVA		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F-value</i>	<i>Sig.</i>
	Within groups	2.119	6	.353		
	Total	6.263	8			
Motivational index	Between groups	8.251	2	4.126	12.742	.007*
	Within groups	1.943	6	.324		
	Total	10.194	8			
Female/male TEA	Between groups	.257	2	.128	7.851	.021*
	Within groups	.098	6	.016		
	Total	.355	8			
Female/male opportunity-driven TEA	Between groups	.033	2	.017	.375	.702
	Within groups	.265	6	.044		
	Total	.298	8			
High job creation expectation	Between groups	452.525	2	226.263	15.803	.004*

(continued)

Table 7.3 (continued)

ANOVA		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F-value</i>	<i>Sig.</i>
Innovation	Within groups	85.908	6	14.318		
	Total	538.433	8			
Business services sector	Between groups	321.862	2	160.931	2.700	.146
	Within groups	357.670	6	59.612		
High status to successful entrepreneurs	Total	679.531	8			
	Between groups	1144.427	2	572.213	44.867	.000***
Entrepreneurship as a good career choice	Within groups	76.521	6	12.753		
	Total	1220.947	8			
Entrepreneurship as a good career choice	Between groups	540.957	2	270.478	18.185	.003*
	Within groups	89.243	6	14.874		
Entrepreneurship as a good career choice	Total	630.200	8			
	Between groups	2536.816	2	1268.408	66.650	.000***
Entrepreneurship as a good career choice	Within groups	114.186	6	19.031		
	Total	2651.002	8			

\*  $p \leq .05$ ; \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$   
 Source: Author (based on the results of the study)



Table 7.4 Post hoc analysis results for Entrepreneurial behavior and attitudes

<i>Dependent variable</i>		<i>(I)</i>	<i>economy</i>	<i>(J)</i>	<i>economy</i>	<i>Mean difference</i> <i>(I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>95% confidence interval</i>	
									<i>Lower bound</i>	<i>Upper bound</i>
Perceived opportunities	Tukey HSD	1.00	2.00	3.00	-10.50000*	2.73464	.020	-18.8906	-2.1094	
		2.00	3.00	1.00	26.46333*	2.73464	.000	18.0727	34.8540	
		3.00	1.00	2.00	10.50000*	2.73464	.020	2.1094	18.8906	
	Tukey HSD	1.00	3.00	2.00	36.96333*	2.73464	.000	28.5727	45.3540	
		2.00	1.00	3.00	-26.46333*	2.73464	.000	-34.8540	-18.0727	
		3.00	2.00	1.00	-36.96333*	2.73464	.000	-45.3540	-28.5727	
Perceived capabilities	Tukey HSD	1.00	2.00	3.00	-15.53667*	4.30546	.026	-28.7470	-2.3263	
		2.00	3.00	1.00	17.10333*	4.30546	.017	3.8930	30.3137	
		3.00	1.00	2.00	15.53667*	4.30546	.026	2.3263	28.7470	
	Tukey HSD	1.00	3.00	2.00	32.64000*	4.30546	.001	19.4297	45.8503	
		2.00	1.00	3.00	-17.10333*	4.30546	.017	-30.3137	-3.8930	
		3.00	2.00	1.00	-32.64000*	4.30546	.001	-45.8503	-19.4297	
Fear of failure rate	Tukey HSD	1.00	2.00	3.00	-1.54333	4.49532	.938	-15.3362	12.2495	
		2.00	3.00	1.00	-6.49000	4.49532	.379	-20.2829	7.3029	
		3.00	1.00	2.00	1.54333	4.49532	.938	-12.2495	15.3362	
	Tukey HSD	1.00	3.00	2.00	-4.94667	4.49532	.548	-18.7395	8.8462	
		2.00	1.00	3.00	6.49000	4.49532	.379	-7.3029	20.2829	
		3.00	2.00	1.00	4.94667	4.49532	.548	-8.8462	18.7395	

(continued)

Table 7.4 (continued)

<i>Dependent variable</i>		<i>95% confidence interval</i>							
		<i>(I) economy</i>	<i>(J) economy</i>	<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>Lower bound</i>	<i>Upper bound</i>	
Entrepreneurial intentions	Tukey HSD	1.00	2.00	3.75667	3.46260	.557	-6.8676	14.3809	
		2.00	3.00	12.91000*	3.46260	.023	2.2858	23.5342	
		3.00	1.00	-3.75667	3.46260	.557	-14.3809	6.8676	
Total early-stage Entrepreneurial Activity (TEA)	Tukey HSD	1.00	1.00	9.15333	3.46260	.085	-1.4709	19.7776	
		2.00	1.00	-12.91000*	3.46260	.023	-23.5342	-2.2858	
		3.00	2.00	-9.15333	3.46260	.085	-19.7776	1.4709	
	Established business ownership	Tukey HSD	1.00	2.00	2.83000	1.89696	.359	-2.9904	8.6504
			2.00	3.00	7.31333*	1.89696	.020	1.4929	13.1337
			3.00	1.00	-2.83000	1.89696	.359	-8.6504	2.9904
Established business ownership	Tukey HSD	1.00	1.00	4.48333	1.89696	.122	-1.3371	10.3037	
		2.00	1.00	-7.31333*	1.89696	.020	-13.1337	-1.4929	
		3.00	2.00	-4.48333	1.89696	.122	-10.3037	1.3371	
		1.00	2.00	1.55667	2.16074	.761	-5.0731	8.1864	
		3.00	3.00	.62000	2.16074	.956	-6.0097	7.2497	

## Multiple comparisons

Dependent variable	95% confidence interval						
	(I) economy	(J) economy	Mean difference (I - J)	Std. error	Sig.	Lower bound	Upper bound
Entrepreneurial employee activity	2.00	1.00	-1.55667	2.16074	.761	-8.1864	5.0731
		3.00	-.93667	2.16074	.903	-7.5664	5.6931
	3.00	1.00	-.62000	2.16074	.956	-7.2497	6.0097
		2.00	.93667	2.16074	.903	-5.6931	7.5664
	Tukey HSD	1.00	.56667	.48519	.512	-.9220	2.0554
		3.00	-1.07000	.48519	.149	-2.5587	.4187
Motivational index	2.00	1.00	-.56667	.48519	.512	-2.0554	.9220
		3.00	-1.63667*	.48519	.035	-3.1254	-.1480
	3.00	1.00	1.07000	.48519	.149	-.4187	2.5587
		2.00	1.63667*	.48519	.035	.1480	3.1254
	Tukey HSD	1.00	.28000	.46461	.824	-1.1456	1.7056
		3.00	-1.87667*	.46461	.016	-3.3022	-.4511
	2.00	1.00	-.28000	.46461	.824	-1.7056	1.1456
		3.00	-2.15667*	.46461	.008	-3.5822	-.7311
	3.00	1.00	1.87667*	.46461	.016	.4511	3.3022
		2.00	2.15667*	.46461	.008	.7311	3.5822

(continued)

Table 7.4 (continued)

<i>Multiple comparisons</i>		<i>95% confidence interval</i>						
		<i>(I) economy</i>	<i>(J) economy</i>	<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>Lower bound</i>	<i>Upper bound</i>
Female/male TEA	Tukey HSD	1.00	2.00	.19000	.10442	.242	-.1304	.5104
			3.00	.41333*	.10442	.018	.0929	.7337
		2.00	1.00	-.19000	.10442	.242	-.5104	1.304
Female/male opportunity-driven TEA			3.00	.22333	.10442	.162	-.0971	.5437
		3.00	1.00	-.41333*	.10442	.018	-.7337	-.0929
	Tukey HSD	1.00	2.00	-.22333	.10442	.162	-.5437	.0971
High job creation expectation			2.00	.14667	.17144	.685	-.3794	.6727
		2.00	3.00	.05333	.17144	.949	-.4727	.5794
	Tukey HSD	1.00	1.00	-.14667	.17144	.685	-.6727	.3794
			3.00	-.09333	.17144	.853	-.6194	.4327
		3.00	1.00	-.05333	.17144	.949	-.5794	.4727
	Tukey HSD	1.00	2.00	.09333	.17144	.853	-.4327	.6194
		2.00	10.90667*	3.08955	.029	1.4271	20.3863	
		3.00	-6.25333	3.08955	.187	-15.7329	3.2263	

## Multiple comparisons

Dependent variable		95% confidence interval						
(I)	(J) economy	Mean difference (I - J)	Std. error	Sig.	Lower bound	Upper bound		
Innovation	2.00	-10.90667*	3.08955	.029	-20.3863	-1.4271		
	3.00	-17.16000*	3.08955	.003	-26.6396	-7.6804		
	3.00	1.00	6.25333	3.08955	.187	-3.2263	15.7329	
		2.00	17.16000*	3.08955	.003	7.6804	26.6396	
	1.00	2.00	-12.60000	6.30405	.193	-31.9426	6.7426	
		3.00	.17000	6.30405	1.000	-19.1726	19.5126	
Business services sector	2.00	12.60000	6.30405	.193	-6.7426	31.9426		
	3.00	12.77000	6.30405	.187	-6.5726	32.1126		
	3.00	1.00	-1.70000	6.30405	1.000	-19.5126	19.1726	
		2.00	-12.77000	6.30405	.187	-32.1126	6.5726	
	1.00	2.00	5.85000	2.91587	.191	-3.0967	14.7967	
		3.00	-20.45333*	2.91587	.001	-29.4000	-11.5066	
2.00	1.00	-5.85000	2.91587	.191	-14.7967	3.0967		
	3.00	-26.30333*	2.91587	.000	-35.2500	-17.3566		
3.00	1.00	20.45333*	2.91587	.001	11.5066	29.4000		
	2.00	26.30333*	2.91587	.000	17.3566	35.2500		

(continued)

Table 7.4 (continued)

<i>Dependent variable</i>		<i>(I) economy</i>		<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>95% confidence interval</i>	
		<i>(I) economy</i>	<i>(J) economy</i>				<i>Lower bound</i>	<i>Upper bound</i>
High status to successful entrepreneurs	Tukey HSD	1.00	2.00	9.61000	3.14895	.051	-.0518	19.2718
		2.00	3.00	18.99000*	3.14895	.002	9.3282	28.6518
		3.00	1.00	-9.61000	3.14895	.051	-19.2718	.0518
Entrepreneurship as a good career choice	Tukey HSD	1.00	2.00	9.38000	3.14895	.056	-.2818	19.0418
		2.00	3.00	-18.99000*	3.14895	.002	-28.6518	-9.3282
		3.00	1.00	-9.38000	3.14895	.056	-19.0418	.2818
		1.00	2.00	6.08000	3.56192	.278	-4.8490	17.0090
		2.00	3.00	38.26333*	3.56192	.000	27.3344	49.1923
		3.00	1.00	-6.08000	3.56192	.278	-17.0090	4.8490
		1.00	2.00	32.18333*	3.56192	.000	21.2544	43.1123
		2.00	3.00	-38.26333*	3.56192	.000	-49.1923	-27.3344
		3.00	1.00	-32.18333*	3.56192	.000	-43.1123	-21.2544

Source: Author (based on the results of the study)

Note: \*The mean difference is significant at the 0.05 level

behavior and attitudes Factors for the three countries. The Post Hoc Analysis uses Tukey HSD method of Equal Variance Assumed.

Factors like Perceived Opportunities and Perceived capabilities both show significant results at 5% level of significance using Tukey HSD method meaning that all the three countries significant vary among each other for these factors. The way Chinese population see good opportunities to start a firm in the area where they live vary significantly among their Indian and Japanese Counterparts. Similarly, for perceived opportunities the way Chinese Population who believe they have the required skills and knowledge to start a business also significantly varies with Indians and Japanese population. For Entrepreneurial intentions there is a significant difference between Chinese population who are latent entrepreneurs and who intend to start a business within three years and Japanese population. For, Total early-stage Entrepreneurial Activity (TEA) factor, there is also again significant difference between the Chinese population who are either a nascent entrepreneur or owner-manager of a new business and Japanese population.

For, Entrepreneurial Employee Activity factor, the rate of involvement of Indian employees in entrepreneurial activities, such as developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary varies significantly with the Japanese employees. Motivational index measured in terms of percentage of those involved in TEA that are improvement-driven opportunity motivated, divided by the percentage of TEA that is necessity-motivated, show significant results between China and Japan; and between India and Japan. This also means that there is no significant difference between India and China on account of Motivational Index.

Female/Male TEA shows that the ratio of female TEAs over male TEAs varies significantly between China and Japan, meaning that Percentage of Chinese female population between 18 and 64 years who are either a nascent entrepreneur or owner-manager of a new business, divided by the equivalent percentage for their male counterparts differs significantly than that of Japan. High job creation expectation measured in terms of percentage of those involved in TEA who expect to create 6 or more jobs in 5 years, significantly varies between China and India.

Business Services Sector Factor measured in terms of Percentage of those involved in TEA in the Business Services sector, significantly varies between China and Japan. Between India and Japan there is no significant difference between China and India, and both more or less have

the same percentage of population that is involved in TEA in the Business Services Sector. High status to successful entrepreneurs measured in terms of Percentage of 18–64 population who agree with the statement that in their country, successful entrepreneurs receive high status varies significantly between China and Japan thereby meaning that both Chinese and Japanese people perceive the High Status to Successful Entrepreneurs differently.

For the last significant factor, Entrepreneurship as a Good Career Choice measured in terms of Percentage of 18–64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice, there is a significant difference between China and Japan; and between India and Japan. This means that both the Chinese and Japanese people differ in their opinion of Entrepreneurship as a Good Career Choice in the country.

## ENTREPRENEURIAL FRAMEWORK CONDITIONS

This sub-section deals with the analysis and interpretation part of second category of variables/factors of the study, i.e., Entrepreneurial Framework Conditions.

The results as shown through Table 7.5 depict the ANOVA analysis of Entrepreneurial Framework Conditions Category for the three countries: China, India, and Japan. The ANOVA analysis will help in analyzing whether there is a significant difference among the three countries for the different Entrepreneurial Framework Condition Factors or not.

According to the results of ANOVA analysis in Table 7.5 out of total 12 factors of Entrepreneurial Framework Condition, only 6 factors are significant on the basis of p-value (at 5% Level of Significance). The significant factors are, namely as: Basic school entrepreneurial education and training (at 5%), Post-school entrepreneurial education and training (at 5%), R&D transfer (at 5%), Commercial and professional infrastructure (at 5%), Physical and services infrastructure (at 5%); and Cultural and social norms (at 5%).

As per the above results, the three countries vary among each other in terms of 6 factors of Entrepreneurial Framework Conditions. For deeper insights about the country to country-specific variation for the said 6 factors Post Hoc Analysis is used. Again, the Post Hoc Analysis uses Tukey HSD method of Equal Variance Assumed.

Table 7.6 depicts the results of Post Hoc Analysis for Entrepreneurial



Table 7.5 ANOVA table results for entrepreneurial framework conditions

		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Financing for entrepreneurs	Between groups	.141	2	.070	1.194	.366
	Within groups	.354	6	.059		
	Total	.494	8			
Governmental support and policies	Between groups	.287	2	.144	1.466	.303
	Within groups	.587	6	.098		
	Total	.874	8			
Taxes and bureaucracy	Between groups	.118	2	.059	1.069	.401
	Within groups	.333	6	.055		
	Total	.451	8			
Governmental programs	Between groups	.281	2	.141	2.848	.135
	Within groups	.296	6	.049		
	Total	.578	8			
Basic school entrepreneurial education and training	Between groups	.996	2	.498	13.261	.006*
	Within groups	.225	6	.038		
	Total	1.221	8			
Post-school entrepreneurial education and training	Between groups	.269	2	.135	6.425	.032*
	Within groups	.126	6	.021		
	Total	.395	8			
R&D transfer	Between groups	.410	2	.205	6.757	.029*

(continued)

Table 7.5 (continued)

		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Commercial and professional infrastructure	Within groups	.182	6	.030		
	Total	.593	8			
	Between groups	.929	2	.465	13.469	.006*
	Within groups	.207	6	.034		
Internal market dynamics	Total	1.136	8			
	Between groups	.327	2	.163	4.054	.077
	Within groups	.242	6	.040		
	Total	.568	8			
Internal market openness	Between groups	.069	2	.035	.864	.468
	Within groups	.240	6	.040		
	Total	.309	8			
	Between groups	.225	2	.112	11.272	.009*
Physical and services infrastructure	Within groups	.060	6	.010		
	Total	.284	8			
	Between groups	1.497	2	.749	7.723	.022*
	Within groups	.582	6	.097		
Total	2.079	8				

\*  $p \leq .05$ ; \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$ *Source* Author (based on the results of the study)

Table 7.6 Post hoc analysis results for entrepreneurial framework conditions

<i>Multiple comparisons</i>		<i>95% confidence interval</i>								
		<i>(I) economy</i>	<i>(J) economy</i>	<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>Lower bound</i>	<i>Upper bound</i>		
Financing for entrepreneurs	Tukey HSD	1.00	2.00	-.30000	.19820	.350	-.9081	.3081		
		2.00	3.00	-.09667	.19820	.880	-.7048	.5115		
		3.00	1.00	.30000	.19820	.350	-.3081	.9081		
	Governmental support and policies	Tukey HSD	1.00	3.00	.20333	.19820	.589	-.4048	.8115	
			2.00	1.00	-.09667	.19820	.880	-.5115	.7048	
			3.00	2.00	-.20333	.19820	.589	-.8115	.4048	
		Taxes and bureaucracy	Tukey HSD	1.00	2.00	-.40000	.25547	.329	-1.1839	.3839
				2.00	3.00	-.04667	.25547	.982	-.8305	.7372
				3.00	1.00	.40000	.25547	.329	-.3839	1.1839
Governmental programs	Tukey HSD	1.00	3.00	.35333	.25547	.406	-.4305	1.1372		
		2.00	1.00	-.04667	.25547	.982	-.7372	.8305		
		3.00	2.00	-.35333	.25547	.406	-1.1372	.4305		
	Governmental programs	Tukey HSD	1.00	2.00	.24000	.19224	.471	-.3498	.8298	
			2.00	3.00	.24667	.19224	.454	-.3432	.8365	
			3.00	1.00	-.24000	.19224	.471	-.8298	.3498	
		Governmental programs	Tukey HSD	1.00	3.00	.00667	.19224	.999	-.5832	.5965
				2.00	1.00	-.24667	.19224	.454	-.8365	.3432
				3.00	2.00	-.00667	.19224	.999	-.5965	.5832
Governmental programs	Tukey HSD	1.00	2.00	-.37000	.18148	.184	-.9268	.1868		
		2.00	3.00	.01000	.18148	.998	-.5468	.5668		
		3.00	1.00	.37000	.18148	.184	-.1868	.9268		
	Governmental programs	Tukey HSD	1.00	3.00	.38000	.18148	.171	-.1768	.9368	
			2.00	1.00	-.01000	.18148	.998	-.5668	.5468	
			3.00	2.00	-.38000	.18148	.171	-.9368	.1768	

(continued)

Table 7.6 (continued)

<i>Multiple comparisons</i>		<i>95% confidence interval</i>						
		<i>(I) economy</i>	<i>(J) economy</i>	<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>Lower bound</i>	<i>Upper bound</i>
Basic School entrepreneurial education and training	Tukey HSD	1.00	2.00	-.50333*	.15823	.044	-.9888	-.0178
		2.00	3.00	.30333	.15823	.214	-.1822	.7888
		3.00	1.00	.50333*	.15823	.044	.0178	.9888
Post School entrepreneurial education and training	Tukey HSD	1.00	3.00	.80667*	.15823	.005	.3212	1.2922
		3.00	1.00	-.30333	.15823	.214	-.7888	.1822
		2.00	2.00	-.80667*	.15823	.005	-.12922	-.3212
R&D transfer	Tukey HSD	1.00	2.00	-.04333	.11820	.929	-.4060	.3193
		2.00	3.00	.34333	.11820	.061	-.0193	.7060
		3.00	1.00	.04333	.11820	.929	-.3193	.4060
Basic School entrepreneurial education and training	Tukey HSD	1.00	3.00	.38667*	.11820	.039	.0240	.7493
		3.00	1.00	-.34333	.11820	.061	-.7060	.0193
		2.00	2.00	-.38667*	.11820	.039	-.7493	-.0240
Post School entrepreneurial education and training	Tukey HSD	1.00	2.00	-.42000	.14228	.058	-.8566	.0166
		2.00	3.00	-.48000*	.14228	.035	-.9166	-.0434
		3.00	1.00	.42000	.14228	.058	-.0166	.8566
R&D transfer	Tukey HSD	1.00	3.00	-.06000	.14228	.908	-.4966	.3766
		3.00	1.00	.48000*	.14228	.035	.0434	.9166
		2.00	2.00	.06000	.14228	.908	-.3766	.4966

## Multiple comparisons

Dependent variable	(I) economy	(J) economy	Mean difference (I - J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
Commercial and professional infrastructure	1.00	2.00	-.65333*	.15163	.012	-1.1186	-.1881
	2.00	3.00	.05333	.15163	.935	-4119	.5186
	3.00	1.00	.65333*	.15163	.012	.1881	1.1186
Internal market dynamics	1.00	2.00	.70667*	.15163	.008	.2414	1.1719
	2.00	3.00	-.05333	.15163	.935	-5186	.4119
	3.00	1.00	-.70667*	.15163	.008	-1.1719	-.2414
Internal market openness	1.00	2.00	.36667	.16389	.143	-.1362	.8695
	2.00	3.00	-.06667	.16389	.914	-5695	.4362
	3.00	1.00	-.36667	.16389	.143	-.8695	.1362
Physical and services infrastructure	1.00	2.00	-.43333	.16389	.085	-.9362	.0695
	2.00	3.00	.06667	.16389	.914	-4362	.5695
	3.00	1.00	.43333	.16389	.085	-.0695	.9362
	1.00	2.00	-.20667	.16321	.462	-.7074	.2941
	2.00	3.00	-.15333	.16321	.638	-6541	.3474
	3.00	1.00	.20667	.16321	.462	-.2941	.7074
	1.00	2.00	.05333	.16321	.943	-4474	.5541
	2.00	3.00	-.15333	.16321	.638	-3474	.6541
	3.00	1.00	-.05333	.16321	.943	-.5541	.4474
	1.00	2.00	.28333*	.08151	.031	.0332	.5334

(continued)

Table 7.6 (continued)

<i>Multiple comparisons</i>		<i>95% confidence interval</i>						
		<i>(I) economy</i>	<i>(J) economy</i>	<i>Mean difference (I - J)</i>	<i>Std. error</i>	<i>Sig.</i>	<i>Lower bound</i>	<i>Upper bound</i>
<i>Dependent variable</i>								
			3.00	-.08667	.08151	.568	-.3368	.1634
		2.00	1.00	-.28333*	.08151	.031	-.5334	-.0332
			3.00	-.37000*	.08151	.009	-.6201	-.1199
		3.00	1.00	.08667	.08151	.568	-.1634	.3368
			2.00	.37000*	.08151	.009	.1199	.6201
		1.00	2.00	.06667	.25422	.963	-.7134	.8467
			3.00	.89667*	.25422	.029	.1166	1.6767
		2.00	1.00	-.06667	.25422	.963	-.8467	.7134
			3.00	.83000*	.25422	.039	.0500	1.6100
		3.00	1.00	-.89667*	.25422	.029	-1.6767	-.1166
			2.00	-.83000*	.25422	.039	-1.6100	-.0500

Note: \*The mean difference is significant at  $p \leq 0.05$   
 Source: Author (based on the results of the study)

Framework Condition Factors for the three countries. The Post Hoc Analysis uses Tukey HSD method of Equal Variance Assumed. Basic school entrepreneurial education and training measured in terms of the extent to which training in creating or managing SMEs is incorporated within the education and training system at primary and secondary levels significantly differs between China and India. Between India and Japan meaning that Chinese and Indian education and training system at primary and secondary levels have different/varying degree of incorporation levels of training incorporated in the system. Similar interpretation can be drawn for the combination of Indian and Japanese education and training system.

Post school entrepreneurial education and training factor has been measured in terms of the extent to which training in creating or managing SMEs is incorporated within the education and training system in higher education. Indian and Japanese education and training system at higher education levels also have varying degree of incorporation levels of training incorporated in the system. R&D Transfer measured in terms of the extent to which national research and development will lead to new commercial opportunities and is available to SMEs significantly varies between China and Japan meaning that both countries differ with each other in providing the national research and development for new commercial opportunities and for existing SMEs. Commercial and Professional Infrastructure factor, has been measured in terms of the property rights, commercial, accounting, and other legal and assessment services and institutions that support or promote SMEs. This factor significantly differs between China and India; and between India and Japan meaning that China and India has varying level of Commercial and Professional Infrastructure. China and Japan also show varying level of Commercial and Professional Infrastructure in possessing presence of property rights, assessment services, institutions, etc., that support or promote SMEs. Physical and Services Infrastructure has been measured in terms of the ease of access to physical resources-communication, utilities, transportation, land, or space-at a price that does not discriminate against SMEs. This factor significantly differs between China and India; and between India and Japan meaning that both the countries be it China and India; or India and Japan, have varying degree of entrepreneurial access to physical resources like communication, utilities, transportation, etc.

Cultural and Social Norms has been measured in terms of the social and cultural norms encourage or allow actions leading to new business

methods or activities that can potentially increase personal wealth and income. This factor significantly varies between China and Japan; and between India and Japan meaning that the countries vary with each other in terms of encouraging new business methods or activities which can ultimately lead to potential increase in personal wealth and income.

## CONCLUSION

For the cross-country analysis this section has been divided into two sub-sections. First sub-section will be dealing with the cross-country analysis of entrepreneurial behavior and attitude Category of Factors and the second sub-section will be dealing with the cross-country analysis of Entrepreneurial Framework Conditions Category of Factors.

### *Cross-Country Analysis of Entrepreneurial Behavior and Attitude Factors*

From the ANOVA analysis, it can be concluded that for the entrepreneurial behavior and attitude category of factors, out of the total 15 factors, 11 were found to be significant on the basis of p-value (Some at 1% and other at 5% Level of Significance). The significant factors were: Perceived Opportunities, Perceived Capabilities, Entrepreneurial Intentions, Total early-stage Entrepreneurial Activity (TEA), Entrepreneurial Employee Activity, Motivational Index, Female/Male TEA, High Job Creation Expectation, Business Services Sector, High Status to Successful Entrepreneurs, and Entrepreneurship as a Good Career Choice.

From the Post Hoc analysis, it can be concluded that the following pair of countries varied between themselves for the said factors written against them:

1. China and India—Perceived Opportunities, Perceived Capabilities, and High Job Creation Expectation.
2. India and Japan—Perceived Opportunities, Perceived Capabilities, Entrepreneurial Employee Activity, Motivational Index, High Job Creation Expectation, Business Services Sector, and Entrepreneurship as a Good Career Choice.
3. China and Japan—Perceived Opportunities, Perceived Capabilities, Entrepreneurial Intentions, Total early-stage Entrepreneurial Activity (TEA), Motivational Index, Female/Male TEA, Business



Services Sector, High Status to Successful Entrepreneurs, and Entrepreneurship as a Good Career Choice.

*Cross-Country Analysis of Entrepreneurial Framework Condition Factors*

From the ANOVA analysis, it can be concluded that for the Entrepreneurial Framework Condition category of factors, out of the total of 12 factors, only 6 were found to be significant on the basis of p-value (at 5% Level of Significance). The significant factors were: Basic school entrepreneurial education and training, Post-school entrepreneurial education and training, R&D transfer, Commercial and professional infrastructure, Physical and services infrastructure; and Cultural and social norms. From the Post Hoc Analysis, it can be concluded that the following pair of countries varied between themselves for the said factors written against them:

1. China and India—Basic school entrepreneurial education and training, Commercial and professional infrastructure, Physical and services infrastructure.
2. India and Japan—Basic school entrepreneurial education and training, Post-school entrepreneurial education and training, Commercial and professional infrastructure, Physical and services infrastructure, and Cultural and social norms.
3. China and Japan—Research and development transfer and Cultural and social norms.

Krueger et al. (2000) highlights that Ajzen's model supports that intention depends on social norms and feasibility. Ebrahim and Schott (2014) concluded that people's entrepreneurial intention is promoted by their risk propensity, opportunity awareness, and especially their perceived capabilities. According to Torres and Augusto (2019) the path to kindle entrepreneurship is not same for all countries and thus there is need to examine this through cross-country analysis.

## IMPLICATIONS OF THE STUDY

As the main objective of the study was to only identify whether the three countries varied among themselves for the different variables of entrepreneurial behavior and attitude and Entrepreneurial Framework Conditions or not. Therefore, the foremost implication of this study would be that, the study lays down a strong foundation on which future research could be done in the direction of how this variation of significant different variables of entrepreneurial behavior and attitude and entrepreneurial framework conditions among three economies can be minimized. Further, GEM as stated below had classified the three economies:

- China as Efficiency-Driven,
- India as Factor-Driven, and
- Japan as Innovation-Driven

It would be of high interest and importance that if a benchmark model can be developed exhibiting the characteristics of all the three kinds of economies and efforts are directed toward achieving it by the policymakers, academicians, and research community.

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# Cluster Development in Small Enterprises: A Case Study of Select Plastic Enterprises in Murshidabad, West Bengal

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## INTRODUCTION

The Micro, Small & Medium Enterprises (MSME) play an important role with economic development of both developing as well as developed nations. The existence of Indian MSME is deep rooted in clusters. Cluster MSME is present all over the country. Porter (2003) defines a cluster as a “Geographically proximate group of interconnected companies, suppliers, service providers and associated institutions in a particular field, linked by externalities of various types.” Clusters contain a mix of industries related by knowledge, skills, inputs, demand, and other linkages. United Nations Industrial Development Organization (UNIDO) defines industrial cluster as “Geographic and economic concentration of manufacturing

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activities which produce and sell a domain of interrelated and complementary products and having common problems and opportunities.” The small and medium enterprise Foundation (SME Foundation) defined SME clusters as “A Cluster is a concentration of 50 or above enterprises producing similar products or services and is situated within an adjoining geographical location of 3-5 kilometer radius and having a common strengths, weaknesses, opportunities and threats.” A unique feature of Indian MSME is that a very large proportion of them are concentrated around an estimated 6600 cluster including 1157 traditional industrial clusters, 3091 handicrafts clusters, and 563 handlooms clusters.

## LITERATURE REVIEW

Previous studies have been reviewed to broaden the understanding in cluster development in small enterprises. Some of the important studies related to working capital management and profitability are discussed in the following section. The study conducted by Nazmul (2016) discusses documented and gathered information about the prospects and challenges of Plastic industries in Bangladesh. The result of the study is that the research work has been done to find out a set of suggestions and has pointed the present situation and current state of plastic industries in Bangladesh. It is very difficult to find out alternative of plastics at this present era because of the dependence on plastics. Plastic’s demands are increasing every day as well as their waste too. It can easily be said that if the use of plastics wastes is increased, the waste management will search more advanced ways to find out to collect and process them. The chapters of this thesis include the elementary principles of plastics sciences provided information as a guide throughout the research work and recycling operations the waste management in Bangladesh. The study reveals that small companies of Bangladesh are performing better than the large companies as their business model in recycle operations of plastics.

Pavelkova et al. (2011) studied the development of plastic clusters in India, Norway, Czech Republic, USA. The study includes financial, technical, marketing, employment, turnover, export, production and processing, networking, education and research training program, etc., which play an important role for the growth and development of these clusters. A report on plastics industry by Federation of Indian Chambers of Commerce and Industry (2014) reviewed that a wide variety of plastics raw materials are produced to meet the material needs of different

sectors of the economy. These polymeric materials are broadly categorized as commodity, engineering, and specialty plastics. Commodity plastics are the major products that account for bulk of the plastics and in turn for petrochemical industry. Commodity plastics comprise of Polyethylene (PE), Polypropylene (PP), Polyvinyl Chloride (PVC), and Polystyrene. While engineering and specialty plastics are plastics that exhibit superior mechanical and thermal properties in a wide range of conditions over and above more commonly used commodity plastics and are used for specific purpose. There are three broad types of PE, viz.: Low-density Polyethylene (LDPE), High-density Polyethylene (HDPE), and Linear Low-density Polyethylene (LLDPE). Major plastic materials like PE and PP are derived from Ethylene and Propylene, respectively, while other plastics such as PVC, PS & ABS and PC are produced from benzene, butadiene, and other feedstock. Commodity plastics comprising of Polyethylene (PE), Polypropylene (PP), Polyvinyl Chloride (PVC), and Polystyrene account for bulk of the plastic consumption in India. India has ramped up its production capacity for plastic to reach 2.9 MnTPA for PE, 3.7 MnTPA for PP, and 1.3MnTPA for PVC.

There are several factors like low per-capita consumption, manufacturing focus, end use industry growth, availability of feedstock, increasing urbanization, changing lifestyle, demographic dividend, etc., promoting growth of plastic across India. However specific to Northern India we observe a lack of planned downstream plastic processing plants within the region and near-by regions of Eastern India to make use of these factors. Spill off benefit of promoting plastic processing is the huge inherent employment potential.

Many application areas of plastics also have overlaps that make market-driven material substitution a good possibility. There are strategic objectives driven by part consolidation and sustainability compulsions by the user industry that have made material selection converge to a polymer to promote recycling. An organized development addressing cost-effective plastic processing along with streamlining operations of recycling of plastics could pave a growth path for downstream plastic manufacturers in Northern India. Plastic culture, which is in its infancy in India, can significantly benefit agriculture by its wide applications in all the areas of farming. It can be used to tackle the specific problems faced by North Indian regions. There exists an opportunity in the same field as the demand of Plastic culture will rise in order to ensure efficiency and sustainability of agriculture practices.

Food processing sector in India is also at a nascent stage. The use of plastics in food processing is currently one of the lowest in the world. Application of plastics in food processing industry is poised to grow at a good rate. With the change in lifestyle, income levels, and aspiration, the growth in the food processing sectors is expected to be very high. As plastics are majorly used for packaging such products, their demand is also expected to grow. North India is already a hub for food processing companies with major international players running their operations thereby promoting the consumption of plastics.

The Umarpur Plastic Cluster Shilpa Samabaya Samity Ltd. in Murshidabad District, West Bengal, prepared by CQMS, Mechanical Engineering Department, Jadavpur University Kolkata had observed that the Stakeholders of more than 50 numbers of units in Umarpur Plastic Cluster have been exceptionally enterprising so far to ensure continual growth in spite of absence of basic industrial infrastructural facilities. They have to arrange all toolings, spares, repair, and maintenance from far-off places, e.g., Kolkata, Delhi, and Mumbai. Objective of setting up a Common Facility Centres under MSE-CDP scheme is to provide required technological service including necessary product design/model making, tooling/maintenance support locally. This will certainly help the stakeholders operating their units much more efficiently ensuring higher growth targets. To transform this cluster into a self-sustaining and ever-growing group of plastics processing factories, under MSE-CDP Scheme, who will always achieve trend-setting growth coupled with assured environment-friendly manufacturing processes as our Corporate Social Responsibility?

Aluva Plastic Consortium Pvt. Ltd was formed in the year 2004 under the Small Industry cluster development program of the Government of India and Government of Kerala. Plastic cluster is an open membership cluster legally formed by Private Limited Company with the presence of 108 numbers Cluster (beneficiaries) and 28 numbers of other consortium member. It is the collective endeavor of the cluster members, which gives the necessary impetus to the growth of the consortium. Cooperation among the members and their dedication to the noble ideal makes the financial, technical and marketing facets of the consortium less intricate. The historical background shows that about 30–40 years ago Micro/Small scale plastic industrial units has been functioning in Aluva, Ernakulam District. Private banks are associated with this cluster for financing. The State is presently in the process of implementing more

than ten projects with the technical and financial support both from the Central and State Government. Thus Government of Kerala initiated the Cluster Development Programme (CDP) on the UNIDO guidelines from the year 2003.

In abroad, Borg Plast-Net Cluster (Norway) was established in 2000 in Fredrikstad as a membership of legal entities. There are 36 companies in the cluster, which are making the core of the cluster. About 92% of the cluster partners are SMEs. Firms are representing different branches, but most of the companies in the cluster are representing the plastic industry. They are plastic processors and producers, raw material suppliers, scrap processors, and equipment manufacturers. Borg Plast-Net is also cooperating with other companies which are not part of the cluster, like raw material suppliers, equipment manufacturers, commercial organizations, and service organizations. The cluster is also cooperating with 6 institutions including university and regional representatives. The clusters members employ around 900 people and have total annual sales of €190 million. The average export quota is around 50%.

Plastic Cluster (Czech Republic) was officially founded in the beginning of 2006 comprising of 18 representatives of the founders firms. The Plastic cluster is an open membership of legal entities processing plastics in Zlín region. The cluster has 25 members today and about 80% of them are SMEs. The cluster links companies in the areas of: plastics processing (90%), mould and tooling construction (5%), raw materials & recycling traders (5%). The cluster also cooperates with the university. The cluster members employ more than 3500 people (50% share of employment in plastic industry in the region) and have total annual sales of €200 million. The average export quota is around 44.5%.

Slovak Plastic Cluster (Slovak Republic) was established in 2009 as an association of legal entities in the area of plastic production and processing. Cluster creates 32 enterprises in plastics industry, where 84% constitutes SMEs (within which 74% are medium-size companies). Companies within the cluster cover most of the value chain, where processors (manufacturers), equipment manufacturers, commercial organizations, scrap processors, service organizations, research institutes, university and other educational institutions are present. Cluster cooperates as well with other non-member enterprises within the whole value chain. The main goal of the cluster is to develop in the field of plastics networking, education (on the level of high school, university, and lifelong learning), research and development, and technology transfer.



Wisconsin Plastic Cluster Partnership (USA) was established in 1998 as a nonprofit organization. The cluster has 29 members and about 90% of them are SMEs. The cluster links companies in the areas of plastics processing, commercial organizations, research institutes, technical colleges, and university. The cluster also cooperates with raw material suppliers and service organizations. The cluster partners employ more than 3500 people and have total annual sales of \$300 million U.S dollars. The average export quota is around 15% and R&D quota 4%. The primary objective of the cluster is to develop educational and training programs to support the plastic industry. The vision of the cluster is: "Wisconsin, the center for plastics in the U.S." The cluster has these goals are Research and Development (applied and pure), Education Program, Achieve regulation friendly, Be a Green Industry, Obtain fair share of federal funding.

## PROFILE OF MURSHIDABAD DISTRICT

Murshidabad district is a district of West Bengal, in Eastern India, situated on the left bank of the river Ganges. It covers 5234 sq. km. of area. Berhampore town is the Head quarter of the district. The total population of the district was 7,103,807 as per 2011 census report. The literacy rate in the district as per 2011 census was 66.59%. Currently there are 26 blocks in the district. At present, there are 21 MSME clusters in the district of Murshidabad.

## STATEMENT OF PROBLEM

India has the highest number of clusters compared to any other country across the globe. However, the development of clusters in all the states of India is not uniform. Government of India has taken various measures for the development of cluster. As a result, amount of investment for the development of different units within cluster has increased significantly. However, the performance of all the clusters is not significant. Many clusters faced problems due to inadequate financial support services from governments and financial institutions, inability to promote their product and services in domestic and international markets, lack of support from government organizations, lack of appropriate need-based

training and development programmers, unavailability of latest technologies, lack of adequate networking opportunities and finally poor knowledge management.

In Murshidabad, West Bengal, though Government has taken cluster initiatives but all that initiatives are challenged by different problems. Keeping in mind, Cluster Development in Small Enterprises: A Case Study of Select Plastic Enterprises in Murshidabad, West Bengal has been considered for the study and the need to have an in-depth analysis of their financial performance over the study period.

### OBJECTIVE OF THE STUDY

The main objectives of the present paper are to analyze the capital structure and the financial performance of plastic enterprises with the help of deferent ratios, i.e., profitability, liquidity, efficiency, and solvency, of select plastic enterprises of Raghunathganj-I and II Block, in the district of Murshidabad, West Bengal over the study period of eight years.

### METHODOLOGY

The study is mainly based on secondary data. Secondary data were collected from relevant articles from journals and books, government reports, statistical handbooks, websites, etc. Out of more than 50 numbers of plastic enterprises of Raghunathganj-I and II Block in the district of Murshidabad, 7 financial statements of small plastic enterprises, having proprietorship and micro enterprises in nature, over the study period 2010–2011 to 2017–2018 are obtained for the purpose.

### ANALYSIS AND FINDINGS

Capital Structure of the select plastic enterprises: Capital structure refers to the permanent financing of the company or firm, represented by owned capital and loan or debt capital. It is very difficult for small firms to raise funds from long term sources. Therefore, the capital structure of small firms becomes very inflexible. The quantum of unsecured loan availed by only 01 enterprise as per their necessity of business is tabulated under Table 8.1.

Table 8.1 shows that out of 7 only one enterprise has taken loans in the range of 1–5 lakhs from friends, relatives, and others and the

**Table 8.1** Loans from friends, relatives and others

<i>Loans taken (in Rs.)</i>	<i>No. of small enterprises</i>
1–5 lakhs	01
NIL	06
Total	07

*Source* Financial Statements of the seven small plastic enterprises

remaining 06 nos. of firms has not taken any unsecured loan for their business purposes. Table 8.2 shows the amount of loan taken from Bank & Financial Institutions, which are as follows.

The table shows that 05 small Plastic enterprises availed Bank finance below Rupees fifty lakhs. Only two firm availed Bank finance above Rupees 50 lakhs to Rupees 4 crores. The equity contribution of the promoters of seven small Plastic enterprises is shown in Table 8.3. The equity participation of the promoters is one of the determining factors in terms of the net worth of the small Plastic enterprises in the district of Murshidabad.

Three small Plastic enterprises net worth is below Rupees 25 lakhs, other 3 small plastic enterprises net worth is in between Rupees 25–40 lakhs and remaining 01 small Plastic enterprise net worth is in the range

**Table 8.2** Loans from bank and other financial institutions

<i>Loans taken (in Rs.)</i>	<i>No. of firms</i>
Below 50 lakhs	5
Above 50 lakhs to 4 crore	2
Total	7

*Source* Financial statements of the seven small plastic enterprises

**Table 8.3** Own capital investment of seven small plastic enterprises in the district of Murshidabad

<i>Capital (Rs.)</i>	<i>No. of small enterprises</i>
Below 25 lakh	03
25–40 lakh	03
40–60 lakh	01
Total	07

*Source* Financial statements of the seven small plastic enterprises

of Rupees 40–60 lakhs. The entire capital structure of the firms' shows that all the enterprises are financed by bank and only 01 Plastic small enterprise borrow unsecured loans in their business from their friends and relatives. The financial statement shows that all the small enterprises, which borrowed money from bank, are regularly paying interest to the bank.

### *Ratio Analysis*

In this study, the performance of small Plastic enterprises has been analyzed from the perspectives of—(i) profitability, (ii) liquidity, (iii) solvency, and (iv) efficiency. Profitability of the small enterprise is measured with the help of three parameters such as Gross Profit Ratio, Net Profit Ratio, and Return on Investment. *Gross Profit Ratio* is the ratio of gross profit of net sales and expressed as percentage. It is useful to test the profitability and management efficiency. The formula of gross profit ratio is  $(\text{Gross Profit}/\text{Net Sales}) \times 100$ . The *Net Profit Ratio* of net profit to net sales is also expressed as percentage. The higher the ratio, the greater will be profitability and higher the return of the entrepreneurs.

*Return on Capital Employed* is the ratio of net profit (after tax) to Net Worth or Capital Employed. It shows whether the capital employed has been effectively utilized. It is an index of operational efficiency of the business as well as indicator of profitability. Therefore the higher the ratio, the better is the management efficiency and profitability. Table 8.4 summarizes the three ratios.

**Table 8.4** Ratio analysis

<i>Gross profit ratio</i>		<i>Net profit ratio</i>		<i>Return on capital employed</i>	
<i>Average gross profit ratio</i>	<i>No. of small plastic enterprises</i>	<i>Average net profit ratio</i>	<i>No. of small plastic enterprises</i>	<i>Average return on investment (in %)</i>	<i>No. of small plastic enterprises</i>
<20	6	<5	6	<0.20	4
>30	1	5–10	1	0.20 < 0.40	2
				0.40 < 0.60	1
Total	7	Total	7	Total	7

*Source* Financial statements of the seven small plastic enterprises

Small Plastic Enterprises shows that the average Gross Profit margin is below the normal standard norms (20–30%) and also 6 small Plastic enterprises have registered below 5% average net profit margin as less than 5% only one firm maintain the standard average net profit ratio, i.e., 5–10%. The findings of the seven small Plastic enterprises show the average return on capital employed or return on investment, i.e., Net profit (Post Tax)/Net Worth is below 1% because most of the firms are highly dependent on bank finance and enjoying the credit facilities from suppliers with a cost element attached to it. It is seen from Table 8.2 that all small Plastic enterprises were financed by bank so they are to pay interest on borrowed money to bank, which affects adversely their net profit and accordingly their return on capital employed.

*Current Ratio* is the relation between the amount of current assets and the amounts of current liabilities. It is essentially a tool for measuring short-term liquidity and solvency of small Plastic enterprises. Generally, a 2:1 ratio is considered as normal. *Total Current Assets to Proprietor's Equity Ratio* is the relationship between Total Current Assets and shareholders/partners/proprietor's fund. The purpose of ratio is to calculate the percentage of entrepreneurs fund invested in current assets. The ratio is arrived at by dividing by total current asset by the amount of shareholders/partners/proprietor's fund. There is no "rule of thumb" for this ratio and depending upon the nature of business there may be different ratios for different firms. The average of the following ratios is given in Table 8.5.

**Table 8.5** Liquidity ratios

<i>Current ratio</i>		<i>Total current assets to proprietor's equity ratio</i>	
<i>Average current ratio</i>	<i>No. of small plastic enterprises</i>	<i>Percentage of total current assets to proprietor's equity ratio</i>	<i>No. of small plastic enterprises</i>
<2:1	3	50–100	1
>2:1 and above	4	Above 100	6
Total	7	Total	7

Source Financial statements of the seven small plastic enterprises

Theoretically, the normal current ratio is considered as 2:1. 04 small Plastic enterprises satisfy the norms 2:1 and above and remaining 03 enterprises failed to satisfy the norms 2:1. Total current assets to proprietors equity ratio of 01 small Plastic enterprise is less than 100%, which indicates small Plastic entrepreneurs or promoters' fund is greater than total current assets and remaining 06 small Plastic enterprises where the percentage of above 100 means that proprietors fund are less than total current assets. It means the small Plastic enterprise depends on outside liabilities, i.e., banks finance, relative loans, and creditors.

Solvency refers to the capacity of a firm to pay off its long term debts. Solvency position in the small Plastic enterprises is measured with the help of Proprietary Ratio and Debt Equity Ratio. *Proprietary Ratio* reveals the owner's contribution to total value of assets. There is no hard and fast norms about the standard ratio, yet 60–75% of the total assets should be financed by proprietor's fund. The higher the ratio, the lesser will be the reliance on outsiders, although, too high a ratio may not be good for it. The formula of proprietary ratio is proprietors fund or Net Worth divided by total assets (fixed assets + current assets). *Debt Equity Ratio* measures the claims of outsiders and owners funds against the assets of the firms. The norm of such ratio is 2:1, although there is no standard norm, which is applicable for all enterprise (Table 8.6).

The Proprietary Ratio of 05 Plastic enterprises is within the standards norms and for the remaining 02 small Plastic enterprise it is below the standard norms, i.e., 60–75%. The debt equity ratio 07 numbers of small Plastic enterprises is within the standard norms, i.e., <2:1. The efficiency of the 7 small Plastic enterprises can be measured with the help of *Stock Turnover Ratio*, *Average Stock Holding*, *Net Working Capital*

**Table 8.6** Proprietary ratio and debt equity ratio

<i>Proprietary ratio</i>		<i>Debt equity ratio</i>	
<i>Percentage of proprietary ratio</i>	<i>No. of small plastic enterprises</i>	<i>Percentage of debt equity ratio</i>	<i>No. of small plastic enterprises</i>
<60	2	<2:1	7
>60–75	5	No debt	0
Total	7	Total	7

Source Financial statements of the seven small plastic enterprises

*Turnover Ratio*, and *Asset Turnover Ratio*. *Stock Turnover Ratio* indicates the number of times the inventory of a firm rotated within an accounting cycle. In this study average stock-turnover ratio was calculated using formula sales by inventory. The normal of this ratio may be taken as 5–6 times. *Average Stock Holding* is the average number of days it takes for a firm to sell off inventory. The formula is  $C/G \times 365$ , where C is the average cost of inventory at its present level, and G is the cost of goods sold (COGS). In this study due to non-availability of data of 7 small Plastic enterprises, within a short period of time, the average stock holding ratio was calculated by first finding one day sale by using the formula:  $\text{Annual Sales} \div 365$  and thereafter by dividing total stock by one day sale, we get Average number of days stock holding. For small enterprises, at least 3–4 month stock, i.e., 90–120 days may be treated as normal. It varies from industry to industry.

*Net Working Capital Turnover Ratio* indicates whether the investments in current asset or net current assets (i.e., working capital) have been properly utilized. The higher the ratio, the lower is the investment in working capital and higher the profitability or vice versa. But too high ratio indicating overtrading, too low ratio indicates that amount of working capital is not efficiently and effectively used. The ratio is an important indicator about the working capital position. The ratio is calculated by dividing total sales by net current assets. *Net sales/total assets (fixed + current) calculate the Assets Turnover Ratio*. The total assets turnover ratio indicates how efficiently firm is using all its assets to generate revenue. The ratio helps in suggesting whether the firm is generating a sufficient volume of business for the size of its assets investment. A high ratio indicates that the company is using its assets efficiently while a low ratio indicates the other way. The average of the following ratios is given in Table 8.7.

All small Plastic enterprises, average stock-turnover ratio is normal for 02 small Plastic enterprises. Therefore, 02 small Plastic enterprises are maintaining Standard Stock-Turnover Ratio and 05 small Plastic enterprises are below the normal standard. Just one plastic enterprise is maintaining above 90–120 days or more average stock holding in a year, which indicates standard average stock holding and the remaining 06 small Plastic enterprises, are in below 90–120 days average stock holding in a year that indicates below the standard average stock holding. The findings of the study show that Net Working Capital Turnover Ratio of 01 small Plastic enterprise is high and remaining 06 small Plastic enterprises

**Table 8.7** Efficiency of the seven small plastic enterprises

<i>Stock turnover ratio</i>		<i>Average stock holding</i>		<i>Net working capital turnover ratio</i>		<i>Assets turnover ratio</i>	
<i>Average stock turnover ratio</i>	<i>No. of small plastic enterprises</i>	<i>Average stock holding</i>	<i>No. of small plastic enterprises</i>	<i>Average assets turnover ratio</i>	<i>No. of small plastic enterprises</i>	<i>Average assets turnover ratio</i>	<i>No. of small plastic enterprises</i>
>5 to <6	2	Below 90–120 days	6	High	1	Low (Below 10%)	2
>6	5	Above 90–120 days	1	Low	6	Medium (10–50%)	3
						High (above 50%)	2
Total	7	Total	7	Total	7	Total	7

*Source* Financial statements of the seven small plastic enterprises

are low which indicate that amount of working capital is not used efficiently and effectively. Asset Turnover ratio of 03 small Plastic enterprises ranges in between 10 and 50% and 02 small Plastic enterprises below 10%, and only 02 small Plastic enterprises having high assets turnover ratio.

## CONCLUSION AND SUGGESTIONS

It has been observed that sources of capital of these enterprises mainly comprises bank financing, unsecured loan from friends and relatives and equity financing. While almost all the enterprises depend on bank financing and equity financing, one enterprise has taken unsecured loan from friends or relatives, probably because the rate of interest on such unsecured loan is comparatively high and banks are more flexible and transparent in disbursement of loans. The entire financial performance of the enterprises is analyzed from four points of views—profitability, liquidity, solvency, and efficiency. Profitability position of the enterprises is measured based on their gross profit and net profit margin and return on capital employed. In all three measures, the findings of the 07 small plastic enterprises show that the average Gross Profit margin is below the



normal standard norms, 6 small Plastic enterprises have registered below 5% average net profit margin and the average return on capital employed is below 1%. Therefore, the enterprises are reporting sub-standard results probably due to high dependence on bank finance and financing risk arising out of huge interest payments.

Liquidity position of the enterprises is measured with the help of current ratio and total current assets to proprietor's equity ratio. In both the measures, 04 small Plastic enterprises satisfy the norms 2:1 and above and remaining 03 enterprises failed to satisfy the norms. The total current assets to proprietors' equity ratio of 01 small Plastic enterprise is less than 100%, remaining 06 small Plastic enterprises where the percentage of above 100 means that proprietors fund are less than total current assets. Therefore, these enterprises have outperformed the standard benchmark. This result only proves that plastic enterprises have a good liquidity position mainly funded by banks, suppliers' credit, or friends and relatives.

The solvency position of the enterprises is measured with the help of proprietary ratio and debt equity ratio. Almost all the enterprises in the cluster are conforming to the standard norms of these two ratios, which means that the enterprises are adequately solvent. Efficiency of the enterprises is measured based on stock-turnover ratio, average stock holding, networking capital turnover ratio and asset turnover ratio. In all the four measures, the Stock-Turnover Ratio of 05 small Plastic enterprises are below the normal standard, 06 small Plastic enterprises are in below 90–120 days average stock holding in a year. Net Working Capital Turnover Ratio of 06 small Plastic enterprises are low which indicate that amount of working capital is not efficiently and effectively used and Asset Turnover ratio of 05 small Plastic enterprises ranges up to 50%. Therefore, the enterprises are projecting below-average performance, which only goes on to prove that the enterprises are not yet being able to convert their stock, capital, or assets into turnover with high efficiency.

Finally, it may be concluded that the number of plastic manufacturing enterprises in the select cluster are increasing day-by-day. However, they cannot sustain for long mainly due to lack of profitable business opportunities and poor asset management. The financial stability of the enterprises can be improved through maximization of sales, minimum maintenance of inventory, and proper working capital management. The Government of West Bengal may take a few positive initiatives to popularize the product in the local market and provide them with all sorts support through Common Facility Centers.

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# Innovation and Human Resource Management Fit: Case of an ITES Firm

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## INTRODUCTION

According to IBM Institute for Business Value, 90% of Indian start-ups fail within the first five years (ref). As a part of this research, a survey was conducted among the venture capitalists to identify major reasons for failure. Undifferentiated business models and lack of sufficient skills were the top two reasons according to this survey. This clearly indicates lack of innovation among Indian start-up firms and the challenges they face in managing appropriate skill set. Moreover, India ranks 52nd in (out of 129 countries) Global Innovation Index (UN WIPO, Cornell, Insead 2019). Even within Asian countries, India (Asia's 3rd largest economy) stands 54th in a recent ranking of 56 countries on supporting innovation (Information Technology and Innovation Foundation—ITIF Report). Above observation can also be mapped to the Indian ITES firms. Lack of sufficient number of successful software products by Indian firms and relatively limited success by bigger firms in niche technologies like cloud,

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artificial intelligence and augmented reality indicates the challenge faced by these firms.

In this paper, we argue that the innovation and human resource management are intrinsically related. Several scholars have pointed out that lack of sufficient skills combined with undifferentiated business-model impact technology innovation in Indian ITES firms. This paper uses the lens of Ansoff's matrix to classify different types of innovations at an ITES firm. This study is an attempt to identify strategies for managing human resources with an objective to fuel innovation lead growth in these firms. Many researchers have done the study around the relationship between Innovation and human resource management (HRM). They have attempted to identify whether the firm's environment helps to create innovative HRM practice or it is other way round.

The researchers have identified many determining factors in the firm's innovative behaviour and have attempted to develop a relationship. Such determining factors include Recruitment, Training, job security, compensation and other practices. There are not very conclusive findings in any such areas. Though there is evidence that supports the Schuker and Jackson's model compared to Miles and Snow's model. An important work in this domain by Schuker and Jackson provides a connection between HRM practice and three types of strategy, namely—cost, quality, innovation. This model also recommends to appoint people from within the organization and to assign them responsibilities depending upon their ability to navigate through the uncertainties. In such situations, Miles and Snow's model argues in favour of external hiring. In this research, we attempt to resolve these contradictions in literature and propose strategies for managing human resources for different kinds of innovation in an ITES firm.

While the above set of literatures have touched upon many HR practices such as recruitment, training and compensation but there are no noticeable literature found which takes this aspect from growth strategy point of view. For example, what kind of HRM would be needed for deploying an existing product in a new market or for deploying a new product in the existing market and so on. This area is under researched and needs to be studied. A part of our findings will also address this gap.

## LITERATURE REVIEW

A firm's innovation behaviour and human resource practices are very much related in multiple aspects. Many researchers have undertaken this study and have touched upon different aspects of this relationship. Madsen and Ulhøi have focussed on the importance of mutual trust among different groups within a firm to encourage technology innovation (Madsen and Ulhøi 2005). A firm's HR policies, on the other hand, have been given importance by some of the other researchers who have highlighted its main dimensions of HR policies and its effective implementation. This is to facilitate technology innovation by knowledge management and also by creating positive organizational culture (Wang et al. 2005).

There have been attempts to measure organization support culture by introducing organizational climate diagnosis (KI diagnosis) needed to create innovation. It highlights the importance of organizational culture on employee's motivation, communication and on their productivity level. The KI diagnosis which was earlier developed in Japan is showing its significance and this paper has attempted to demonstrate its significance in Europe as well (Giardini and Kyllonen 2004). Joel D. Haines and Nawaz M. Sharif (2006) have presented a framework for managing sophistication of technology resource component to provide competitive advantage to a firm. They explain multiple definition of technology and identifies capital, labour and firm as factors required for production.

The framework uses for different constructs—Orgaware, Technoware, Humanware and Inforware to recognize the technology sophistication, which is very important for technological innovation. The literature review, however, did indicate that there have not been adequate studies done around the need of a solid framework, which can address the firm's growth needs by optimally planning human resource practices for fuelling innovation.

## WHAT IS AN ITES FIRM?

With the advancement of modern information and communication technology, we find information technology embedded in most of our personal and professional activities. However, such usages are largely embedded as secondary IT services. It is important to note and to distinguish that IT has enabled many other services, which are being used

and are being offered as primary services. Such primary services include Business Process Outsourcing (BPO), call centre, tax and legal back office services, content development, which can be termed as Information Technology Enabled Services (ITES). As per “cio-wiki.org”, ITES is defined as “IT enabled Services (ITeS), also called web enabled services or remote services or Tele-working, covers the entire gamut of operations which exploit information technology for improving the efficiency of an organization”

### WHAT IS INNOVATION?

The term ‘Innovation’ is used for new ideas, implementation of improved solution with processes, products, methods, tools, technologies, etc. This is different from ‘invention’ in the way that it is more related to the practical application of invention. A more widely accepted definition of innovation is given by Crossan and Apaydin which states ‘Innovation is production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and the establishment of new management systems. It is both a process and an outcome.’ From business and economics standpoint, innovation is considered as a fuel for growth, which is very much essential for rapidly changing business environment.

### SOME EXAMPLES OF INNOVATIONS AT ITES FIRMS

For the last two decades, ITES firms have come a long way. These firms initially started and being seen only as transaction processing company. However, a close look at their activities provides a lot of insight about the innovation such firms have brought about. Few examples of innovations at ITES firms include:

- In the field of medical diagnostics, one of the major challenges remains the portability, cost and setup of large diagnostics and imaging machines in remote rural areas. “3nethra” was the solution, which addressed one such need in the area of ophthalmology. “3nethra” is a portable imaging tool, which acts as—Refractometer, Retina & Cornea imaging. It can be mounted on a mobile clinic and has teleophthalmology capability.

- *Aadhar* (social security identity of India) is another example, which helps to maintain a potentially large database of about 1.2 billion people for their unique identification. This is a 12 digit unique number and has the capability of being reached “Anywhere, anytime, anyhow”.
- Mobile banking is another example, which provided a mobile-based branchless banking platforms being adopted by the banks. It has a large database of information that are available for enabling automation of services like IVR.

### WHAT IS THE HISTORY OF INNOVATION AT INDIAN FIRMS?

Until new economic policy was implemented in India in 1991, India was only serving a low cost manufacturing factory for some of the global brands. The Indian job market only provided opportunities to government or semi-private job to its large engineering talent pool. During the 70s, although the department of electronics was established in India to cater national electronic Industry and during the 1980s, the software export was also encouraged. However, it was only after the signing of the GATT agreement in 1993 that large MNCs such as Oracle, Microsoft, Sun and like companies set up their research and development centre in India. It acted as a fuel for Indian large technical talented pool who started establishing their credential worldwide. The Government further encouraged this Industry by setting up SEZs. Many Indian companies also took extra steps setting up MoUs with many Indian and Global technical institutes to setup research and development (R&D) labs.

### SOME EXAMPLES OF INNOVATION ATTEMPTS THAT FAILED?

While there are success stories of applied Innovation in India for the likes of Aadhar, 3nethra and others, there are not too many stories of success. Most of the innovations in India are failing because of several reasons. Some of the innovations, which failed recently are as discussed below:

- The Indian branch of eBay, global retail company, acquired by Flipkart attempted its Indian operation in early 2017. Like any other online e-commerce platform, the operation started through its website. However, the website did not achieve much success and

eventually it had to close down. The primary reason was its business model. Indian consumer did not adopt the online auction model. In addition, the product quality in many transactions was questioned and there was no guarantee provided by the buyer. There was a stiff competition from Amazon and Flipkart. eBay also couldn't manage its employee optimally and they had to let go around 350 employees well before its closure decision.

- India's largest crypto exchange, Zebpay attempted to trade in niche area of Bitcoin and other cryptocurrencies. Very soon, the number of subscription rose beyond 3 million users. However, it had to close in 2018 after the policy circular issued by the Reserve Bank of India (RBI) which restricted the buy and sale of cryptocurrencies.
- Monkeybox, a big food supplier, provided vegetarian diet to school kids in the 3–18 age group in Bengaluru. The diet was packed using recommended dietary allowance (RDA) and being supplied to schools and 1500 food order every day from 85 schools. However, this startup had to shut down its operations in 2017. The primary reason was not having enough cash flow and sustainable revenue model.

There could be several reasons for failures in managing innovations at Indian ITES firms such as lack of sufficient funds, less appetite for failures or risk, lack of skilled manpower and lack of government support. However, our focus in this paper is on the challenge of managing human resources for innovating at an Indian ITES firm.

## RESEARCH QUESTIONS

Our research objective is to address the strategic planning around utilization of human resources for different types of innovation. The research questions are discussed below:

1. Identify and classify different types of innovations at Indian ITES firms.
2. Identify Human Resources Management strategies for each of these different types of innovation at Indian ITES firms.



## METHOD

We have adopted case study (qualitative) research method for this study. The reasons, we found case study method as appropriate one are as follows (Yin, n.d.)

- The research inquiry attempts to understand “How” and “Why” part of HRM for different growth strategies
- There is hardly any control over the events within the given area of study
- The focus is more on contemporary events rather on historical events

For source of evidence, the study relies on “interviews” as it provides focused attention to the queries using guided conversation. It also does provide very insightful information. The data analysis part is done using “coding” and “explanation building”.

We have interviewed eight senior professionals of different Indian ITES firms. They are either business unit leads or technology practice director. The interviews are taken for one hour or more for each interview sessions. For some of the professionals, more than one interview was conducted.

## KEY FINDINGS

Ansoff’s matrix, a well-established strategy tool has been used to classify different types of innovations at ITES firms. Ansoff’s Matrix, a strategic planning tool, provides a framework for business leaders for planning future growth. It provides four different quadrants by using  $2 \times 2$  matrix of product and market with New and Existing parameters.

- **Market Penetration**—This growth strategy is applied for selling existing products in the existing market. In this segment, the key tenets are promotion, discount and customer loyalty. The ITES firm in this case has operations globally including USA geography and offers “application managed services” to its customer. If the firm decides to offer its application managed services to a new customer in USA geography, this would be an example of market penetration.
- **Market Development**—This growth strategy is applicable for selling existing products to new customers. The case studies and demonstrated expertise in the existing product can help the firm attracting

new customers. If the same ITES firm offers its existing service—“application managed services” to its new customer in Latin America geography where firm does not have any customer, this would be an example of market development.

- **Product Development**—Selling new products to the existing customer is what this growth strategy talks about under product development. Sometimes it involves selling of additional products to the loyal customer. If the same ITES firm offers a new service—“application upgrade service” to its existing customers in USA geography, this would qualify as an example of product development.
- **Diversification**—This is the most risky growth strategy as it involves selling new products to new customers. If the same ITES firm offers a new service—“application upgrade service” to a new customer in Latin America geography where the firm does have any customer, this would be an example of diversification. Foray in cloud solutions, product development are also examples of diversification.

Following strategy with respect to access to skill, performance management and separation planning is suitable for four different categories of innovation.

### MARKET PENETRATION TYPE OF INNOVATION

Under this growth strategy, access to skill should be focused on standard induction process after new employees are recruited from reputed technical institutes, they should be part of the standard performance management process. It can be managed under the principle of normal bell curve appraisal process. They should be encouraged to keep updating their skills to meet market demand. If any employee decides to move on and wants to resign, there should be a process of getting his/her feedback recorded through an “exit interview” process.

The market penetration strategy can be further sub-divided into following approaches

- **Increase Market share of Product or Service**—In this case, pricing becomes very important so that more share of the current work (type) can be secured

- Expand in growth market—This requires the identification of the other related segments which are either related to the existing offerings or part of the extended value chain
- Target Competitor's Pie—This strategy becomes effective particularly in a saturated market where most of the offerings are matured and there are hardly any difference of services among service providers (Competitors)
- Increase usage of current customer base—In this case, service/product consumption is increased within the same customer base.

### MARKET DEVELOPMENT TYPE OF INNOVATION

In this case, the recruitment should be channelized from high quality management institute. The candidates having technical background should be given references. Additionally it is advisable that an aptitude for sales should be tested. The candidate should be encouraged to work in a new location and under challenging environment during training and induction process. Their performance appraisal should be based on strict completion of goals and the reward system should include bonus component. In general, it is seen that such employees are largely recruited for a specified period on contract basis; hence contract norms should strictly be followed in case of contract hiring.

The market penetration strategy can be further sub-divided into following approaches

- New Geographical Areas—This could be a new region where potential of product demand can pick up depending upon the supply. Several market survey can help assessing the new geographical region for market development
- Repackage the Product—Repackaging the product/service does attract new market. For example, packaging infrastructure hosting deals with applications development services
- New Distribution Channels—The service providers should always explore the options of new distribution channels. Such as—can an in-person activity be provided online?
- Different Subscription schemes—This could include various options such as buy, rent, subscription, rental, etc.

## PRODUCT DEVELOPMENT TYPE OF INNOVATION

Here the recruitment should be done from high quality technical institutes and a reasonable percentage of the employees should have specialized degree so that they can contribute towards product development in much constructive way. Their appraisal system should be done through a different process where the appraisal process should be kept away from the “normal bell curve” process. The focus should be on building new assets and knowledge artefacts. If anyone from this workforce category plans to move out of the firm, his exit interview should focus on grievance solution. The market penetration strategy can be further sub-divided into following approaches:

- Evaluate Customer Needs—In the current digital world, customer requirements are changing very frequently and need to be understood in holistic way to respond appropriately.
- Create Separate Category name (Brand) of the product/services—Creating a separate category of the name of the offering would help building a new market, attracting new customers and reducing the risk on the existing service lines.

## DIVERSIFICATION TYPE OF INNOVATION

Under this growth strategy, the focus should be inducting well-qualified candidates from the local market. Here the focus should be on hiring experienced associates. Generally, such candidates would also need to have good amount of market and domain knowledge for the specific geography or sectors. Their performance appraisal should be strictly bonus based and the local norms should follow if they plan to move out of the firm. In general, this segment of candidates would be fast moving; hence, adequate care should be taken during their on boarding or exit. The above conclusion has been summarized in Table 9.1. The market penetration strategy can be further sub-divided into following approaches.

## CONCLUSION

Based on several literature reviews, we have found a gap and the need for a structured framework, which can help managing the human resource skills. This paper provides a framework based on Ansoff’s matrix to

**Table 9.1** Market penetration and resource management strategy

<i>Management strategy</i>	<i>Penetration (A)</i>	<i>Product development (B)</i>	<i>Market development (C)</i>	<i>Diversification (D)</i>
Focus area	<ul style="list-style-type: none"> <li>• Increase market share of product or service</li> <li>• Expand in growth market</li> <li>• Target competitor's pie</li> <li>• Increase usage of current customer base</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate customer needs</li> <li>• Create separate category</li> <li>• New subscription schemes</li> </ul>	<ul style="list-style-type: none"> <li>• New geographies</li> <li>• Repackage the product</li> <li>• New distribution channel</li> </ul>	<ul style="list-style-type: none"> <li>• Complete diversification</li> <li>• Upstream diversification</li> <li>• Downstream diversification</li> <li>• Sideways diversification</li> </ul>
<i>Resource management strategy</i> Access to skill	<ul style="list-style-type: none"> <li>• <i>Recruitment channel I</i> Recruit bright science graduate from reputed colleges through campus recruitment, aptitude test followed by interview</li> <li>• <i>Recruitment Channel II</i> Recruit through high standard aptitude test. Student can be from general background with strong base in quantitative subjects</li> <li>• Focus on attributes such as discipline, Quick learning abilities, team player</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Recruitment channel I</i> Recruitment from high quality technical institute bachelors or masters with specializations in IT, computers science or like degrees (STEM)</li> <li>• <i>Recruitment channel II</i> Recruit (few limited number) research associates/doctoral associates from IT, computers science Or domain background</li> <li>• <i>Recruitment Channel III</i> Recruit (few limited number) experienced professionals from Industry with applicable domain knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Recruitment Channel I</i> Recruitment from high quality management institute</li> <li>• <i>Recruitment channel II</i> Recruit (few limited number) experienced professionals from local market whose credentials are well established</li> <li>Focus on Attributes such as result orientation, managing quickly connects, through uncertain environments</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Recruitment Channel I</i> Transfer/depute people from (B) and (C) category</li> <li>Focus on attributes such as risk taking abilities</li> </ul>
Learning, training management	<ul style="list-style-type: none"> <li>• Rigorous induction and training program</li> <li>• Regular up-skilling training participation</li> <li>• Technology specific certifications</li> <li>• Focus on process innovations</li> </ul>	<ul style="list-style-type: none"> <li>• Induction process focussed on product domain, existing offerings, company's vision</li> <li>• Regular training on domain specific development, on industry trends</li> <li>• Industry, technology and domain specific certifications</li> <li>• Focus on product innovations</li> </ul>	<ul style="list-style-type: none"> <li>• Periodic participation in advanced management courses</li> <li>• Training on P&amp;L management</li> </ul>	<ul style="list-style-type: none"> <li>• Develop entrepreneurial Skills</li> <li>• Encouragement of skills such as—ability to navigate through uncertainties</li> <li>• Improve cross-functional, cross cultural, social ties mindset</li> <li>• Periodic participation in advanced management courses</li> </ul>

(continued)

Table 9.1 (continued)

<i>Management strategy</i>	<i>Penetration (A)</i>	<i>Product development(B)</i>	<i>Market development (C)</i>	<i>Diversification (D)</i>
Performance management	<ul style="list-style-type: none"> <li>• Measurement on achieving certifications</li> <li>• Target on grooming juniors</li> <li>• Encouragement on automation tool development and bringing cost effective measurements</li> <li>• Target to reduce total cost of ownership for customer and own organization</li> <li>• Structured performance evaluation system</li> <li>• Focus on institutional collectivism</li> <li>• Develop fungibility</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on value creation</li> <li>• Measure contribution on adding new features in the existing product creating new paper itself</li> <li>• Publishing Industry standard white papers, participation in IT/domain specific seminars</li> <li>• Focus to create solution to bridge the gap with customer requirements</li> <li>• Regular review with market analyst's report to evaluate and improve the product positioning</li> <li>• Incorporation of digital features in products/services</li> <li>• Focus on contextual knowledge</li> <li>• Structured performance evaluation system with increased weight age on product creation</li> <li>• Rewards tied to creation of new products, product enhancement</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on risk and reward policies throughout the assignments</li> <li>• Measurement on ability to create new bundled products</li> <li>• Target of creating new pricing/subscription structure</li> <li>• Orientation towards customer service</li> <li>• Performance evaluation system allowing flexibility on case to case basis</li> <li>• Focus on mobility, adaptability and flexibility attributes</li> </ul>	<ul style="list-style-type: none"> <li>• Performance evaluation system—allow to be creative</li> <li>• Focus on mobility, adaptability and flexibility</li> </ul>
Compensation and rewards	<ul style="list-style-type: none"> <li>• Structured compensation structure focussed on goal management</li> </ul>		<ul style="list-style-type: none"> <li>• Commission and bonus based compensation structure</li> </ul>	<ul style="list-style-type: none"> <li>• Allow greater flexibility to compensation and rewards—case to case basis variation</li> </ul>

Source: Author (based on the results of the study)

address this problem for four different business growth model. We have not encountered any such model being proposed earlier and hence we firmly believe that this new model will be very helpful for the practitioners to fuel innovations in ITES or similar firms.

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PART III

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Socio-Economic and Cultural Perspectives  
in Emerging Markets





# A Study on Sustainable Livelihood Frameworks and Entrepreneurial Opportunities with Specific Reference to the Sabai Grass Handicraft, Odisha, India

*Lipsa Mohapatra and Goutam Saha*

## INTRODUCTION

The intersection between Sustainable Livelihood and Artisanal Entrepreneurship is an important area of study in a country like India where artisanship generates massive employment and entrepreneurial opportunities after farming. The purpose of this study is to understand the livelihood generation process through artisanal entrepreneurship opportunities in rural areas of Odisha. For the study, the authors have chosen the Sabai Producer Group in Guhaldihi Village of Baripada block in Mayurbhanj district of Odisha. It is a tribal-dominated area in which

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the main occupation of the people is agriculture, selling of Sabai grass and Sabai grass ropes. To reduce their vulnerabilities, certain government agencies started forming Women SHG's<sup>1</sup> in this area. The women were trained to produce non-traditional artefacts using Sabai grass. These SHG's have now grown more prominent and established themselves as successful businesses contributing to the growth and stability of the rural economy. Our paper attempts to understand their sustainable livelihood frameworks and entrepreneurial capabilities.

A literature review on artisanal entrepreneurship, challenges and prospects, a study on Sustainable Livelihood Frameworks proposed by various organizations, Sabai grass and its importance gave us insights about the variables to study. Qualitative research techniques were used for primary data collection and analysis. We designed a questionnaire for a Focus Group Discussions (FGD) with the artisans and interview questions for the Government officers and business owners linked to the cluster. Content analysis has been used to analyze and validate the data. We identified that the cluster has been successful in its purpose. The cluster formation and livelihood generation is not based on any such SL frameworks. However, its working model may be explained by the fundamental principles underlying the DFID SL framework. We also found that the cluster delivered capabilities to the women entrepreneurs in terms of product knowledge, innovation and market understanding.

The paper is the first to propose a relationship between the fundamental principles of the SL frameworks and the operations and outcomes of an existing Artisan Producer Group. The focus of the paper is specifically on artisan entrepreneurs and how group entrepreneurship through SHG's and Producer group creates value addition in capability building, income generation, knowledge creation and generation of a more sustainable system leading to community development and social well-being in a tribal-rural setup.

## THE SABAI GRASS ARTISANS IN GUHALDIHI

Researchers and policy makers argue that rural artisanal entrepreneurship with SHG women generate sustainable livelihood for the community. However, this concept needs to be tested considering the local dynamics.

<sup>1</sup>All abbreviations used in this chapter are listed in Appendix at the end of the chapter.

Therefore, the authors have chosen the Guhaldihi Sabai Producer Group where the women artisans have been trained to develop handicraft products with the naturally growing sabai grass found abundantly in that area. The producer group aims to develop and chanelize their capabilities as an artisan entrepreneur and to understand their model of sustainable livelihood framework. The Guhaldihi Producer Group is the first of its kind formed in the Mayurbhanj district and has been running successfully from past 8 years.

### *Sabai Grass*

Sabai grass or '*Eulaliopsis Binata*' is a naturally growing grass in the tropical climate of the Mayurbhanj district of Odisha. (Sahu et al. 2010). The grass is used for making ropes and handicrafts, used for both decorative and utility purposes. These articles are sold in local, national and global markets. The products are a suitable replacement for plastic products and have the potential of developing a sustainable and circular economy. Also, the grass is a primary source of livelihood for many tribal communities settled in the area (Kundu 2016). But a little attention has been paid to the craft-based enterprises in this area.

Mayurbhanj is one of the tribal-dominated districts of Orissa, which has been declared as the fully Scheduled district of the State. Out of 26 Blocks, the tribal are more concentrated in Udala, Khunta, Bijatala, Jamda, and Baripada Blocks where the population varies from 70 to 80% of the total population of respective Blocks. The tribes constitute 56.6% of total population of the district, though the population of Mayurbhanj is only 6% of the State's total population (Mohanty 2017).

Though the majority of the population is dependent on the primary sector, agriculture is under-developed because the district lacks in irrigation facilities. In the agricultural sector, there is hardly any commercial surplus production in the district due to small land holdings except for Sabai grass (Sahu et al. 2016).

The grass is mainly harvested between November and June. The district's annual Sabai production is estimated about 20,000 metric tons, which fetches about Rs.300 crores (Kundu 2016).

### *Working of the Producer Group*

In the Guhaldihi village of Baripada, the Sabai Producer Group is mainly run and managed by the women of that village. About 60 registered and 40 unregistered members constitute the Producer Group. These women are part of different Self-help groups (SHG) present in Baripada. In general, 10–20 women who are willing to become entrepreneurs and produce non-farm products, could add to their existing family incomes from the SHG. An SHG is formed as a part of the policies laid down in NRLM (National Rural Livelihood Mission, MoRD, Govt. of India). The first SHG in Baripada started in 2001 with the intervention of DIC and ‘Mission Shakti’, a Govt. of Odisha organization that aims to create Women SHG for the economic development of rural households.

Selected members from 13 such SHG’s were combined to form a Producer Group. Under the apprentice of ORMAS and DRDA, Odisha and District Collector, the first Producer Group (PG) was formed in Guhaldihi. The number of members in a PG ranges from 20 to 50. The members register themselves under the PG as per the norms laid down by NRLM. ORMAS plays a significant role in establishing the supply chain and market linkages of the products. The women earn a decent living of about Rs.200–Rs.300 per day as making charges of these products.

The women working in the cluster fix the making charge for each item. Every PG has a ‘Udyog Mitra’ who is one of the members of the cluster. He/she has a minimum education of up to class 8 and has some knowledge about the market. This person is responsible for buying the raw materials, fixing up the cost of each product, and helping other members to decide the making charge of each item, and set up the selling price of the items. ORMAS and many NGO’s like *Arupa* from Bhubaneswar, *Jio* from Delhi and fashion brands like Fab India place orders with the artisans and procure finished goods from them. ORMAS conducts national and international fairs across different parts of the state of Odisha and India. The artisans are selected according to their skill levels, amount of produce and cost of products. They get a fair chance to represent their clusters/SHG/Producer group in such fairs to sell their products directly to consumers. No third party interference exists in such cases. In other cases, the private organizations set up the costing and MRP of the products and sell them in the market.

SHG’s are linked to banks to get micro-credit loans that they could use to start up any business. In this case, the women were trained to

make handicrafts from Sabai Grass. They used fine graded Sabai grass and palm leaves to make decorative artefacts. Designers, appointed by the Govt. Agencies like DIC, ORMAS, DRDA, Odisha and Mission Shakti, conducted Skill development workshops and design training programs for skill up-gradation of the artisans. The trainers were designers from NID or NIFT and/or Master Artisan in the same field, artists and professionals. NABARD also helps in establishing the credit linkages and provide small amount of loans to each SHG. The loan amount increases once the previous loan is cleared.

Such initiatives by various govt. organizations operating in the state have aimed to help these women in improve their lives. They have a steady source of income. They have the freedom and choice of work and working hours. During the agricultural sowing and harvesting season they help their family members in agriculture, which was earlier, their only occupation. Aajeevika—National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India, in June 2011.

Aided in part through investment support by the World Bank, the Mission aims at creating efficient and effective institutional platforms for the rural poor, enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services (MoRD 2011). The women have been trained and their skills have been upgraded through various government interventions. Design development training, association with banks, access to credit facilities, the government developed common facility centres, family and societal support and community development goals drive these women to earn more. They maximize the use of natural resource base, have adequate nearness to raw material supply chain, can be trained and new product development can be easily implemented. There are nine producer groups with 382 members that are currently promoted in the district producing handicrafts with Sabai Grass. The area under study is, however, Guhaldihi Sabai Producer Group.

## LITERATURE REVIEW

### *Artisan*

The term artisan is used differently globally and may be interpreted in different ways. The origin of the word artisan can be traced back to the

mid-sixteenth century from Italian *artigiano* or Latin *artitus*, which can be traced to the English word *art* (Oxford, n.d.). Throughout this paper an artisan is considered to be a small business or individual engaged in producing, transforming or repairing goods without the use of machinery and having not more than five employees (Carlson 2016). There are a number of reasons for supporting the local artisan community because it not only provides income and social equality, but as stated by the Fair-trade resources organization (2008), it contributes to the overall economic growth of the country (Raynolds and Bennett 2015).

Artisans are identified and distinguished by the type of trade they practice, or some are defined based on their goals and value set (Tregear 2007). Due to the diversity of the artisanal sector, artisans are not very well defined in the research literature.

### *Artisanal Entrepreneurship*

Rural livelihood studies in the non-farm product sectors in India are very crucial to understand about the economic and social growth of the people. In order to achieve this, capabilities need to be generated and income opportunities need to be explained (Sen 1993). In the non-farm sector handlooms and handicrafts also form a major income generating profession. It not only generates income but also develop design capabilities, artisans also known as designers and entrepreneurs. This mode of rural entrepreneurship has helped shape the village economy in India since long. With Government interventions, the artisans have received better facilities (Minimol and Makesh 2012).

Artisanal and other non-farm activities have been considered as a significant component of livelihood choices in developing economies. Artisanal enterprises are mainly associated with place and locality, cultural forms of business ventures (Bown 2014). However, the economic activities of artisans are well-acknowledged as an engine for economic development (Igwe et al. 2018). A few other researchers have observed that ‘most people still do not understand the full economic value of the sector and do not think of artisan businesses as real industries or as drivers of economic development and job creation’ (Lonsbury and Glynn 2001).

In India, the self-help groups have helped to provide income, generate skills and provide social well-being. Therefore, it is imperative to study the role of different social actors in this sector that contribute towards the changing economy (Lee and Cowling 2014).

### *Women Entrepreneurship in Rural India*

Entrepreneurship is the practice of starting a new organization or a business. In the words of Schumpeter, 'An entrepreneur is a person who is willing and able to convert a new idea and invention into a successful innovation'. Entrepreneurship can create new economic opportunities for women and contribute to the overall growth and exit from poverty. The potential flexibility in time use from entrepreneurship can also facilitate balancing work and family obligations for women (Minniti 2010). According to a report published by OECD in 2015, most entrepreneurs in India belong to the unorganized sector and constitute about 99% of all businesses (Daynard 2015).

There is also a growing literature on female entrepreneurship in India. According to the Policy Research Working Papers published by World Bank in 2012, 2013 and 2014, the researchers have been successful in identifying the key factors suitable for development of women entrepreneurs such as education, income per capita, infrastructure, family situation, self-perceptions, agglomeration, community structures, network benefits and political representation (Ghani and O'Connell 2012/2013/2014).

According to Minimol and Makesh (2012) Self-help groups in India have played a significant role in the development of rural women entrepreneurs by providing income, generate skills and social well-being. In their study conducted in Kerala, they surveyed 200 respondents from 18 SHG's and found out that SHG's have helped the women to achieve a very high level of empowerment in terms of personal and social attributes. The women had a higher amount of self-respect and mutual respect and a greater amount of acceptance from family and relatives. These factors, along with the economic empowerment, had boosted up their self-confidence and made them economically independent. The study also found out that the social engagement of the women also enhanced; however, it was not very useful. Thus, the study highlighted the importance of SHG's in the development of women under poverty largely (Minimol and Makesh 2012).

It has been suggested that through training and financial assistance along with an improved understanding of systems rural women may be developed into successful entrepreneurs (Shastri and Sinha 2010). Sen defines capabilities as what people can do or be with their entitlements.

He provided a capabilities model that helped separate capability acquisition from the entrepreneurial application. According to him, a very significant objective of development should be to maximize people's capabilities, the freedom of pursuing different choices they value in life. He separates 'well-being freedom' from 'well-being achievement'; as a difference between the freedom to access resources that develop capabilities and the freedom to apply their achievements and improve well-being (Howell 2008). For example, poor people not only need access to some resources like training and technology, but they also need real opportunities to apply their newly earned skills (Sen, Capability and well-being, 1993). The study of the SHG quite often is related with sustainable livelihood and its framework.

### *Study of Sustainable Livelihood Frameworks*

To understand livelihood strategies, poverty reduction and sustainability, researchers from different disciplines have focused on the framework built on assets, processes and activities. In recent times, this has been termed as sustainable livelihood framework (Scoones 2009). To sustain a livelihood, people take up various activities to access assets, habituate to social factors like social relations, institutions and organizations; external trends like economic and political changes; and shocks like droughts, diseases, floods and pests. An SL framework provides a base to analyze a given situation, identify, remove constraints and strengthen the true inks for the livelihood success (Solesbury 2003).

Thus, a livelihood may be defined as the activities, assets and access that jointly determine the living gained by an individual or household (Chambers 1992). In this context, the following SLA frameworks developed by CARE, OXFAM, DFID and UNDP were studied (Carney 1999). After a thorough study of literature about the frameworks, the following five elements that define the broad aspects of livelihood assets and are common to all the frameworks have been discussed below:-

- Human capital (education, skills and health of household members),
- Physical capital (farm equipment machines),
- Social capital (social networks and associations),
- Financial capital and its substitute (savings, credit, cattle), and
- Natural capital (water, air, soil, flora and fauna).



## PROBLEM STATEMENT

The women artisans of Guhaldihi village have become self-reliant now. The government interventions and capacity building through trainings have upgraded their skills. The government and many private agencies provide them market linkages. They develop products on the basis of order received from various parts of the country. They are now earning better than ever before. But is the system self-sustainable? Which model of Sustainable Livelihood framework best fits their existing system? What more can be done? Can they become individual entrepreneurs? The artisans face tough competition from other alternative products in the market and many such producers groups existing elsewhere. Their products do not sell in the local Baripada market. The supply chain depends upon external agencies giving them work orders.

Therefore, in this paper, the authors have selected to study a women's producer group in Odisha that works with handicrafts made from Sabai grass. There exists a need to understand how a women producers' group can develop capabilities of its members to start up new entrepreneurial ventures. In this study, we have analyzed the various SL models that are popular in the literature and tried to identify which model best suits the current scenario.

## RESEARCH AIMS AND RESEARCH QUESTIONS

However, the cluster under study has been consistently progressing since its inception since 2010. This implies that the artisans have a successful model. Therefore, the primary focus of the research is to understand the functioning of the cluster and hence. This is the basic model of Sustainable Livelihood Framework that fits best in clusters. Secondly, to understand the various stakeholders present in the value chain and their contributions to the expansion of the handicraft business and thus the entrepreneurial opportunities. Third, is to comprehend the impact of various government interventions in the area that has led to a successful livelihood generation model.

### *Environment Study*

A preliminary analysis of the environmental conditions was made before the main research. The interviews and survey questions partly evolved

based on these analyses. It is also understood that handicrafts made from Sabai Grass are not a traditional age-old craft. These crafts have been recently developed by the government to boost livelihoods of the rural women. Hence, to obtain a complete picture and a better comprehensive knowledge about how and why these village women turned into craftsmen we employed a Focus Group discussion (Krueger 2002) amongst the members of the producer group.

## METHODOLOGY

For the purpose of this research, qualitative data was gathered through mix- methods. It consisted of field research through observation of the target group of artisans followed by a Focus Group Discussion. A face-to-face interview was conducted with the government officers, regarding the implementation of government policies and their outcomes. The interview was recorded and coded. Interviews of business owners working with these set of artisans were conducted through telephonic conversations followed by a questionnaire survey sent via e-mail. Content analysis was used to triangulate the findings from various sources. It was an iterative process and required cross verification. As the paper is based on qualitative data, it was imperative to collect data from various sources for triangulation and validation.

### *Focus Group Discussion*

As the producer group consisted women from a homogeneous segment of the society, it was easy to conduct an FGD. Questions were prepared based on the 5 parameters identified from the SL frameworks study. In addition, to understand the capabilities of the women artisans based on the capability model developed by Sen (1993). Only Odia language was used to communicate with the artisans, as they were not thorough with English or Hindi. One of the authors, being an Odia was the moderator. The questionnaire had very short and simple questions. The moderator translated these questions into Odia and the discussions were initiated. They were willing participants in the discussion. With their permission, the FDG was recorded and field notes were taken.

### *Interviews*

Interviews were conducted in person with government representatives and business owners. At the beginning of each interview, name and position were stated and then the aim of the research was explained to formalize the interviewee with the research topic. The interviewed persons were asked permission of an audio record and a video record at the beginning of the interview to analyze the data later. Additionally to the recording, notes were taken. They also validated the information received from the artisans.

### *Sample Selection*

Out of 60 registered members, 20 members were randomly selected for the FGD. Open ended questions were used to initiate an informal discussion. Thus the authors found that women from age-group 21–40 were involved in the craft making process. Small children were not involved as they went to school for education. Most of the artisans had obtained basic education in government schools in vernacular medium.

The information generated from the FGD was condensed, transcribed and paraphrased. Due to time restrictions, this could not be done with inputs from all participants, therefore just the relevant information and data was extracted and further elaborated on. Information regarding business relationship, product and business model was gathered to get a better understanding about the supplier and customer relationship as well as the value chain in which artisans operate in.

### *Data Analysis*

The data analysis was made by analyzing the main findings of the collected data from the FGD with the artisans as well as interviews with business owners and government representatives. Special focus was given to the suggestions and experiences delivered by the artisans. The analysis of the qualitative data was done using two fundamental approaches: the deductive approach and the inductive approach (Fereday 2006). The deductive approach, which involves using a predetermined framework to analyze the data, was appropriate for the conducted research. The interview data gathered was constantly compared to existing literature sources and theories.

Thematic content analysis is a method of the inductive research approach and was applied to analyze the paper whereby the process involved analyzing transcripts, identifying themes within those data and gathering examples of those themes from the text. The data analysis began right after the first data was collected. The aim was to find common patterns across the gathered data set.

Therefore, the recorded discussions were overheard several times to get familiar with the data and then coded. Themes with a broader patterns meaning were examined and defined. Afterwards the most important findings were transcribed and quotes from the FGD were noted. The responses of interviews were analyzed to understand the deviation or similarity of data obtained in the Focus Group Discussion (FGD) as exhibited in Table 10.1. Points of discussion are considered based on the variables identified from the literature.

## FINDINGS OF THE INTERVIEW

ORMAS is a Odisha government organization looking after the formation and execution of the Producer Group. It is also responsible for developing, channelizing and marketing of non-farm products including handloom and handicrafts. Therefore, we conducted an interview with the Dy.CEO, ORMAS previously working as the Chief Executive DSMS, Baripada (District Supply and Marketing Society). The questions were framed based on the other areas of concern provided by the SL frameworks which is as discussed below:

- Vulnerability Context (Shocks, Trends and Vulnerability)
- Transforming Structures (government and private sectors) and Processes (laws, policies, culture and institutions)
- Livelihood Strategies

### *Process of Policy Implementation*

ORMAS identifies rural pockets where they can intervene in developing products from the available natural resource base. They conduct tests to identify people who are interested in working for diversification of their livelihood sources. These people, men or women are grouped under various institutional structures like SHG (Self-help group), PG (Producer

Table 10.1 Major Findings from the FGD

<i>Points of discussion</i>	<i>Findings</i>
Community/religion	<ul style="list-style-type: none"> <li>• The majority of the artisans belonged to various tribes residing in the same or near-by villages</li> <li>• A few of them belong to the OBC communities</li> <li>• They all follow the Hindu religion</li> </ul>
Family type	<ul style="list-style-type: none"> <li>• Either nuclear or joint with 4–8 members</li> </ul>
Family well-being	<ul style="list-style-type: none"> <li>• They own Pucca houses which have been provided by the Government under the ‘Prime Minister Awaas Yojana’</li> <li>• Some people even own both Pucca and Kaccha houses</li> <li>• They also have secured family lives and are not subjected to domestic violence of any kind</li> <li>• All children go to nearby Anganwadi Schools</li> </ul>
Working hours	<ul style="list-style-type: none"> <li>• The artisans enjoy flexible and convenient working hours</li> <li>• Most of the artisans come to the community centre of the PG after completing their daily household chores and after their children go off to school. They work according to their capacity per day. Thus they can maintain the work-life balance</li> <li>• They get their remuneration on a piece-rate basis</li> <li>• The remuneration per item type, is decided the artisans themselves. It depends upon the complexity of the design and the time required to make one unit of the product</li> <li>• They enjoy Sundays and other local holidays as holidays</li> <li>• The District Collector has given the PG a Pucca house where the artisans can sit around in a well ventilated, well lit surroundings with electric ceiling fans and a warehouse to stock raw materials and a design studio to display finished products for buyers</li> <li>• The artisans commute from the vicinity of their homes and hence, find such an arrangement to be extremely convenient</li> </ul>

(continued)

Table 10.1 (continued)

<i>Points of discussion</i>	<i>Findings</i>
Training and skill up gradation	<ul style="list-style-type: none"> <li>• The Government gives them regular training by inviting designers, trainers</li> <li>• If a buyer provides a new design, then they also give training on how to develop those products</li> <li>• The trained artisans give further training to new participants in the PG</li> </ul>
Farming	<ul style="list-style-type: none"> <li>• Many women and girls, who are not registered with the PG, also join them to learn new designs</li> <li>• These members do not work full time. They come to learn as a matter of choice so that they may make some additional earnings</li> <li>• Agriculture is their main occupation</li> <li>• They mainly produce indigenous varieties of rice as per season</li> <li>• These areas depend on seasonal rainfall. Hence, mostly rain-fed crops are grown</li> <li>• There is water scarcity. Hence, water-intensive food products like vegetables are not grown</li> <li>• Also, many families have cattle and goats, so they do not produce vegetables as it becomes expensive for fencing their plots</li> <li>• They are mainly marginal (0–1 Hectare) farmers. So, they produce food crops only for self-consumption</li> <li>• Mostly rice, moong dal, groundnuts, etc. are produced</li> <li>• The village does not have a cold storage facility for vegetable production. The nearest cold storage is in Baripada (District Headquarter)</li> <li>• They do not use fertilisers for the indigenous varieties of rice crops. Only natural manure is used</li> <li>• During off-season, they produce hybrid varieties of crops and use fertilisers and pesticides in those crops only. They get water for irrigation from Government made canals</li> <li>• 'Agriculture and farmer's welfare department', a Govt. of Odisha organization provides them training on new methods of agriculture and the use of hybrid seeds and fertilisers</li> <li>• They have never assessed their annual income as most of the income is spent on regional festivities and other Hindu festivals</li> <li>• They have individual or community ponds in the village. They practice fishery for individual and commercial use</li> </ul>

<i>Points of discussion</i>	<i>Findings</i>
Village characteristics	<ul style="list-style-type: none"> <li>• The women artisans were asked to rate a few facilities available in the village on the level of their satisfaction</li> <li>• According to their ratings, factors like access to education facility, medical, clean drinking water and participation of the villagers in Gram sabha or Pali sabha conducted by the Village Panchayat Samiti were ranked higher than the village transport system, electricity continuity and availability of agricultural land</li> </ul>
Community well-being	<ul style="list-style-type: none"> <li>• The Government has provided basic facilities like medical, postal, banking (Bank of India), schools and electricity facilities in this Panchayat</li> <li>• They have access to clean drinking water through tube wells, wells and bore wells (subsidised)</li> <li>• They have access to different kinds of fuel for cooking like fuel wood and subsidised LPG and kerosene</li> <li>• Many villagers have employment under the MNREGA scheme, under which they have developed ponds, canals, roads, etc.</li> </ul>
Social well-being	<ul style="list-style-type: none"> <li>• All the women artisans are part of the village Panchayat meetings</li> <li>• The village does not have any experience of thefts, murders or molestations</li> <li>• Women have a much more sense of social security within the community and within the neighboring villages</li> <li>• All internal conflicts within the family or the community or village are sorted out with internal intervention and counselling</li> <li>• Their families seek their opinions in major decision-making</li> </ul>
Migration	<ul style="list-style-type: none"> <li>• The women are more concerned about community well-being than the individual</li> <li>• The artisans informed that there had been many instances of migration. People mainly migrate for earnings</li> <li>• Mostly after marriage, the families divide and as the parental property does not support the growing family, some people migrate to other places in search of jobs</li> </ul>
Savings	<ul style="list-style-type: none"> <li>• All the artisans have bank accounts as it is a mandatory requirement to become a part of SHG as per Government guidelines</li> <li>• People save money in banks, which is mostly spent on festivals, agricultural inputs and in any case of emergency</li> <li>• People save around Rs.10,000–Rs.20,000/- annually</li> </ul>
Credit facilities	<ul style="list-style-type: none"> <li>• The most important way the families lose money is the addiction to liquor of the male folk in the village</li> <li>• Liquor is available through Government licensed shops that promote drinking for their male counterparts</li> <li>• Such habits create many family disturbances and drain their income</li> <li>• According to government policies, SHG's are linked to micro-credit facilities through nationalized banks.</li> <li>• NABARD also provides great financial support for rural development</li> <li>• ORMAS provides Rs.1 lakh as a corpus fund for each SHG. This fund is used as a working capital for the SHG</li> <li>• Banks also provide loans to the SHG at a 12% interest rate. This helps the artisans to get financially stable and secure</li> <li>• Once the SHG returns the loan, they become eligible for a higher amount of loans to expand their businesses, purchase raw materials, transportation and other expenses</li> </ul>

(continued)

Table 10.1 (continued)

<i>Points of discussion</i>	<i>Findings</i>
Financial stability	<ul style="list-style-type: none"> <li>• Earlier they used sell Sabai grass and ropes made from Sabai grass. Sabai grass was made into 10 kg bundles and sold at Rs.15–20 in their local ‘haats’. Sabai Grass ropes were sold at Rs.20–30 for the thicker varieties and Rs.50 for finer varieties per kg. It used to take two-three days for an entire family to process the grass into ropes before it was sold in the market. Hence, the overall household income used to be drastically low</li> <li>• However, after getting engaged through the SHG, the women have started earning around Rs.200–Rs.300 per day. Thus, making a very significant contribution to their household income</li> </ul>
Environment assessment	<ul style="list-style-type: none"> <li>• They can satisfy all their basic needs like food, clothes, goods, services, etc. and are satisfied with their current financial situation</li> <li>• They have also acquired other material possessions like motorcycles, refrigerators, television, mobile phones, gold and silver jewellery, furniture and other necessary items</li> <li>• Being a landlocked area, Mayurbhanj has a rocky terrain</li> <li>• It has less area of land suitable for agriculture</li> </ul>
Natural calamity	<ul style="list-style-type: none"> <li>• The area under study is not affected by seasonal floods but droughts and sometimes affected by cyclones as well</li> <li>• The area is not affected by natural calamities like floods and cyclones that hit Odisha most often</li> </ul>
Level of satisfaction Major drawback of the business	<ul style="list-style-type: none"> <li>• But they are affected by droughts if rainfall is less in a year</li> <li>• From the above discussions, the artisans confirmed that they are happy and satisfied with their current financial status</li> <li>• Time management is seen as a major drawback as the production of craft takes a lot of time and effort</li> <li>• Pricing of the products—smaller artefacts are higher priced due to its complexity; however, such products do not find many customers</li> <li>• Work on orders—In case of big, bulk orders, the income generation increases while, in other times, the income reduces</li> <li>• Online platforms for the distribution of goods—the PG has a Facebook page and also ORMAS has tied up with Amazon and Flipkart</li> <li>• But due to less knowledge about handling social media accounts and orders from online portals, the artisans fail to make much benefit out of it</li> <li>• Competition—the artisans operate in a highly competitive market from other such artisans as well as cheap substitutes</li> <li>• Unable to match higher demands due to lack of organising capability for scaling up</li> </ul>

*Source* Author (based on the results of the study)



Group) or PC (Producer Company) depending on the amount and type of intervention required and the kind of structure they need to work upon. If an intervention requires more financing then they work on SHG model. If there are more number of participants, less financial and low intervention requirement, then they work on PG model.

These institutions are funded and managed by ORMAS and other government bodies like DIC, Mission Shakti, OLM and NABARD. ORMAS and OLM are the subsidiary units of NRLM. ORMAS aims at livelihood generation in rural areas and marketing of the non-farm products. It executes the policies, plans and guidelines as provided by NRLM, Ministry of Rural Development (MoRD), Government of India. In case of Baripada, they have been able to identify around 3000–4000 artisans who are willing to work in the handicrafts production. Hence, the business could be scaled up in near future.

### *Managing Shocks, Trends and Vulnerability*

ORMAS organizes Trade Exhibitions throughout the state and the country at various levels including International Levels. Hence, it provides enough outlets for sales throughout the year to the artisans of the SHGs or PGs. Through these trade fairs and exhibitions new buyers could be identified and the ORMAS officials initiate business processes with these buyers including legal documentation and agreements thus providing backward linkages, supply chain and forward linkages to the artisans thus reducing vulnerability and shocks. Training in new design development, quality management, product diversification is given to the artisans by inviting designers from reputed organizations like National Institute of Fashion Technology, Bhubaneswar, National Institute of Design, Ahmadabad, Master Craftsmen and other artists and designers of repute. Thus the artisans are made aware of new trends and change in fashion.

### *Developing Livelihood Strategies*

Such strategies are developed as per the laid down policies of NRLM. ORMAS prepares an annual financial plan of inclusion of more such SHG's into the Producer Group format. These financial inputs helps the SHG's and PG's to start and develop the clusters. ORMAS mainly contributes in providing very strong market linkages, linkages with new

buyers and organizations, credit facility, design training and capability development of the artisans.

## RESULTS AND DISCUSSIONS

Content analysis was done on the findings from the FGD and interviews. The findings of the interviews helped to validate the findings from the artisan PG. The results could be triangulated to form a coherent meaning. It is found that the cluster is self-sustaining and would continue to sustain as the income generation opportunities are increasing with many different interventions. The raw material supply is also constant as the grass used as the raw material is grown in the same and nearby villages. The authors also aimed to find out which Sustainable Livelihood Framework best fits this current situation. In this regard, a questionnaire (Annexure II) developed by Deluwar Hoque as part of his Doctoral Thesis (Hoque 2015) was used to segregate the above findings under the five major segments under the Livelihood Assets of the SL frameworks as listed below

- Human capital—It has been discussed under the above mentioned headings of Community/Religion, Family Type, Family well-being, Working hours, Training and Skill up-gradation.
- Physical capital has been discussed under the sub-headings of Farming and Village Characteristics.
- Social capital has been identified through community well-being, social well-being and migration.
- Financial capital and its substitute has been discussed under Savings, Credit facilities and financial stability.
- Natural capital has been discussed through Environment Assessment and Natural Calamity.

From the findings obtained from the FGD and interviews and the literature of various frameworks, the authors suggest that on the basis of the principles of operation, the DFID framework for Sustainable Livelihood best fits the existing scenario under study. There is slight difference in the principle of operation of OXFAM and CARE SL frameworks as studied from the literature. The results obtained correspond with the parameters mentioned under the heading of ‘Livelihood Outcomes’ discussed in the SL models. The Women Producer Group (WPG) has more income,

increased well-being, reduced vulnerability, improved food security and more sustainable use of the natural resource base available in the village. However, on further study, it is found that the UNDP model can also be implemented at a later stage for policy implementation for macro-level impact.

This Women's Producers Group is a classical example of women entrepreneurship that improved the livelihood of the community and developed the women's capabilities to form new SHG's and generate further income. This case focuses on the development of a community or group entrepreneurship as a whole rather than individual entrepreneurs. Group entrepreneurship is imperative for their existence and sustenance because of two major reasons. (a) The trade needs scale, timely delivery and maintain quality standards. (b) The government promotes group entrepreneurship by giving support to SHG and PG for their promotions and sales.

In this Women's Producers Group, all the five capitals have been developed quite significantly. Artisans of this producer group developed their capabilities in terms of the parameters namely (a) product knowledge, (b) innovation and (c) market understanding (Sen, Capability and well-being, 1993). However, there are many more things to do to develop this capital more and increase the capabilities of the people to make the Producer's Group more productive and self-sustaining in the years to come.

### *Limitations and Future Scope*

A comparative study of their socio-economic condition before and after the development of the producer group may also be done as further study. The artisans were found to be satisfied and had a positive approach to growth and prosperity. A scale for measuring satisfaction index for artisans in a given situation may be developed in the future. Such a scale would help in developing various policies for the betterment of the rural sectors.

## APPENDIX

See Table 10.2.

**Table 10.2** List of abbreviations

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CARE	Cooperative for Assistance and Relief Everywhere, Switzerland
DFID	Department for International Development, UK
DIC	Directorate of Industries
DRDA	District Rural Development Agency Odisha
DSMS	District Supply and Marketing Society
Dy.CEO	Deputy Chief Executive Officer
FGD	Focus Group Discussion
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act, 2005, India
MoRD	Ministry of Rural development
NABARD	National Bank for Agriculture and Rural Development, Mumbai
NGO	Non-Governmental Organisation
NID	National Institute of Design, Ahmadabad
NIFT	National Institute of Fashion Technology, Bhubaneswar
NRLM	National Rural Livelihood Mission
OBC	Other Backward Classes
OECD	Organization for Economic Cooperation and Development
OLM	Odisha Livelihood Mission
ORMAS	Odisha Rural Development and Marketing Society, Bhubaneswar
OXFAM	Oxfam is a confederation of 19 independent charitable organizations focusing on the alleviation of global poverty, founded in 1942 and led by Oxfam International, headquartered at Kenya
PG	Producer Group
SHG	Self-Help Group
SL	Sustainable Livelihood
SLA	Sustainable Livelihood Assessment
UNDP	United Nations Development Programme, USA
WSHG	Women Self-Help Group

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Source Author

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# Organizational Culture and Its Impact on Student Engagement: A Study Based on Private and Public Universities in Rajasthan

*Preeti Mishra and Sourabh Sharma*

## INTRODUCTION

Higher education is about the fundamental importance of the nation, as it is an intense instrument to construct the learning-based society of the twenty-first century (Nyangau 2014). Foshay (1991) in one of his articles specified that since long antiquity ancient, the objective of education has been to bring people this realization that how does it feel like to be a human being. Education in its most prime sense is any deed or know-how that has a seminal effect on the mind, character, or physical ability of an individual (Edwards 1993/2012).

Questions have been raised about the existence of organizational culture and its significance. The culture of an organization is manifested in what is performed here, how is it performed and who are the major

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performers in it (Tierney 1988). Further includes, “It concerns decisions, actions, and communication both on an instrumental and a symbolic level.” According to Ahmad (2012), organizational culture is a significant feature of a firm, as it can, and does influence the conduct of the employees, enthusiasm, and ideals. That is also true in the matter of institutions, their personnel, faculties and, of course, students. Nevertheless, we have always observed that the output of any company depends on the quality of its personnel and employees. These participants of the companies should be well versed and careful in order to achieve the desired outcome. Distinguished and recognized companies employ students from famous colleges and universities. The culture of the institutions defines the people who are involved in it. Having said so, this research work is imperative in order to manifest the involvement of students not only for the progress of the society but also for their own progress and advancement.

Kuh (2003) explains engagement as “the time and vigor students dedicate to educationally sound actions and deeds internally and beyond the classroom and the guidelines and practices that institutions apply to persuade students to participate in these activities.” Presenting better educational practice encourages faculty, staff, students, and many others on the assignments and activities that are related with higher consequences in terms of desired student outcomes (Bottenfield 2013). Gunuc and Kuzu (2015) quantified two types of involvements, namely, class involvement and campus involvement, and further elucidated the subdivisions of these two dimensions as cognitive, emotional, and behavioral involvements under class and morals, sense of attachment, and partaking under campus.

Higher education institutions are nowadays facing several challenges about attainment of students and their retention where cut throat competition has pervaded the entire world. Various researches have shown that if an organization wishes to thrive, it has to concentrate on giving better organizational culture and their level of engagement. Achieving explanations and clarifications tends to focus on psychological attributes and singular paucities, as a replacement for of the severe monetary and social constructions weighing afflicting youngsters. An effort has been initiated and completed to peruse the effects of organizational culture on students’ engagement in public and private universities in Rajasthan.

The data have been collected from students of public and private universities of management education through the questionnaire, email,



and other secondary sources to furnish the appropriate information. This research work is grounded on 400 students from both public and private universities from the seven divisions of Rajasthan. The outcomes of the research show that factors of organizational culture have significant relationship with the student engagement. Confirmatory factor analysis has been applied to validate empirically the hypotheses of the study. To examine the relationship of Organizational Culture with the Student Engagement regression analysis was conducted. Finally, *t*-test was performed to examine the mean differences between public and private universities with reference to organizational culture and student engagement. This research concludes that level of engagement of the students depends upon the culture of the institution.

## LITERATURE REVIEW AND FRAMEWORK OF HYPOTHESES

### *Organizational Culture*

The organizational cultures have a significant impact on efficacy (Denison and Mishra, *Organizational Culture, and Effectiveness*, 1995). Organizational culture is an integral trait of a firm/company, as it is able to, and does influence employees' conduct, enthusiasm, and ideals (Ahmad 2012). Tierney (1988) described that the culture of an organization is manifested by what is performed, how it is performed, and who performs it; it is related to judgments, activities, and communiqué, both on an instrumental and on a representative level. As culture is an intricate singularity, starting from original views and suppositions to palpable constructions and practices, some observers raise a question if culture can really be "measured" in a proportional sense (Fey and Denison 2003). Organizational culture is extensively believed to be one of the most important reasons in restructuring and revolutionizing public administration and service supply (Jung et al. 2009). The structures that are used, the procedures that are obeyed, and the ceremonies, signs, and stories that in abundance in the organization (Bagyo 2013) very often narrate about culture. In his article, Bagyo (2013) states, "culture performs in a various ways and we can recognize the particulars of it from how information is conveyed, feedback is provided, performance is controlled, and assignments are co-coordinated within the organization."

### *Organizational Dimensions*

Denison's model is founded on comparatively more "surface-level" ideals and their noticeable practices are prepared in comparisons of organizations (Ahmad 2012). Such regards are considered both more obtainable than the possibilities and more reliable than the antique scarcities (Yilmaz and Ergun 2008). Denison's hierarchical culture exhibits and relies on four social characteristics: involvement, adaptability, consistency, and mission that have surfaced in the writing to create an effect on commanding implementation (Denison and Mishra 1995). The following four traits constitute the hierarchical culture in Denison's system are as discussed below:

- **Involvement:** Active organizations enable their personnel and staff, create their organizations with teams, and cultivate human competency at all levels (Denison et al., *Corporate Culture and Organizational Effectiveness*, 2003). Officials, chiefs, and staffs are devoted to their assignment and job and feel that they have a part of ownership in the organization (Ahmad 2012). People at all stages and ranks experience that they have at least some decisive contribution into those decisions that will influence their job and that their job is directly affiliated to the goals of the organization (Denison et al., *Corporate Culture and Organizational Effectiveness*, 2003).
- **Adaptability:** Paradoxically, organizations that are healthily united are often the most challenging ones to transform (Prasad 2016; Kanter 1983). Internal assimilation and outwardly adaptation can often be different (Denison et al., *Corporate Culture and Organizational Effectiveness*, 2003). Flexible organizations are run by their clientele, experimenting with menaces and learn from their mistakes and errors, and possess competence and knowledge at creating transformation (Nadler 1998). They are incessantly altering the structure so that they are refining the unified capabilities of the organizations to give worth to their clientele (Stalk 1988).
- **Consistency:** Organizations also incline to be impactful because they inherit "mighty" cultures that are highly reliable, well synchronized, and well unified (Kuada 2015). Behavior is ingrained in a set of fundamental principles and ideals, and leaders and supporters are accomplished at reaching settlement even when they differ in their point of views (Block 1991). This type of stability is a commanding

source of steadiness and internal assimilation that springs from a mutual outlook and a high degree of conformism (Senge 1990; Denison et al., *Corporate Culture and Organizational Effectiveness*, 2003).

- Mission: Successful relations possess an inimitable feeling of purpose and course that exemplifies commanding objectives and vivacious purposes and convey a dream of how the association will appear in the future (Mintzberg 1987, 1994; Ohmae 1982; Hamel and Prahalad 1994).

### *Student Engagement*

Student engagement is essential not just for students' academic performance but also helpful in the socialization. With cutting-edge education institutions, challenging increasingly impoverished economic circumstances, and sustaining students (Trowler 2010). According to Kuh (2003), student engagement is explained as the time and vigor that students dedicate to educationally purposeful performance and the limit to which the institution receives students to take part in performances that pave the path to the success of the student. Kuh (2009) specified that student involvement, advances through a never-ending procedure such as spending of the extra time by the students leads to more transparency of the subjects and topics, which is then examined by the professors. Subsequently, give feedback to them, which contributes in the enhancement of the skills connected to academics and nurtures profound learning. Student involvement has been evaluated by different experts from intellectual, enthusiastic, and interactive perspectives, together with the dimensions of educational, rational, and social engagement, or with various blends of all (Gunuc and Kuzu 2015).

Student involvement cannot be viably branded or evaluated by a lone assessment process. The lively thought of involvement authorizes a multi-faceted method to cope with an assessment that clasps the intellectual thought of the behavior, full of sentiment and subjective dimensions inclusive of students' involvement (Mandernach 2015). The outcomes of a research conducted by exposed that intellectual, emotional, and behavioral involvements have a mighty association with academic attainment, and it is significant to enrich the cognitive and conduct-related engagements of the students. In addition to this, the last objective was conducted the surveys of the public and private universities of Rajasthan

to find out whether student engagement varies in both segments, *i.e.*, class engagement and campus engagement.

### *Campus Engagement*

Engagement is a sentiment of belonging to a place, enduring the approximation of college and dynamic investment in college exercises (Gunuc and Kuzu 2015). Social knowledge areas, the condition of the argument, life of the grounds and social dimensions in the amalgamation make significant promises to the progression of owning a spot, learning and student engagement. Investment is mentioned to as contribution, especially in grounds exercises or in out-of-class practices (Gunuc and Kuzu 2015). Several researchers reveals that social learning, the campus life and social measurements come together make important commitments to the advancement of belonging, learning, and student commitment (Blimling 1993; Bryson et al. 2009; Jamieson 2003; Matthews et al. 2011; Montgomery 2008; Pike and Kuh 2005; Pike et al. 2003).

### *Class Engagement*

Class engagement encompasses students, subjective, passionate, and conduct-related responses to in-class and out-of-class instructional practices (Gunuc and Kuzu 2015). Gunuc and Kuzu (2015) state that subjective involvement is recognized with students' methods to cope up with and understanding of their own knowledge. It refers to venture on attaining the valuing picking up, imbibing motivation, learning purposes, and self-guidance and arrangement. Enthusiastic involvement refers to students' passionate replies, including their circumstances of mind, relations and virtues to the educator/staff, colleagues, course material, and class. The conduct-related involvement integrates students' investment in scholarly, out-of-class instructional practices, their undertakings and their partaking and collaboration in classes (Gunuc and Kuzu 2015).

### *Organizational Culture and Students Engagement*

In this research, incline to display that organizational culture has its impact on the engagement of the students. The more attached and

engaged students become during the time they join their institutions, the more probably they will nurture the wanted results; analysis of the students' result is crucial documentation for institutions with value-oriented missions (Turi 2012). Student involvement is a multi-dimensional notion that includes diverse features of the student experience (Carey 2013). Carey (2013) describes that there are four crucial roles of students—assessors, participants, partners/co-creators and specialists, and change agents. A fine and controlled organizational culture brings out the best from the students. Bagyo (2013) specified that because of the engagement the culture is affected. Organizational culture remains one of the most competitive regions of academic investigation within the wider arena of organizational studies (Erwee et al. 2001). It is essential for us to know how much the organizational culture impacts the engagement of the students. The principles of universities and institutions though differ from region to region, but they definitely have a unique effect on the involvement of students. The supreme institutions are future-centric and forecast what talents, attitudes, and conduct they will require from their talented personnel (Bahizi 2012). Ranjitha (2016) various career options, which were earlier not considered as significant or renowned, are now among the desired career choices for students.

According to Lee, Jung-Sook (2014) multistage examination manifested that conduct-related involvement (characterized as exertion and steadiness in learning) and passionate involvement (branded as the sentiment of owning a spot) fundamentally estimated scrutinizing implementation. Student involvement is a multifaceted concept. Promise that organizational societies are alluring to students have to experience that they are recognized and affirmed; they are also viewed as a prime feature of the institutional culture, and students draw in when that culture honors and backs their efforts to know (Zepke and Leach 2010).

$H_{01}$ : There is insignificant relationship between the Organizational Culture and Student Engagement

### ***Public and Private Universities with Reference to Student Engagement***

According to Naidu and Derani (2016) and Hanaysha et al. (2011) there are certain factors which differ from the public and private universities in terms of quality of education; and students who are engaged likely to be more successful (Ahmad 2015). In addition to this,

Tiwari et al. (2013) stated that though the private institutes have grown in number but unemployability of graduates is a cause for concern. On the other hand Alam et al. (2007) have argued that private universities are creating quality students, and they have a significant positive impact on employment sector which is increasing very sharply compared to the impact that public universities in Bangladesh. Apart from this the cost of education in private universities is significantly higher compared to the public universities (Barmon et al. 2012).

$H_{02}$ : There is no significant difference in the student engagement scores of public and private universities of Rajasthan

## RESEARCH GAP

The term student engagement has gained its popularity recently due its linkage with organizational culture. Though there is not sufficient research into higher education institutions related to organizational culture and students' engagement with reference to education (Management) sector. However, numerous studies have been conducted on employee engagement and work engagement. Student engagement has been conducted mostly in developed countries such as the USA and UK (Kazmi 2010; Macneil et al. 2009; Cervantes 2013; Uprety and Chhetri 2014). However, sufficient studies have been conducted on faculty and student engagement but limited studies have been found in Indian context (Kuh and Hu 2001; Bain 2004). Therefore, this study was conducted with the following objectives:

- To study the dimensions of organizational culture and student engagement.
- To study the relationship between organizational culture and students' engagement.
- To find out the difference between public and private universities with reference to student engagement.

## CONCEPTUAL MODEL

The literature review that studied the different dimensions of organizational culture and student engagement as present in this section leads to significant relationship between the organizational culture and students'

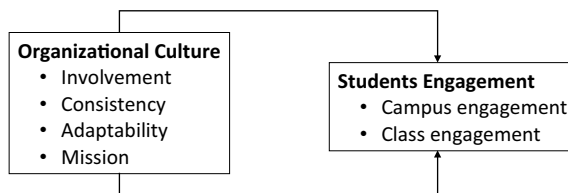
engagement of public and private universities in Rajasthan. This model represents the organizational culture and students' engagement, namely campus engagement and class engagement (Fig. 11.1).

## RESEARCH METHODOLOGY

This descriptive and causal research study elaborates the notion with the contribution of primary data where the independent variable (IV) is organizational culture, which includes 60 items/statements, and the dependent variable (DV) includes 59 items/statements in students' engagement. The questionnaire was measured on a five-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree and some statistical tools like *t*-test and regression with the help of statistical package for the social sciences (SPSS) version 20 were used for output. The sample includes students of public and private universities in Rajasthan. Sample selection was based on multistage sampling.

## ANALYSES AND DISCUSSION OF RESULTS

The dependability analysis was evaluated with Cronbach's alpha in which organizational culture is 0.881 and of student engagement is 0.864; it shows that the factor scales are internally dependable and good validation to each measurement (Table 11.1).



**Fig. 11.1** Conceptual model of organization culture and students' engagement  
(Source Author [based on the results of the study])

**Table 11.1** Reliability analysis of organizational culture and students' engagement

<i>Variable</i>	<i>Cronbach alpha</i>	<i>No. of items</i>
Organizational culture	0.881	60
Student engagement	0.864	59

*Source* Author (based on the results of the study)

**Table 11.2** Model fit

<i>CNIM</i>	<i>CNIM/DF</i>	<i>GFI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>PCLOSE</i>
236.528	2.208	0.943	0.902	0.011	0.000
Criteria for the acceptance of model					
≤0.05	≤2-5	≥0.90	≥0.90	≤0.08	0.000

*Source* Author (based on the results of the study)

### *Organizational Culture*

Confirmatory Factor Analysis (CFA) has been applied to all the items to evaluate the impact of organizational culture with four different factors including Involvement, Adaptability, Consistency, and Mission on student engagement (Campus and Class engagement) as explained in Table 11.2.

### *Confirmatory Factor Analysis of Student Engagement*

The model emerged using the second order CFA confirms all the conditions of the goodness of fit model, and the factors loadings for all the statements were above 0.70 as exhibited in Table 11.3. The result is a good fit to CFA and it can be seen that statements load on the particular factors. Further, the standardized regression and *t*-test has been used.

**Table 11.3** Model fit

<i>CNIM</i>	<i>CNIM/DF</i>	<i>GFI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>PCLOSE</i>
1189.167	2.228	0.953	0.936	0.02	0.000
Criteria for the acceptance of model					
≤0.05	≤2-5	≥0.90	≥0.90	≤0.08	0.000

*Source* Author (based on the results of the study)



There is no need of model re-specification as hypothetical model fits the theoretical model.

Regression results show that the value of  $R$  is 0.602, while the value of  $R^2$  was found to be 0.362, which states that organizational culture explain only 36% of the variation in the dependent variable, i.e., Student Engagement (Table 11.4).

It can be seen from the ANOVA results exhibited in Table 11.5 that the value of “ $f$ ” was found to be 270.218, which indicates that there is a statistically significant relationship between organizational culture and student engagement. Regression equation for student engagement and organizational culture is as stated below:

$$\text{Student Engagement} = 1.685 + 0.602 * \text{Organizational Culture} + \text{error term}$$

Thus, the hypothesis accepted which means that there exists a significant relationship between organizational culture and student engagement.

**Table 11.4** Model summary

<i>Model</i>	<i>R</i>	<i>R<sup>2</sup></i>	<i>Adjusted R<sup>2</sup></i>	<i>Std. error of the estimate</i>	<i>Durbin-Watson</i>
1	.602	.362	.361	.804	2.383

*Note* Predictors: (constant), organizational culture; Dependent variable: student engagement  
*Source* Author (based on the results of the study)

**Table 11.5** ANOVA results for organizational culture and student engagement

<i>Model</i>		<i>Sum of squares</i>	<i>Df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	174.753	1	174.753	270.218	.000
	Residual	307.835	398	.647		
	Total	482.588	399			

*Source* Author (based on the results of the study)

*Organizational Culture of Public and Private Universities  
of Rajasthan*

Results of independent samples of *t*-test show that the value of *t*-test was found to be significant for all the four predictors of organizational culture, which include involvement, adaptability, consistency, and mission as presented in Table 11.6. Thus, it can be said that type of university has a significant impact on the opinions of the students toward the predictors of organizational culture.

Results show that the mean value of the students from public universities was found to be higher as compared to the students from private universities for campus engagement, class engagement, and student engagement. It indicates that the public universities' students were found to be highly engaged than the private universities' students. It is significant but not statistically significant at the 95% level of significance as presented in Table 11.7. Yet there is variation but not at high importance level.

Thus, the acknowledged hypotheses manifest the insignificant difference between private and public universities with regard to student engagement. Organizational culture definitely has an impact on students' engagement and their performance, universities would like to reconsider the vitality of organizational culture and how they can improvise on it.

**Table 11.6** Organizational culture of public and private universities

<i>Indicators</i>	<i>Universities</i>	<i>N</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>Std. error mean</i>	<i>t</i>	<i>Sig.</i>
Involvement	Public	200	3.41	1.216	.086	-2.959	.003
	Private	200	3.77	1.251	.088		
Consistency	Public	200	3.51	1.147	.081	9.799	.000
	Private	200	2.33	1.249	.088		
Adaptability	Public	200	3.97	.868	.061	7.228	.000
	Private	200	3.11	1.442	.102		
Mission	Public	200	3.43	1.201	.085	-9.000	.000
	Private	200	2.25	1.403	.099		

*Source* Author (based on the results of the study)

**Table 11.7** Student engagement scores of public and private universities

<i>Indicators/universities</i>		<i>N</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>Std. error</i>	<i>Lower bound</i>	<i>Upper bound</i>	<i>Sig.</i>
Campus engagement	Public	200	4.24	.187	.023	4.08	4.17	.000
	Private	200	4.02	.158	.011	3.99	4.04	
	Total	400	4.07	.265	.013	4.04	4.10	
Class engagement	Public	200	4.10	.311	.022	4.05	4.14	.000
	Private	200	4.00	.142	.010	3.98	4.02	
	Total	400	4.05	.246	.012	4.02	4.07	
Student engagement	Public	200	3.50	1.236	.087	3.33	3.67	.051
	Private	200	3.27	1.306	.092	3.09	3.45	
	Total	400	3.39	1.275	.064	3.26	3.51	

*Source* Author (based on the results of the study)

## CONCLUSION

There have not been many noteworthy researches in India in the educational sector. However, we found certain derivations and conclusions from this study. One of the gaps, which we came through during this study, is that there have been very few researches conducted in India or by Indian writers on organizational cultures and impacts on educational sectors. For analyzing the data, confirmatory factor analysis was applied. After that, the data were further analyzed by using regression and *t*-test. Kline (2005) clarified that deciding if an instrument's construct ought to be estimated as a second order factor model or a first-order factor model is the judgment of the researcher and depends on the meaningfulness of the clarification and the theoretical framework. Construct involved contains a reliable and valid measure of organizational culture and student engagement. Information was gathered from ten private and five public universities over, Rajasthan, India.

In this research, observed that the opportunity of engagement in the public sector in comparison to private sectors is relatively high in contrast with adaptability, consistency, and mission. This further affirms that there is the significant difference in organizational culture in public and private universities. Further, also came to know that there is not much difference in the students' engagement of public and private universities in Rajasthan.

## IMPLICATIONS

The study adds to already existing literature on organizational culture and student engagement. The study has empirically established the impact of organizational culture on student engagement with reference to public and private universities in Rajasthan. This study has various implications, which are important for practitioners as well as academicians. Student engagement leads to the greater achievement of management skills for example, internship and conferences help in learning from the classroom to the corporate world (Singh and Srivastava 2013). Further, societies will also acquire great and highly skilled students and managers. This study will not only help in providing them better career opportunity but also help in the growth of the economy and quality of life. However, believed that this study is limited to universities of Rajasthan and helpful for researchers on a wider scale.

## LIMITATIONS AND FUTURE RESEARCH OF THE STUDY

The research has focused only on management students from private and public universities in Rajasthan. All the precautionary efforts were made to ensure the reliability, validity of the study. Some limitations, which could not be ruled out, can be considered for any future references regarding the findings and implications of the study. This, research is carried out with small sample size. Thus, it limits generalization of results to other departments of higher education. As, comparative studies of public and private universities examine the efforts of quality students. It will be quite interesting to investigate the other departments like technical, science, arts, etc. Future studies may consider all the departments of higher education across India and use a combination of several variables to measure academic success. Another limitation of the study arises the faculty engagement can be used as a moderator and student achievement and outcomes.

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# Corporate Social Responsibility Informing Business Analytics: New Standards for Engagement and Performance

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## INTRODUCTION

Data, information, and knowledge are three correlated terms that have been somewhat adjusted in the era of business analytics and Big Data; in the sense that their meaning is not the same in this new data-centered stage of development. The concept of business analytics (BA) has become part of everyday business vernacular; its relevance is clear by the 1,470,000,000 hits a Google search yields. Today, data and its analysis are elemental to organizations' decision making (Power et al. 2018) around the world. The quote “The way to predict the future is to create it” has been credited to both President Abraham Lincoln and Management Guru Peter F. Drucker. And, through the years, many have echoed their words because of the implications of the art of prediction and the attainment of desired results.

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The collection of vast amounts of data is not a practice reserved to Big Data Analytics; for years, before the existence of social media, organizations were collecting and storing large amounts of data as part of their core business operations. Examples of the latter include, banks (particularly for credit card management), airlines, search engines, The World Meteorological Organization (WMO), The National Aeronautics and Space Administration (NASA), Nielsen Holdings Plc and, of course, any Intelligence Agency, amongst many others.

Big Data has become much more than just a buzz word (Sharma et al. 2014). Certainly, the notion of being able to extract valuable information from sizeable collections of data is not new; however, it is fair to say that it has become a mainstream concept. The data and information that can be collected via social media, particularly social networking sites is ubiquitous, thus, so is Big Data (Ward and Barker 2013); in fact, just three years ago, Eberendu (2016) posited that 2.5 quintillion bytes of data were being created daily worldwide.

Business analytics has been widely discussed due to recent scandals involving mismanagement of data. Unethical and/or questionable practices may be due to insufficient standards of behavior. Further, although the number of organizations claiming engagement in corporate social responsibility has increased in the past ten years, there seems to be a disconnect between said concept and business analytics. For such matter, how businesses around the world approach the collection of data, how they are managing it, and why they are doing so, become increasingly relevant to stakeholder engagement and organizational performance.

Ever-changing global conditions and contexts compel organizational leaders to continuously design and execute global strategies fit for global stakeholder needs and wants. There are two elements that have been directly impacting business dynamics intensely for over a decade, these being, the Internet and firm responsibility and accountability toward stakeholders and society. In the era of Big Data and business analytics, are firms able to ensure ethical management of current and potential stakeholders' data and information? The study aims to describe current business analytics dynamics, as well as propose a model for stakeholder engagement and firm performance via the convergence of CSR and business analytics standards.

The main objective of the study is to assess current settings of business analytics around the world in relation to social responsibility. The specific objectives include, to analyze the ethical ramifications and norms

applicable to business analytics; and, to propose a model that puts forth standards of practice congruent with both business strategic objectives and corporate social responsibility, to ensure effective stakeholder engagement and firm performance. To do so, a series of propositions and a conceptual model to illustrate the proposed association of constructs and variables is presented, as well as a discussion on the managerial implications of such association.

## LITERATURE REVIEW

### *Business Analytics*

Data is currency and power, in that those that possess it have a greater opportunity to design what is in store. Everyday a massive amount of data is being collected, warehoused, processed, and produced. Yet, it is its analysis that has the potential to provide interpreters with information and knowledge that may reveal key insights for decision making. Analytics has been defined as a process by which statistics and statistical models are developed and applied to solve framed problems to obtain insights (Cooper 2012) which can, eventually, be worked to create knowledge; it has also been defined as a “decision-making-assistance tool” (Ohri 2012). Whilst analytics was once mostly limited to sports, particularly baseball, it has since evolved into a source for competitive advantage, to a buzzword, to a standard in business operations today.

Business Intelligence (BI) is a developed decision support system (DSS) guided by and operated with data (Negash and Gray 2008); according to Curto Díaz (2010) it may be defined as the collection of methodologies, techniques, practices, as well as abilities used to create and manage information with the aim of producing improved organizational decisions. And, Foley and Guillemette (2012) argue that it is a “combination of processes, policies, culture, and technologies for gathering, manipulating, storing, and analyzing data collected from internal and external sources, in order to communicate information, create knowledge, and inform decision making.” Business analytics (BA) has been defined as a component of business intelligence (Laursen and Thorlund 2017; Davenport 2006), whilst other authors have debated the merger of both concepts, that is, BI&A (Chen et al. 2012; Chiang et al. 2012). According to Chae et al. (2014), BA involves the use of both methods and analytical techniques, which are data-driven, for diverse business-related

operations. In a sense, the aim of implementing business analytics is to extract value from raw or unprocessed data (Acito and Khatri 2014), in order to develop critical information and shape knowledge; the latter is what, ultimately, provides for improved decision making and enhanced organizational performance (Schláfke et al. 2013; Cosic et al. 2015). As such, BI&A enables the extraction of business data that is critical to the formulation of decisive insights (Lim et al. 2013).

Business analytics has been associated with the undertaking of organizational culture (Hawley 2016), prompt and effective decision making (Hopkins et al. 2010; Holsapple et al. 2014), and theory development (Chahal et al. 2019), amongst other aspects. Increased data availability, its ease of access, and its commodity-like quality have naturally led a significant number of organizations worldwide to delve into and carry out Business Analytics. Furthermore, it would seem that current circumstances and conditions are just right for businesses to explore the use of vast amounts of data to help accelerate business strategies. Both Business Intelligence and business analytics are related to the concept and management of Big Data (Chen et al. 2012), in that it is their primary material on which operations pivot.

### *Big Data*

Big Data has been defined as a field (Canavillas et al. 2016) that merges the implementation of innovative technology with a large volume of data to obtain valuable information. It has also been referred to as the collection of “disruptive tools and technologies” (Kumar 2015). According to Faisal et al. (2012), Big Data is a “collection of large datasets that cannot be processed using traditional computing technologies, such as tools/software.” Pethe (2017) has argued that the concept is used to refer to the management complexity of sets of data that are large, potentially unstructured, and grow rapidly. In the sense that, the size of the sets cannot be effectively managed with traditional technological mathematical and statistical tools in an acceptable time frame (Chen et al. 2014) for prompt decision making. And, Kaisler et al. (2013) posit that Big Data is the indication of the actual volume of the data, denoting exabytes (i.e., one quintillion bytes or one billion Gigabytes [Kuner et al. 2012; Shrestha 2014]) at the minimum. Therefore, the concept does not merely refer to the fact that there is now more data available, but that its storage and

processing (i.e., dataset management and data mining), cannot be carried out with conventional systems (ISO 2019a).

There are three main characteristics of Big Data, these being, volume, velocity, and variety (Zikopoulos and Eaton 2011; Fan and Bifet 2013; Suthaharan 2014), also known as the 3Vs of Big Data. However, other authors have discussed 5Vs, adding value and veracity (Pethe 2017; Ishwarappa and Anuradha 2015), whilst others include variety, value, and complexity (Kaisler et al. 2013), veracity, volatility, visualization, and value (Eberendu 2016), etcetera, as important characteristics. According to Chen et al. (2012), there are five main areas of analytics research, including “Big Data Analytics, text analytics, web analytics, network analytics, and mobile analytics.” There are various sources of Big Data, including online services and social media, particularly social networking sites (SNSs), such as Facebook, Twitter, Instagram, Snapchat, LinkedIn, YouTube, to name a few.

Since the emergence of social media, its evolution has been exponential. Social networking sites have not only created communities but have brought existing ones closer together, that is, helped them remain connected; as such, these platforms have had a significant impact on collaboration (Liebowitz 2013). Said sources of the data are autonomous (Wu et al. 2014) platforms; their active users, well in the billions, generate a vast amount of content worldwide on a daily basis. Therefore, one of the advantages of Social Media Analytics is that it enables organizations to engage in conversation with stakeholders (Lusch et al. 2010), both current and potential. By sweeping social media platforms, enormous amounts of data, on vast amounts of topics, can be collected. And it is not just the content itself that provides valuable data, in that the emotional responses (i.e., sentiment analysis [Pang and Lee 2008]) to posts, tweets, stories, videos, memes, amongst others, as well as tags, and hashtags are also important providers of diverse data.

It is important to remember that organizations’ stakeholders are more than likely users of at least one social networking site; there are approximately 2.1 billion people using Facebook, Instagram, WhatsApp, or Messenger daily (Facebook 2019a). As such, they are also creators of the very content that organizational leaders are interested in, which ought to increase their appeal for what they have to offer. Current and potential stakeholders, including the firm itself, create and disseminate content via SNSs on a range of topics, including but not limited to: politics, religion,

beliefs, sports, likes and dislikes, business practices, products and services, historic moments, entertainment, human rights, breaking news, etc.

The content created and disseminated by both firms and current and potential stakeholders is commonly referred to as Word-of-Mouth (WOM), digital word-of-mouth (Hu et al. 2006), and eWOM (Erkan and Evans 2016), amongst others. It includes original posts and tweets, the emotional responses (i.e., variety of *like* options) and comments to the latter, as well as the action of sharing, retweeting and reposting. The content may be positive, negative, factual and/or fake; moreover, it may be created by authentic social networking sites' users or, as been recently learned, by social media bots (Bessi and Ferrara 2016) inserting spurious content. Amongst other aspects, acknowledging the latter as relevant noise is required for effective Big Data analytics practice. Accordingly, the propositions have been derived as stated below:

- P<sub>1</sub>: Firms and current and potential stakeholders create and disseminate WOM via SNSs from which valuable information may be extracted.  
 P<sub>2</sub>: The content created and disseminated by firms and current and potential stakeholders via SNSs feeds Big Data for business analytics.

Granted, at the outset, the data may be described as a mass, clutter, noise (García-Gil et al. 2019), unstructured (Liu et al. 2016), which is due to the very characteristics of Big Data abovementioned. Big Data analytics is the process by which advanced analytic techniques are used to manage Big Data (Russom 2011). According to Cao et al. (2015), Big Data analytics is a process, which entails “inspecting, cleaning, transforming, and modeling Big Data to discover and communicate useful information and patterns, suggest conclusions, and support decision making.” In the sense that processing data is what enables detaching the noise from consequential data. Analysis of the latter leads to the uncovering of telling perceptions, ideas, opinions, facts, untruths, and significant patterns. And, applying theory, particular interests, and even personal biases, amongst other attributes, is what helps make sense of the analysis so that it is suitable for decision making.

Predictions and forecasting are the very essence of Big Data (Mayer-Schönberger and Cukier 2013); as such, there is great value in extracting information in a variety of fields. Big Data has been studied in relation to Software-defined networking (SDN) (Cui et al. 2016), acquisition (Lyko et al. 2016), Cloud computing (Hashem et al. 2015), supply chain risk (Schlegel 2014), storage and transport (Kaisler et al. 2013),

consumer analytics (Erevelles et al. 2016), management and analysis (Chen et al. 2014; Saeed and Ahmed 2018), and marketing (Verhoef et al. 2016), amongst many others. However, not much has been discussed regarding its association with organizational engagement in corporate social responsibility.

### *Corporate Social Responsibility*

Business responsibility, also known as corporate social responsibility (CSR), has been defined as organizations' responsibility for the effects they have on society and the environment (European Commission 2019a). It has also been defined as an organization's set of policies and actions that both surpass financial performance interests and positively impact stakeholders (Turker 2009; Aguinis and Glavas 2017). Because CSR engagement is not precisely legislated, it continues to be a voluntary practice (Crane et al. 2014), which for many organizational leaders is still reduced to mere philanthropy. Furthermore, several studies have been developed in regards to the promotion, communication, and marketing of corporate social responsibility via social media (Kesavan et al. 2013; Capriotti 2011; Ros-Diego and Castelló-Martínez 2011); however, not much has been said regarding the relation between corporate social responsibility engagement, or lack thereof, and the collection and management of Big Data.

More than ever, current and potential stakeholders have high expectations of the organizations with which they associate. In a sense, they not only prefer to do business with a socially responsible firm (Dawkins and Ngunjiri 2008), but they also insist on the assurance that they have adequate policies and are performing accordingly. Strategically designed and executed CSR objectives, policies, and actions have a direct and effective impact on stakeholder management, development of added value, satisfaction, loyalty, enhanced corporate image, desired performance, and social and business growth and development.

There are six main CSR principles, which ought to guide all operations, stakeholder management, and the development of new policies, standards and norms, including: ethical behavior, transparent communication, stakeholder added value, and social, environmental, and financial performance. For such matter, CSR has commonly been associated with sustainability (Van Marrewijk 2003) and social impact (Toppinen and

Korhonen-Kurki 2013). And, it has also frequently been related to business ethics (Christensen et al. 2007; Joyner and Payne 2002; Carroll 1999; Fassin and Van Rossem 2009), as it is a business approach by which organizations are accountable for their role in society, as well as their actions impacting the latter, the environment, and stakeholders. Therefore, there is research that has put forth the relation of corporate social responsibility and good practices relating to favorable outcomes inside and outside the organization. That being said, the paucity in previous literature in regards to the relation between business analytics and corporate social responsibility necessitates understanding of the criteria and standards for their execution.

### *Laws and Standards*

Currently, everything anyone does online leaves a trail of data, which can easily be mined and managed by third parties to create information and hone knowledge, without users being aware it is being done. There have been various reports over the years of organizations that have mismanaged consumers' data; although many countries have developed laws meant to protect personal data and information, legislation on the matter is not even close to being a mainstream practice. Some examples include Mexico's Federal Law on Protection of Personal Data (IFAI 2010), the European Union's General Data Protection Regulation (GDPR) (European Commission 2019b), Argentina's Personal Data Protection Act 2000 (UNPAN 2000), and Australia's Privacy Act 1988 (Australian Government 2019), amongst others. Despite efforts, there continues to be significant mismanagement of personal data and information, even from firms stating to be ethical, socially responsible.

Standards are clear and detailed specifications of a desired outcome. The organization's corporate philosophy, as well as industry, national and international qualifications, norms, laws, and other standards inform them. Further, they are applicable to any product, service, process, procedure, system, technique, and method. Standardization is the practice of ensuring that standards are designed, executed, and evaluated in a consistent manner. It is what ultimately enables the attainment and assurance of a degree of acceptable quality. Therefore, in a sense, if standards are the vocabulary, standardization is the language.

There are numerous international standards, in fact, ISO (International Organization for Standardization) has developed and published



over twenty-two thousand standards (ISO 2019b). Said organization has developed standards related to corporate social responsibility, business analytics, and data analytics practices. The ISO 26000 Social Responsibility standard was launched in 2010; unlike many other standards, it “provides guidance rather than requirements” (ISO 2019c). Meaning that, unambiguous measurement is difficult to achieve, which ultimately means that certification of said standard is not plausible. The ISO 19731 Digital analytics and web analyses standard was launched in 2017; it includes processes related to the collection, analysis, and report of digital data, as well as particularities of social media analytics (ISO 2019d). As such, it may be applied for business analytics and Big Data analytics practices; furthermore, although still under development, ISO has put forth the ISO/NP TR 23347 standard for Statistics and Big Data Analytics (ISO 2019e).

The reality is that, despite the availability of these standards, linkage between the engagement in corporate social responsibility and business analytics remains absent; moreover, the level of firms’ awareness of their existence, knowledge of how to apply them, and interest in doing so is questionable. As such, the required alignment of CSR standards with those of business analytics ought to include the execution of the abovementioned six principles of CSR that include:

- Data collection,
- Data management,
- Data processing, and
- Data usage post-analysis.

In order to ensure standard alignment, processes and procedures should be standardized and carried out ethically (i.e., with providers and suppliers’ awareness and consent), which also entails that the firm ought to formally and transparently communicate their policies, standards, and actions with current and potential stakeholders. Consequently, as a firm’s standards of practice business analytics are effectively aligned with its social responsibility endeavors, it may genuinely be engaged in CSR. By doing so, the firm may be performing corporate socially responsible business analytics (CSR-BA). Therefore the proposition has been laid as:

P<sub>3</sub>: A socially responsible firm aligns its CSR standards with their business analytics practices.

Stakeholder engagement has been positively associated with firm engagement in CSR (Gao and Zhang 2006; Lim and Greenwood 2017); in other words, it aids in the involvement of current and potential stakeholders in the firm's positive CSR-related activities (Greenwood 2007) and decision making. If CSR is a mean by which business ethics may be applied and stakeholders favor firms doing so (Lichtenstein et al. 2004), then, it seems reasonable that business analytics standards converged with the firm's CSR would have the same effect on stakeholders. Furthermore, there is nothing that disenchant and disengages a stakeholder quicker than the realization that a firm, which states to be engaged in CSR, is caught and proven to be carrying out questionable and unethical practices. Therefore, the proposition has been constructed as stated below:

P<sub>4</sub>: Firm engagement in CSR-BA directly affects stakeholder engagement.

In the midst of firms gradually taking on a more proactive stance on corporate social responsibility, the digital era has revolutionized the manner in which organizations conduct business. Such was the case of a recent scandal involving SNSs, Big Data, business analytics, and big business.

### *Business Analytics—A Case of Mismanagement*

In 2018, the world woke up to news of the Cambridge Analytica scandal; reports indicated that the British consulting firm specializing in politics collected data from Facebook users without their consent (Gilbert and Ma 2019). Said data was then utilized to profile users and target them with political ads related to the US 2016 Presidential election and the Brexit Campaign (Magee 2019). This case brought Facebook, one of the world's biggest and most successful firms, to the center of the discussion. It is noteworthy that Facebook has approximately 2.41 billion monthly active users (Facebook 2019a), and that reports of the case in question specify that about 87 million users' data and information had been unlawfully harvested (BBC 2019) from users' profiles; this particular Big Data was meant for Cambridge Analytica's processing, transformation, and dissemination.

Facebook was now being urged to provide evidence of involvement, or lack thereof; the firm and Mark Zuckerberg were called to testify before various Congressional Committees, and the European Parliament (BBC

2018), amongst others. An International Grand Committee was held in the United Kingdom in November 2018 to question Facebook's involvement and degree of awareness of alleged accounts. During said hearing, the absence of Mark Zuckerberg was noted and the firm's prior awareness of the mismanagement was mentioned, amongst other particularities.

There are numerous issues that arise with the case at hand. First, Cambridge Analytica and Facebook's practices were questionable and unethical as they possess the following attributes:

- Threatened democracy,
- Collected data without owners' consent,
- Compromised public safety over shareholder value, and
- Ultimately lied about the processes and procedures followed before, during, and after the targeted campaigns.

Second, Facebook's very current and potential stakeholders have begun to question the firm's corporate and generated interests, as well as its overall practices. Third, stakeholder distrust toward the firm and its associates has increased. Fourth, the firm's stance on social responsibility has been called into question; to clarify, although the firm operates a website on their role in sustainability (Facebook 2019b), it does not transparently share a corporate social responsibility report with its current and potential stakeholders, thereby forfeiting the right to be acknowledged as a firm fully engaged in CSR. As such, the firm has given many more reasons for stakeholders distrust, and disenchantment than it has to procure their effective engagement.

That being said, because Facebook's stakeholders are more than likely also groups of interest of numerous firms around the world, their engagement effectivity may also be diminished. For instance, if company A seeks to foster stakeholder engagement via Facebook, and the latter's integrity is questioned, leading stakeholders to debate whether to leave said platform, their relationship with company A may also be fragmented. This is an effect of the principles of supply chain management, in that the behavior and practices of one firm on the chain informs the effects and results of the others. This case of data mismanagement is illustrative of the consequences of a lack of operation standards, to say the least.

The case exemplifies the imperative need for organization's business analytics policies, standards, and practices to be aligned with their CSR

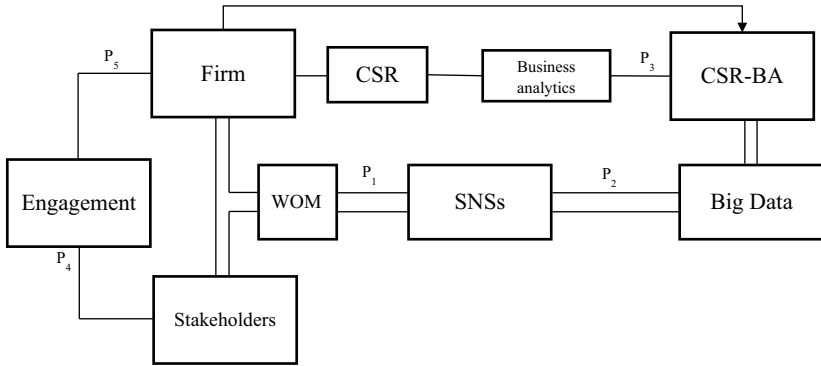
standards, as doing so will ensure that their data management processes are ethical. Furthermore, current and potential stakeholders are likely to be more engaged with firms using social networking site platform when their CSR and BA standards are well-aligned. In fact, they may be much more responsive, more willing to associate with the firm, and even create and disseminate positive WOM regarding the firm in question via SNSs. According to LaValle et al. (2011) high performing firms are those that use more data and analytic insights for strategic decision making; furthermore, they effectively adapt to environmental changes (Utting 2005), and are responsive to stakeholder needs (Dee 2010). Therefore the proposition has been developed as:

P<sub>5</sub>: Stakeholder engagement derived from CSR-BA engagement directly influences the firm's performance.

## MODEL ANALYSIS

CSR and business analytics have become an important source of competitiveness; meaning that, they are elemental to the achievement of stakeholder engagement and desired performance. Therefore, for purposes of this study, it is imperative to begin with the premise that the firm actively and proactively engages in corporate social responsibility. This would mean that the firm is ethical, stakeholder oriented, and attains competitive advantage by pursuing business and social growth and development. Current and potential stakeholders, including firms, are social networking site users with varying purposes, be it for entertainment, communication, as a news source, and/or to accelerate business strategies, to name a few. One of the most valuable results of their SNS activity is word-of-mouth creation and dissemination; the latter is, or should be, of particular interest to firms as it may potentially be the source of valuable information (P<sub>1</sub>). Therefore, it is the very content that stakeholders are continuously, in many cases daily, creating and disseminating worldwide that feeds the Big Data that firms may pursue for business analytics (P<sub>2</sub>).

The principles of corporate social responsibility, as mentioned earlier, include: ethical behavior, stakeholder added value, social, environmental and financial performance, as well as transparent communication of policies, actions, and results. A truly socially responsible firm aligns its CSR policies with all processes and procedures; furthermore, it will strive to be associated only with those that share the same principles, in other



**Fig. 12.1** The research model (*Source* Author)

words, ensure that their supply chain is also socially responsible. Consequently, a firm's business analytics' standards of practice ought to be effectively aligned with its social responsibility endeavors, in order for it to be genuinely engaged in CSR. By doing so, the firm may be performing corporate socially responsible business analytics (CSR-BA) ( $P_3$ ).

Figure 12.1 depicts the conceptual model describing the effects of CSR and BA alignment on engagement and performance.

Stakeholders are more likely to associate with a firm whose moral compass is well-aligned with their own; they are also more likely to become and remain engaged with the firm that does not ignore social and environmental issues, is ethical, and transparent. For that matter, CSR-BA directly affects stakeholder engagement ( $P_4$ ) as it tells them that their data is being properly managed, or not at all if such is the case, and that they are not merely being viewed as exploitable sources of data and information. Their responsiveness to firms practicing corporate socially responsible business analytics, then, may have a direct and positive effect on firm performance ( $P_5$ ) and, in turn, on business growth of the firm.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

It is frequently said that the youngest generation has never known a world without the Internet or social media and, therefore, cannot do without; however, it is not just them who have come to find it difficult to maneuver throughout their day without them. Perhaps one of the major innovations

of this era is social networking sites; not only are they used by billions of current and potential stakeholders around the world, but firms have also taken to them to accelerate business strategies related to their marketing, sales, and stakeholder engagement endeavors, amongst many others.

Scientifically and significantly predicting consumer behavior has become one of the business leaders' top priorities. Further, making strategic decisions in real time and, particularly, in a split second, has become a challenge opportunely accepted by organizational leaders around the world. Business analytics is mainly carried out with the Big Data collected via SNSs. The latter is of utmost importance for at least a couple of reasons: first, social media is not going anywhere, despite a significant backlash that has led many to close their pages and accounts; and, second, reports of business malpractice related to analytics are on the rise and consequences are exponentially more severe. Current conditions of firm behavior related to business analytics have certainly left stakeholders questioning the integrity of the firms, as well as their legitimacy and authenticity in CSR engagement.

That being said, perhaps one of the principal advantages to using Big Data and business analytics is not necessarily related to the former's core characteristics, rather to internal organizational processes. For instance, strategic planning processes typically take months to design, implement, obtain results, and evaluate them. However, by using Big Data, time elapsed from beginning to end may be significantly reduced. For example, suppose an organization wants to know how many consumers are linking their purchase decision making to business practices. However, earlier to Big Data and business analytics it would have taken a significant amount of time to design and execute the plan, now a mere question can instigate an outright research and an active collection of primary data which can, furthermore, be created in real time.

Stakeholder engagement may be achieved by transparent communication of firm dynamics, including its CSR endeavors. Current and potential stakeholders wish to know how the firm is operating, what, why, and how they are using their personal data, and the impact their policies, actions, and results are having on society, the environment, and their financial performance; as such, stakeholder engagement may also be enhanced by means of corporate socially responsible business analytics (CSR-BA) practices. Moreover, if high performing organizations are tending to their current and potential stakeholders' needs and wants, and the latter include

ethical management of their data, then, CSR-BA may also have a direct and positive effect on the firm's performance.

Stakeholders' behavior is, without question, being effectively predicted with the implementation of business analytics; there is significant financial benefit from engaging in Big Data analytics. In other words, sweeping, scraping, SNSs is providing firms around the world with key insights for strategic decision making. In a way that having access to Big Data, and the resources to manage it, means having the ability to be competitive in today's global market. This would give rise to further questions, such as how do firms without the same resources as say multinational enterprises fairly compete? Is it even possible to level the playing field? In addition, then, where is the line drawn for anticompetitive behavior regarding Big Data and business analytics? Certainly, these are questions that require further exploration, as well as adequate answers that aid in the formulation of best practices.

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PART IV

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# Global Business



# Effect of Exaggerated Claims on Brand Evaluation

*Ishpreet Virdi*

## INTRODUCTION

Is belief independent of comprehension? Descartes asserted that comprehension proceeds, and is independent of, belief. As humans come into contact with claims or opinions, they comprehend them automatically, and then decide whether to accept or reject the information (Gilbert 1991; Gilbert et al. 1993). Spinoza, on the other hand, believed that comprehending and accepting were part of the same process. “According to Spinoza, the act of understanding is the act of believing. As such, people are incapable of withholding their acceptance of what they understand. They may indeed change their mind after accepting the assertions they comprehend but they cannot stop their minds from being changed by the contact with those assertions” (Gilbert et al. 1993, p. 222).

Government policymakers allow advertisers to use puffery, defined as wildly exaggerated, fanciful, or vague claims for a product or service, because they believe that nobody could possibly treat puffery seriously or be misled by it. Two critical assumptions underlay the policy. First,

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consumers can identify puffed claims as not credible. Second, consumers will not incorporate a puffed claim into their evaluations or beliefs because they understand that the puffery is a “wild” exaggeration. Although policymakers use Cartesian logic, empirical evidence supports Spinoza’s view. Gilbert et al. (1993) show that interrupting the processing of false claims results in participants believing the claims to be truer. The disturbing implication of the findings by Gilbert et al. (1993) is that every encounter with misinformation or an exaggerated claim can potentially affect future behavior, even if the consumer realizes that the claim is false. The research presented here demonstrates that although consumers are able to identify an exaggerated claim as less credible, exposure to the puffed claim still shifts the evaluation of the brand to be more positive.

Government policymakers allow advertisers to use wildly exaggerated, fanciful, or vague claims for a product or service because they believe that nobody could possibly treat the claims seriously or be misled by them. The results demonstrate that although consumers are able to identify exaggerated claims as less credible than factual claims, their brand evaluations are inflated after exposure to exaggerated claims. The explanation is that during the process of comprehension, claims are accepted before being discredited. The temporary acceptance of the claim affects memory, even after the claim is understood as an exaggeration.

## PROCESSING EXAGGERATED CLAIMS

### *Cartesian Approach*

Government policymakers have taken the position that consumers recognize that puffery lacks credibility, even though very little empirical evidence has been presented to support this assumption. Policymakers assume that when consumer process exaggerated claims they understand the lack of credibility and ignore the claims. Cartesian logic is implicit in this assumption, as there is no concern for partially processed claims.

Previous academic research has focused on conditions under which consumers believe exaggerated claims (Kamins and Marks 1987; Olson and Dover 1978; Rotfeld and Rotzoll 1980; Wyckham 1985). Most research has shown that consumers do form beliefs based on specific puffed claims such as “the fastest headache relief possible.” Two explanations are offered for the deception. First, consumers believe the claims (Kamins and Marks 1987; Rotfeld and Rotzoll 1980; Shimp and Preston



1981). “Consumers do not recognize them [puffed claims] for what they are ...” (Shimp and Preston 1981, p. 24). Second, consumers process the puffed claims as though they were fact and generate inferences on the basis of those facts (Holbrook 1978; Shimp and Preston 1981; Wyckham 1987). “[Consumers] are prone to interpret evaluative claims [puffery] as constituting factual claims.”

It is a process of implication the consumer accepts an unstated factual claim as the implied meaning of the stated evaluative claim (Shimp and Preston 1981, p. 24). In both cases, the concern is that consumers will make a mistake during the assessment of the accuracy of the claim. Again, Cartesian logic is implicit in the assumption that one representation of the claim will be made in memory. Are consumers unable to differentiate between fact and exaggeration? Is “the public more tolerant of advertising hyperbole and less inclined to counter argue than is the case with other message forms” (Shimp and Preston 1981, p. 26)? Is it safe to assume that a necessary condition for forming beliefs on the basis of puffed claims is that the claim is judged to be credible?

Instead of a Cartesian approach, perhaps the claim is initially represented in memory as true during the comprehension process, affecting other associated beliefs. After determining that the claim is not credible, consumers are able to store the claim with a “not credible” tag, but the corresponding evaluation will not be appropriately adjusted.

### *Spinozian Approach*

Gilbert (1990) provide evidence that people initially represent false information as true. In their research, participants are asked to learn new propositions, both true and false. If participants were interrupted whilst processing the propositions, they rated a significantly greater proportion of both true and false statements as true, compared to participants that were allowed to completely process the propositions. The result is interpreted as support for the Spinozian explanation. Gilbert and colleagues found the result to hold even when the participants were forewarned that some of the information presented would be false.

Perhaps consumers temporarily believe puffed claims as part of the comprehension process. Even though consumers may expect some advertising to lack credibility, they initially represent the claim as true. In the process of determining whether the claim is true, an accepted form of the claim is represented in memory. If the claim is a generalized exaggeration

such as “the very best restaurant in town” then the positive global evaluation may be later stored with a “not credible tag,” but is not ignored during the evaluation procedure. More specific attribute beliefs may not be affected as they are at a different level of abstraction (Hawkins et al. 2001).

The prediction that a global evaluation of the brand will be affected by puffery, even though the claim is ultimately determined to be untrue, is consistent with a larger body of research. This evaluation finds that people are particularly poor at rejecting, ignoring, or failing to believe what they have comprehended (Bjork 1972; Schul and Burnstein 1985; Wyer and Budesheim 1987), even when they are forewarned that the information will be false (Gilbert et al. 1990). The outcome of this comprehension process is also consistent with dissociations found between perceptions of truth and belief (Begg et al. 1992).

### *Remembering Exaggerated Claims*

Even though consumers may be able to reject a puffed claim, it has been shown that thinking about and negating a proposition can lead to false memory (Mayo et al. 2004). Feidler et al. (1996) found that after correctly negating a fact and following a filler task, respondents were more likely to falsely recognize the fact in its non-negated form than they were to recognize unrepresented facts. This is counter to the Cartesian explanation. Because under Cartesian logic only the negated claim would be stored in memory, non-negated facts could not be retrieved from memory. If the Spinozian model is correct, then factual claims should be better remembered than puffed claims because there is no alternative representation to cause interference during retrieval. However, if the processing of the exaggerated claims is interrupted, then the puffed claims should be recognized as the factual claims because the non-negated fact is the only representation available in memory.

## HYPOTHESES

Consumers are able to identify generalized puffed claims as less credible than factual claims if processing is uninterrupted (H1). However, even after identifying the generalized puffed claims as less credible, they are still more positive in their evaluation of the brand associated with the puffed claim (H2a), but no change occurs in their specific brand beliefs (H2b).

Support for the Spinozian explanation is expected. When processing is interrupted, puffed claims are rated as credible as the factual claims (H3).

Consumers are better able to remember the factual claim compared to the puffed claim in an uninterrupted processing condition (H4a). However, the memory advantage for factual claims should disappear if processing is interrupted because the negation process will not occur (H4b).

## METHODOLOGY

### *Design and Manipulations*

Sixty undergraduate students at an Australian university participated in the study for course credit. The design of the study was  $2 \times 3$ . The processing at encoding was a between-subject factor with 2-levels (uninterrupted processing, interrupted processing). The level of puffery was a within-subject factor with 3-levels (a “the very best” claim, a “the ultimate” claim, a factual (no puffery) claim).

### *Puffery Manipulation*

Each participant saw three target advertisements (one for the Harbor Bistro, one for the Alternative Bar, and one for the City Cruise Line), one advertisement at each level of puffery. The two puffery levels were taken from Preston (1996) and (1998), who identified “the very best” and “the ultimate” as two of six levels of puffery. The advertisement for the Harbor Bistro claimed the bistro was “the very best bistro in Sydney,” “the ultimate dining experience,” or the factual claim of “dining with a harbor view.” The advertisement included a photo of the interior of the bistro with a view of the harbor; this ensured that participants could identify the factual claim as factual. The advertisement for the Alternative Bar claimed the bar was “the very best club in Sydney,” “the ultimate club experience,” or the factual claim of “music in the city.” The advertisement included a photo of the interior of the bar with a view of the stage with musical equipment to ensure that the participant knew the factual claim was factual. The advertisement for City Cruise Line claimed the cruise was “the very best cruise in Sydney,” “the ultimate harbor experience,” or the factual claim of “see Sydney from the harbor.” The advertisement included a photo of the interior of the boat with a view of the harbor

including the Harbor Bridge and Sydney Opera House. All of the target ads advertised hypothetical brands.

### *The Encoding Manipulation*

The study was run in a computer lab. Each participant viewed the stimuli on a 17" computer terminal. All participants were warned that previous participants had experienced some technical difficulties with the software when reading the advertisements. The participants were told that "if a screen disappears, please just follow the instructions as closely as you can." Half of the participants were allowed to view the target ads for as long as they required before making the credibility and liking judgments without interruption. The other half of the participants were allowed to view the three target ads for 500 milliseconds (ms) before being "interrupted" by the screen disappearing. A pretest ( $n = 20$ ) had revealed that 500 ms allowed participants to read the screens but not to elaborate on the information in the copy, or to question the claims.

A new screen appeared which included an apology and instructed the participant to type their student identification number in a pop-up box in order to continue. Students were forced to use the numbers above the letters on the keyboard instead of the numbers on the number pad to the right of the keyboard. Not using the number pad was important because many students can touch-type their student number on the number pad. Using the keys at the top of the keyboard meant that they had to concentrate on the location of each number key. This provided the desired interruption to the processing of the claim. When the participants finished typing their student identification number and pressed the "return" key, they did not return to the screen with the target advertisement.

## DEPENDENT MEASURES

### *Credibility*

Directly after viewing the ads, participants were asked to provide a credibility rating for the advertisement. Participants used a 10 point scale anchored with "not at all credible" (0) to "very credible" (9). The instructions encouraged participants to use the entire scale. Although participants were invited to ask questions if they did not understand the instructions, no questions were directed to the study administrator.

### *Belief and Evaluation Ratings*

After rating the credibility of the ad, the participants were asked to predict the probability of receiving good service and good food, and whether they believed the bistro/bar/cruise would be expensive. Participants used a 10 point scale anchored with “not at all likely” (0) to “very likely” (9). They could find some information in the advertisements about the food and service. Price information was not available, participants had to infer the expense involved with each establishment. Finally, participants were asked for an overall evaluation of the bistro/bar/cruise on a 10 point scale anchored with “not at all good” (0) to “very good” (9), and to indicate how sure they were in their response on a 10 point scale anchored with “not at all certain” (0) to “very certain” (9).

### *Recognition*

The participants were asked to identify the claim that they saw earlier for each of the target ads. They were presented with all three claims (one old claim seen at study, two new claims) and a “don’t remember” option.

### *Procedure*

Participants signed up for a study called the Advertising Study which ostensibly was designed to investigate the relationship between leisure activities and attitudes toward advertising. They were informed that they would see a copy for both existing and potential ads. In the introduction they were told that they would be viewing 10 advertisements. They would first view the ad, and then answer some questions about their impressions of the credibility of the ad, the performance of the product or service, and their overall evaluation of the brand. Participants were then warned about the “problem” with the software. Before the first target advertisement, two filler ads were rated for perceived credibility, overall evaluation of the brand, and two specific brand beliefs. All participants experienced the “disappearing screen problem” with the software for the second filler advertisement. Experiencing the interrupted processing early in the experimental session was critical because all participants were motivated to try and read as much as they could of the copy as soon as the advertisement appeared on the screen.

The third advertisement was the first target ad. One third of the participants saw a factual claim, one third saw a slightly exaggerated claim, and one third saw a highly exaggerated claim. Half of the participants were allowed to process the ads without interruption, the other half had their processing interrupted after comprehension. Participants saw two more target ads amongst the next four ads and then three filler ads. The same ratings were made for each ad. If the first ad included a very best claim then the second was an ultimate claim and the third was a factual claim.

Unrelated filler questions about the leisure activities of the participants followed. The questions were included to support the cover story and provide time to clear short term memory. Ten minutes later participants were asked to recognize the ad claims for the three target ads. Participants were asked to guess the hypotheses of the study and then were debriefed. None of the participants suspected that the study was testing the effect of exaggerated claims.

## RESULTS

### *Credibility Ratings*

Hypotheses 1 and 3 are tested with the credibility ratings. Hypothesis 1 asserts that consumers are able to recognize the reduced credibility of an exaggerated claim. Evidence in support of the hypothesis will be claimed if participants rate the puffed claims as less credible than the factual claims when they had time to process the claims completely. An ANOVA run on credibility ratings in the uninterrupted condition reveals a significant main effect for the level of puffery ( $F(2, 84) = 6.42, p < .01$ ). Participants were able to identify that the puffed claims were less credible than the factual claims (fact = 7.21, ultimate = 6.07, very best = 5.07). Hypothesis 1 is supported. Note that participants did not believe, on average, that the claims were not credible. Therefore, government policymakers would be correct if they assumed that consumers can identify that puffed claims as less credible, but they are wrong to assume that consumers dismiss puffery as not credible.

If comprehension and acceptance are part of the same process, then the interruption manipulation should affect credibility ratings such that no differences are found in the assessment of the credibility of a fact versus puffed claim in the interrupted condition. The acceptance of all claims as credible was hypothesized in this condition because participants did

not have a chance to reject decidedly less credible claim. An ANOVA run on the entire sample reveals a significant interaction between puffery and interruption condition ( $F(2, 174) = 3.63, p < .05$ ). A separate ANOVA was run on credibility ratings in the interrupted condition to investigate the interaction. The ANOVA reveals no significant main effect for level of puffery ( $F(2, 90) = 1.12, p > .10$ ). Participants were not able to identify that the puffed claims as less credible than the factual claims (fact = 7.26, low puffery = 6.84, high puffery = 6.94). Hypothesis 3 is supported.

The data support the Spinozian hypothesis that the process of comprehension is not independent from the belief decision. When processing of the claim was interrupted, the merely comprehended claims were believed to be true.

### OVERALL EVALUATION

Participants were asked to provide an overall evaluation of the bistro/bar/cruise and to indicate how certain they were about their response. Hypothesis 2a predicts that the inherently positive nature of a generalized puffed claim such as “the very best in town” will influence the overall evaluation of the brand. An ANOVA was run on the overall evaluation of the brand with the level of puffery and the interruption condition as the independent variables and the credibility rating as a covariate. The results reveal a significant main effect for puffery ( $F(2, 174) = 6.85, p < .01$ ), but not for interruption ( $F(1, 174) = 2.41, p > .10$ ). Consumers in both conditions rated brands with puffed claims as more favorable overall (fact = 6.31, low puffery = 6.71, high puffery = 7.35). Planned comparisons reveal that the “very best” claim was significantly higher than the other claims in the interrupted processing condition, and higher than the fact claim in the uninterrupted condition. A possible explanation for the mixed result for the “ultimate” claim may be that it is a more complicated claim than the “very best” which is easier to understand. The credibility covariate was weakly significant ( $F(1, 174) = 3.35, p < .10$ ). Perceived credibility of the claim has a positive effect on the overall evaluation of the brand. Hypothesis 2a is supported.

A separate ANOVA run on the certainty ratings for brand evaluations with puffery and interruption condition as the independent variables revealed a significant effect for the interruption condition ( $F(1, 174) = 3.99, p < .05$ ), but no significant effect for the level of puffery. The significant effect for the interruption condition is interesting because evaluation

confidence was higher in the interrupted condition (interrupted = 6.85, uninterrupted = 6.30). This result is consistent with recent evidence that a reduction in attitude confidence can follow the counter argumentation associated with negation of a claim (Petty et al. 2004). The null effect for the level of puffery is interesting because it indicates that an evaluation based on a factual claim is held as confidently as an evaluation based on an exaggerated claim. The result is consistent with previous research finding a low correlation between accuracy and confidence in judgments by consumers (Alba and Hutchinson 2000; Cowley 2004).

### *Attribute Beliefs*

As expected, the attribute beliefs (good food, good service) and the inference (being expensive) did not vary with puffery level or interruption condition. ANOVAs did not reveal main effects for puffery or interruption or interaction effects. This was predicted in H2b because of the general nature of the puffed claims. Hypothesis 2b is supported.

The absence of a change in specific beliefs does not support or negate the Spinozian hypothesis, instead the null effects suggest that the specificity of a puffed claim may play a role in generating inferences and changing specific attribute beliefs. Previous work has reported that specific claims affect specific beliefs. Rotfeld and Rotzoll (1980) find that almost half of the consumers in their study believed the puffed claims, but a much reduced, yet still evident percentage believed the puffery implied claims. Rotfeld and Preston (1981) and Shimp (1978) also use specific claims and find that consumers expanded on the claims, possibly because of the multiple interpretations allowing for inference generation. The effects are not found here with generalized exaggeration. The difference in results depending on the specificity of the claims themselves is consistent with related work where plausible specific claims have been found to affect belief in those claims, but that general claims do not affect specific beliefs (Hawkins et al. 2001).

### *Memory for the Claim*

Hypothesis 4a states that participants in the uninterrupted condition should be better able to recognize factual claims. The data indicate that there is a difference in memory performance for puffery versus factual



claims ( $\chi^2(1) = 3.87, p < .05$ ). As expected, participants were more accurate when remembering factual claims (factual = 85% correct, puffery = 64%) when processing was not interrupted. Therefore, H4a is supported. The memory advantage for factual claims was hypothesized because there was no negation process which may cause interference during retrieval. Hypothesis 4b suggests that the memory disadvantage for exaggerated claims should disappear in the interrupted processing condition because the negation process does not occur. The results show no differences in memory performance in the interrupted condition ( $\chi^2(1) = .26, p = .61$ ). Although this may seem surprising, a number of influences are at work. First, since the interrupted group had only 500 ms to look at the ad, they may have more trouble recognizing the claim and less confidence in their ability to identify the correct claim. On the other hand, the puffed claim may have been the only thing taken away from the exposure because it was prominent: increased attention to the claim may have reduced interference from other aspects of the ad. Second, part of the rationale behind H4b was that in the uninterrupted condition the dual representation of the claim may have caused interference during retrieval resulting in an increase in erroneous recognition judgments.

One result that provides evidence consistent with a lack of processing account in the interrupted condition is the number of “don’t remember” responses. Participants in the interrupted condition more frequently reported that they did not believe they knew the answer. These results are not significant, however.

A result consistent with a negation tag account is that participants in the uninterrupted condition were more accurate when remembering factual claims versus the exaggerated claims. Although false recognition went up slightly in the interrupted condition for factual claims (possibly because of the limited processing time), it was less likely in the interrupted condition. Taking the results of H4a and H4b together, it appears that the process of negating the initial acceptance of the claim affected recognition memory for the puffed claims.

## CONCLUSIONS

### *General Discussion*

The results provide evidence that consumers are able to identify puffed claims as less credible, however, the claims are not judged to be not

credible. Only 1 in 180 responses rated the puffed claim as 0 or “not at all credible.” This is counter to previous findings with the exception of Wyckham (1987) who found upwards of 80% of consumers stating that puffed claims were not true. One explanation is that the generalized puffed claims used here are less concrete and more difficult to discredit. More specific claims such as those used in Wyckham’s study (1987) refer to a single attribute or benefit, allowing the consumer a better opportunity to mentally test its credibility.

Even though consumers can identify a puffed claim as less credible, they still rated the brand more favorably than brands associated with a factual claim. The general finding, that puffery is deceptive because consumer beliefs do change after exposure to puffed claims, replicates a number of past studies (Holbrook 1978; Kamins and Marks 1987; Olson and Dover 1978; Rotfeld and Rotzoll 1980; Wyckham 1985) and supports assertions made in research review papers (i.e., Rotfeld and Preston 1981). The explanation in previous research was that consumers believe the claims and generate inferences on the basis of the implied facts. No support is found here for these explanations. Consumers were able to identify puffery as less true and they did not generate inferences about the quality of food and service or the expense of the bistro/bar/cruise.

The explanation offered here is that during the process of comprehending a puffed claim, the initial representation in memory is that the claim is true. Consumers appear to accept the claim initially, and then unaccept or discount the claim after realizing its lack of credibility. This is evidenced by the increased number of puffed claims accepted as credible in the interrupted processing condition. Processing was interrupted before the unaccepting or discounting process was complete. Associations from the initial representation to other brand beliefs may be established in memory, possibly affecting brand evaluations and other generalized beliefs about the brand. After a claim is identified as lacking credibility a negation tag is added to the representation, but other alterations to associated beliefs are not re-adjusted, or at least not completely. Consequently, knowledge that the claim is lacking credibility is stored, but remnants of the claim’s persuasive impact linger.

Finally, memory for the puffed claim is not as accurate as memory for the factual claims in the uninterrupted condition, but improves in the interruption condition. The explanation is that the memory representation resulting from the negation process can interfere with retrieval. This result is very limited because the processing time was different across

conditions confounding the manipulation. It is impossible to establish with this data how much of the memory performance difference is based on the negation process and how much is attributable to the encoding time itself. Future research is required to investigate this hypothesis because it is important to know under what circumstances the puffed claim is eventually forgotten.

## IMPLICATIONS

The implications for policy makers are clear. Exposure to incorrect information affects beliefs even when it is identified as lacking credibility. Although puffery defined by policymakers as “wildly exaggerated, fanciful or vague claims for a product or service,” can be identified as less credible, consumers still alter their evaluations of the brand after exposure. As mentioned above, after some time has passed, consumers do not recognize the claim. This compounds the deceptive danger of exposure to puffed claims for consumers because they can not correct the inflated overall evaluation at retrieval with the memory that the claims were not credible. One logical suggestion is to forewarn consumers of the effects of exposure to puffed claims as a strategy to safeguard them. The problem with this suggestion is that warnings of impending false information do not seem to alter this process (Gilbert et al. 1990).

The implication for marketers is also clear. Puffery works. A legally accepted, but misleading claim, results in consumers liking the brand better and not remembering the exaggeration specifically. Given that the advertising environment is extremely cluttered reducing the amount of processing even in an uninterrupted situation (Gardner et al. 1976), consumers may be even more likely to accept puffed messages in a more natural setting because of the possible interference in the unaccepting process. This would explain the findings of Rotfeld and Rotzoll (1980) who tested brand beliefs based on exposure to puffed claims in “natural” advertising settings and found very high levels of belief amongst a sample of consumers (from 42 to 69%).

## FUTURE RESEARCH PROSPECTS

The brands used here were hypothetical. The participants had no knowledge of these brands. The effect of puffery on more established brands and the process by which a claim for a well-known brand is processed

may be different from the process investigated here. No current evidence in cognitive psychology research suggests that this would be true, but it remains possible.

Perhaps the most promising avenue for future work is to investigate whether puffed claims heard after product trial will change a consumer's memory and evaluation for their own experiences with the brand. Braun (1999) has shown that misleading advertising has this effect, but Cowley and Janus (2004) have shown that blatantly misleading advertising can have the opposite effect by improving memory. It would be interesting to know what effect puffed claims have on a consumer's memory for an experience, particularly since policymakers categorize puffery as blatantly misleading, but consumers do not.

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## Religion and Marketing

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### INTRODUCTION

Religion refers to a commitment to follow principles believed to be set forth by God (McDaniel and Burnett 1990). It is a socially shared set of beliefs, ideas, and actions that relate to a reality that cannot be verified empirically yet is believed to affect the course of natural and human events (Terpstra and David 1991). Religion can take many denominations with many doctrines such as Christianity, Buddhism, Judaism, and Islam, among others. So marketing messages should be consistent with religious beliefs, otherwise it may be sensitive to eliciting reactions of distaste, disgust, offense, and/or outrage to their advertisements (Fam et al.

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2004). Marketing refers to a paid, mass-mediated attempt to persuade people with the objectives to stimulate an intense desire for a product or reinforce behaviors and values or just maintain the status quo in the market (Pollay and Gallagher 1990). It is an art of presenting a product or service to a target audience in the most favorable and convincing manner. Religion-based marketing has long been used to influence people and make them perceive the world around them in a certain way, leading them to take action usually that results in a purchase. As a result, marketing utilizes an array of religious symbols logos or techniques to command attention and appeal.

The purpose of the chapter is to explore how people react to religion marketing in the context of the Philippines, which is largely a Christian country except for the South (Drenten and McManus 2016). Studies relating to religion have been conducted in Christian-dominant states in the USA (Sauter et al. 2011). So exploring and understanding of religion in the context of consumers in the Philippines should be a welcome addition to the literature. As such, Philippines has a significant population of about 110 m (CIA 2020) which in itself is an attractive emerging market for most international brands. This study is also important for both profit and nonprofit organizations that indeed use religion as a vehicle to emphasize moral standards to appeal to the religious segments and stakeholders in order to capitalize on people. For example, people should feel a sense of duty to be good to people or travel for pilgrim or standout by using religious symbols, among others. This aspect of religion-based marketing shades light on how people interpret and infer meaning from the advertisements and associated brands. Evaluating the relationship between religion and marketing allows customers to develop a better understanding of the products and services that are based on moral concepts, norms, and standards, leading them to make informed purchase decisions. Because people have varying degrees of commitments to religion, this chapter discusses how people react to religion marketing and whether their reactions result in positive or negative perception of marketing in general, and thus purchase intention.

This chapter contributes to literature in that it examines how religion affects development of religion and symbol-based marketing strategies that lead to desirable consumer behavior and purchases. The presence or absence of religious symbols or norms or duty among others in advertisements relates to consumer behavior toward certain products and services. Using Elaboration Likelihood Model and the attribution theory—the

process of causal attribution through exogenous and endogenous variables—and analytic generalization method, our results indicate that the relationship between religion and marketing is strongly mediated by *Concept Formation*, *Large Segments*, *Symbolism*, and *Discipline on Norms*, and weakly mediated by *Stand Out Attitude*, and *Tourism*. The implication of the study for business managers is that they can use the findings of the chapter to position their products and services in the context of religion to target the intended segment.

In the following section, we present the theory and hypotheses development, methodology, results, and discussion followed by implications for managers and directions for future research.

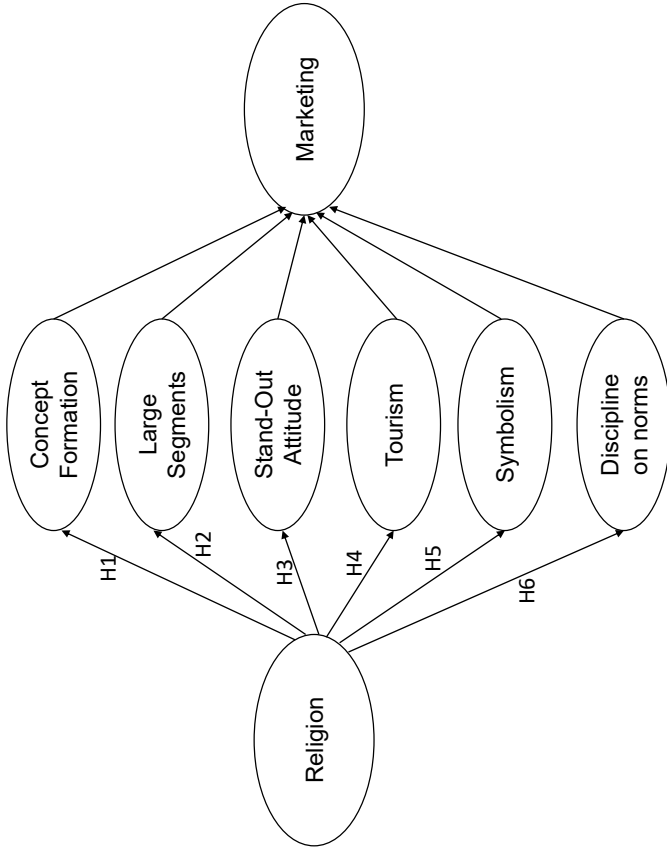
## THEORY AND HYPOTHESES DEVELOPMENT

For the purpose of the chapter, we draw upon the theory of the Elaboration Likelihood Model (ELM) which posits that persuasion is a dual process that describes a change in attitudes. This model explains the role of different ways to stimuli in changing attitude and thus the outcome. It is based on two cues—central and peripheral. *Central cue* refers to people’s careful and thoughtful considerations of the merit of the information presented for persuasion, whereas *peripheral cue* refers to peoples’ association with cues (either positive or negative) which may not be related to the logic provided by the stimuli. In light of the ELM, it is suggested that a use of appropriately associated religious concept, attitude, symbol, or norm should have a greater chance of being considered and accepted by target segment (Barnes and Dotson 1990). Keeping this in mind when conducting literature review, we identify six theoretically applicable intervening variables—*Concept Formation*, *Large Segments*, *Stand-Out Attitude*, *Tourism*, *Symbolism*, and *Discipline on Norms*—that could mediate the relationship between Religion and Marketing as shown in Figure 14.1.

### *Role of Concept Formation in Mediating the Religion-Marketing Relationship*

Concept formation relates to the obligation to follow religion-based concepts such as festivals or fashion, and good versus bad, among others. Although there are limited examples of studies that incorporate the role of religion as an element of concept formation in consumer behavior, some





**Fig. 14.1** Conceptual Framework: Mediating Variables between Religion and Marketing *Source: The authors*

factors such as beliefs, rituals, spirituality, and values among others may be predictors of consumer behavior. It also appears that religiosity mediates the psychological wellbeing. Therefore, a higher degree of religiosity is expected to lessen the negative effects of sadness (Momtaz et al. 2011). Religion indeed influences consumer behavior, lifestyle, and choices for religion-based compatible products and services. Religious people tend to be more conservative, have a greater concern for moral standards and possess traditional attitudes (Wilkes et al. 1986), which may lead to a certain type of religion-based concept formation. In support of this argument, a study conducted on the media usage of born again Christians found that evangelicals were more likely to respond positively toward religion-based advertisements than other religious individuals, groups, or the general public. So messages relating to controversial products such as cigarettes, alcohol, contraceptives, and underwear may not be consistent with the concept of these religious people (Barnes and Dotson 1990). Other categories of controversial products and services include products (birth control, drugs for assisted suicide), services (abortion, artificial insemination), and concepts (political ideas and palliative care) (Wilson and West 1981), which might mediate the relationship between religion and marketing. Based on the discussion, we propose to test the first hypothesis:

H1: Concept Formation mediates the Religion-Marketing Relationship.

### *Role of the Large Segment in Mediating the Religion-Marketing Relationship*

Religion offers an opportunity for firms to unify the segment that may have a significant impact on revenue. When controlling for age, income and gender, it was found that people with a higher degree of religious commitment tended to be satisfied with their lives, had a more traditional gender role orientation and were more likely to be opinion leaders for a segment (Wilkes et al. 1986). The linkage between religion and marketing in other emerging markets have also been studied by analyzing magazine advertisements. For example, advertisements in Arab countries were found to be effective only when they were in compliance with the Muslim religious tenants (Al-Olayan et al. 2000). Another

study conducted in the Gulf Cooperation Council countries indicates that religiously strict Muslims scored lower on recall and were unfavorable toward advertisements for controversial products relative to lenient Muslims, an indication of the differences between the segments (devout versus lenient Muslims) on the perceived importance of marketing strategies (Michell and Al-Mossawi 1999). Also, impact of religious beliefs on marketing of controversial products and services varies across countries, demographics, and product categories, and influences the segment's consumer purchase decisions. Indeed, religion influences the segment's consumer's lifestyle and thus affects brand choice behavior. In fact, brands all over the world are increasingly interested in these religious segments (Izberk-Bilgin 2012). Hence we propose to test the second hypothesis:

H2: Large Segment mediates the Religion-Marketing Relationship.

### *Role of Standing Out in Mediating the Religion-Marketing Relationship*

Standing out refers to consumers' desire to visibly differentiate themselves by purchases that are indicative of religious lifestyle. Members of religious groups are motivated by their desire to stand out from the other members of religious groups by preferring religion-based products and services to standard products and services (Mathras et al. 2015). It was also observed that Muslim customers liked switching brands for Islamic products and services (Saeed and Azmi 2015). The brand switching behavior may be explained by the observation that intrinsic religiosity lowers the social-adjustive and the value-expressive functions of consumer attitudes, whereas extrinsic religiosity increases both the attitude functions (Pace 2014). Using the attitude function, Korean consumers appear to adjust the use of product information based on their levels of religiosity (Choi et al. 2010). Intuitively, those with a high score on the religiosity scale may become involved in prosocial activities to affect positive societal change through their churches and other faith-based activities more often than those who score a low score on the religiosity scale. The ad sponsors such as Mothers Against Drunk Driving (MADD) advocate prosocial change, leading to obtaining support from high religious group. So the need for standing out which is rooted in religious values appears to affect

attitude of customers toward the marketing and perceived social responsibility of the sponsor. Given the behavior of religious consumers, it can be argued that purchasing of religion-based fashion clothing may be the most visible way to stand out yet indicating religion affiliation. Hence, we propose to test the third hypothesis:

H3: Standing out mediates the Religion-Marketing Relationship.

### *Role of Tourism in Mediating the Religion-Marketing Relationship*

Religion contributes to tourism industry by encouraging people to participate in religious tours, pilgrimage, and devotions. The religious sites provide tourists with opportunities to interact with local community and share religious history (Carbone et al. 2016). Pilgrim churches also contribute to tourism by providing social and economic activities (De Castro et al. 2014). These activities have led to successful and sustainable religious tourism development in the province of Batangas in the Philippines (Asi et al. 2015). The great variety of visitors indicates religious motive for visiting place of worships and participating in it (Van Tongeren 2014). In the context of Buddhism, Buddhists believers, worshippers, or practitioners attach great importance to simple buildings and structures that in itself has become places of tourist attraction (Wong et al. 2013). Recently, digital media functioned as technology to cater to large segment of travelers, and to assess religious products and services as a conduit between businesses (Kamarulzaman et al. 2015). Highly religious consumers were observed to be more conservative and exhibit more conscious reactions to marketing than non-religious consumers (Leary et al. 2016). As religion is the belief in spirit and supernatural that covers an area of human activity (Horton 1960), we argue that religion and tourism intersect, and thus garner specific religion-based tourism marketing strategy. Hence we propose to test the fourth hypothesis:

H4: Tourism mediates the Religion-Marketing Relationship.

### *Role of Symbolism in Mediating the Religion-Marketing Relationship*

Symbols such as signs, logos, illustrations, figures, photographs, or visual evidences provide *meaning* to consumer behavior (Mick 1986), and motivate consumers to migrate from the religious meaning system to their own meaning system by objectifying them as internal citations (Nardella 2014). In a study that classified brands in five groups—logos and banners, religious vocabulary, slogans, quotations from famous personalities, and events—religion was found to be a dominant theme in all the five groups with the logos and banners having religious attributions, and the colors and fonts pointing to religious heritage (Uysal 2013). Religious symbols also affect perceived quality, marketing skepticism, and purchase intentions (Taylor et al. 2017). However, consumers in different cultures may have different reactions to religious symbols in advertisements. For example, in individualistic culture, religious symbols were found to increase levels of symbolism explicitness in consumers' attitudes toward the religious brands' advertisements (Kalliny et al. 2019). Symbols and logos of brands influence decision-making process of consumers while purchasing products. Organizations may choose to tag the existing products with religious symbols and labels rather than developing separate brands targeting a religious community. It is found that the advertisements for pet health insurance became more effective when altered with the use of the Christian cross (Barnes and Dotson 1990). So a distinct relationship exists between product category involvement and level of religious dogmatism relative to the attitude toward the advertisements and brands, and thus the purchase intentions. However, adding religious stimuli such as logos or symbol that are linked to specific religion-based association may provoke negative reactions among other consumers with unfavorable attitudes toward or prejudices against a religion, leading to negative spillover effects on the brand, and thus to fewer purchases (Schlegelmilch and Khan 2010). Given the mixed results, we propose to test the fifth hypothesis:

H5: Symbolism mediates the Religion-Marketing Relationship.

### *Role of Discipline on Norms in Mediating Religion-Marketing Relationship*

The Discipline on Norms refers to following religion-based rules and norms. In this context, a religion-based label can communicate an offering's suitability for adherence to a specific religious practice or standard or norm. Labels, a source of information, can alter consumer behavior and brand perception. Previous studies have examined the impact of labeling such as religion, organic, or nutrition information on brand perception and found a positive effect on consumer attitudes and behaviors (Argo and Main 2004; Grunert and Wills 2007). For example, Ben and Jerry's Ice Cream labeled its products as *Kosher*, which targets Jewish consumers. In another example, Haribo developed a particular version of gummy bears, made of gelatine with pork-free ingredients, and labeled it *Halal*. Religious organizations such as the Islamic Food and Nutrition Council of America, the Islamic Society of North America, and the Halal Certification Agency, among others are recognized halal-certifiers in several key markets (InterPOC 2009). Similarly, several official organizations certify kosher products (Havinga 2010). Although religion-based labels play a key role in targeting religious consumers, their effects on other segments of customers so far remain unclear. For example, even consumers who do not belong to the dominant religion, religion-based labels may still be perceived as more pure, clean, and of higher quality (Riefler et al. 2012). However, labels could negatively contribute to sales when consumers perceived the label as deceptive (Becker-Olsena et al. 2006). In fact, Coca-Cola decided to remove labeling during Ramadan in the Middle East to decrease anti-American sentiments. Hence, we propose to test the final hypothesis:

H6: Discipline on Norms mediates the Religion-Marketing Relationship.

## METHODOLOGY

### *Research Design*

We used qualitative method and attribution theory to examine the mediating relationships between religion and marketing via *Concept Formation, Large Segments, Stand-Out Attitude, Tourism, Symbolism, and Discipline*

*on Norms.* Attribution theory relates to a variety of sources including to one's self as the consumer or to other marketplace actors (e.g., companies or governments) along with spiritual or fate/chance attribution (Kruglanski 1975). So the impact of marketing could be attributed to religion. The Philippines is an ideal country to test the six hypotheses. With more than 300 years under the Spanish rule, more than 80% of Filipinos who are Roman Catholic, making Catholicism the main religion of the Philippines. The other religious sectors are eight percent of Filipinos who are Protestants, and six percent are Muslim. Two percent of Filipinos practices folk religions while another two percent constitutes Buddhists, Hindus, and Jews. Less than one percent of the Filipinos has no religion (Perkins 2019).

### *Data Collection*

Data were collected from the participants from College of Dalubhasaan ng Lungsod ng San Pablo (DLSP) and San Pablo Colleges (SPC) (for details on the colleges, see Appendix) who were in marketing area and had experience with evaluating marketing communications materials. No financial incentives were given to the participants to take part in this study; however, they were promised a copy of results of the study. Following ethical clearance and random sampling of the population, 86 participants participated in eight focus groups, each group with about 10 members. The participants were 12 Doctor in Business Administration students from SPC, 29 Master in Business Administration students from SPC, 35 College of Engineering Students from DLSP, six Research Associates from DLSP, and four Faculty Members from DLSP. The opinions of the respondents in the focus group were the data of interest in this study. All the participants from different groups agreed that religion influences marketing and advertising. In the focus group discussion, questions raised include:

- What is religion?
- What is marketing?
- What is advertising?
- What are the influences of religion on marketing and advertising?

**Table 14.1** Respondents' general understanding of religion, marketing and advertising

<i>Domains</i>	<i>Understanding of respondents</i>
Religion	<ul style="list-style-type: none"> <li>• Religion is an institution that promotes spiritual advocacies of a group</li> <li>• Religion promotes rituals, worships, dogma, and doctrine</li> <li>• Religion is about beliefs on God and a Supreme Power</li> <li>• Religion is mostly related to beliefs and doctrine</li> <li>• Religion is about faith, relationship, and worship of God</li> <li>• Religion is a set of religious beliefs, attitudes, and practices</li> <li>• Religion is a group of people sharing beliefs about God</li> <li>• Religion has set or system of religious attitudes and practices</li> <li>• Religion is organized by groups</li> <li>• Religion is a system of beliefs on an Almighty Being</li> </ul>
Marketing	<ul style="list-style-type: none"> <li>• Marketing is about meeting customers' needs through products and services</li> <li>• Marketing is the study and management of exchange relationship</li> <li>• Marketing includes promotion and sales</li> <li>• Marketing is the activity, set of institutions, and process for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large</li> <li>• Marketing has seven P's in its Mix</li> <li>• Marketing is an important aspect of the business that deals in promoting, selling, and distributing products and services</li> <li>• The success of a product is through effective marketing</li> <li>• Marketing is a process or technique to promote or sell and distribute a product or service</li> <li>• Entrepreneurs use marketing to sell products and services</li> </ul>

(continued)

Table 14.1 reports respondents' general understanding of religion, marketing, and advertising. The data were collected from the focus group discussions.

## ANALYSES

Data were coded and rearranged into meaningful categories that could facilitate the comparison within and between these categories (Maxwell 1996). Each category had a list of items that represented a theme. To analyze the influence of religion on marketing and to test the six



**Table 14.1** (continued)

<i>Domains</i>	<i>Understanding of respondents</i>
Advertising	<ul style="list-style-type: none"> <li>• Advertising is a way of promoting products and services to the market</li> <li>• Advertising attracts the interests and desires of customers to take action</li> <li>• Advertising is a form of communication to introduce products and services</li> <li>• Advertising is associated with communicating and positioning and disseminating marketing information</li> <li>• Advertising is responsible for commercial values and concepts imitated by viewers, like children</li> <li>• Advertising influences shopping behavior of consumers</li> <li>• Advertising is an act of promoting a product through television, radio, print ads, and social media</li> <li>• Advertising is important for introducing new products and services</li> <li>• Advertising provides awareness of products and services</li> <li>• Advertising is a way on how consumer will know about the products and services</li> <li>• Advertising is a way of calling the interests of the public and markets</li> </ul>

*Source* Author (based on the results of the study)

hypotheses, we used analytic generalization and triangulation methods. Analytic generalization is a method that uses formerly developed theory as a template and describes the empirical results in terms of the relationships between variables. The template is then used to compare with the observed results from a case (Perry 1998). On the other hand, triangulation method combines methodologies to study the same phenomenon by making use of multiple references to locate an exact position and multiple viewpoints for greater accuracy (Jick 1979). Next, we conducted thematic analyses of religion, marketing and advertising as constructs using the method suggested by Kavoura and Bitsani (2014). We define a theme as a statement of meaning that (1) runs through all or most of the pertinent data, or (2) one in the minority that carries heavy emotional or factual impact (Ely et al. 1999; Holstein and Gubrium 1998; Murray and Chamberlain 1999). Thus creating themes was based on the constructivism philosophy where respondents actively constructed knowledge (Prawat and Floden 1994).

## RESULTS

As shown in Table 14.2, the modal responses of influences of religion on marketing and advertising are presented in a thematic fashion. Each theme corresponds to our framework; however, as indicated by the number of items in each category, we can reasonably conclude that the relationship between religion and marketing is strongly mediated by *Concept Formation*, *Large Segments*, *Symbolism*, and *Discipline on Norms*, and weakly mediated by *Stand Out Attitude*, and *Tourism*.

**Table 14.2** Impact of religion on marketing and advertising (6-themes, 17-items)

<i>Sub-domains</i>	<i>Impact spread</i>
Concept formation	<ul style="list-style-type: none"> <li>• Religion gives the concept of good or bad and serves communication tools of marketing</li> <li>• Norms in fashion are reflected in advertisements</li> <li>• Fashion of good man and care-free persona</li> <li>• Religion-themed advertisements</li> </ul>
Large segments	<ul style="list-style-type: none"> <li>• Religion affects the creation of marketing strategies to server larger segments</li> <li>• There is unity and common patronization among religions</li> <li>• Some marketers target specific religion and are cautious on the restrictions, but some find acceptable offers across all religion</li> </ul>
Stand out attitude	<ul style="list-style-type: none"> <li>• Religion affects consumer shopping behavior because of consumers' needs to stand out from group</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>• Old religious places are used to promote tourism</li> </ul>
Symbolism	<ul style="list-style-type: none"> <li>• Religion-based schools have recognizable logos</li> <li>• Religious symbols affect the attitude of people</li> <li>• Songs and tunes used in religion-based institutions promote life spans</li> </ul>
Discipline on norms	<ul style="list-style-type: none"> <li>• Religion-based institutions highlight religious figures</li> <li>• Religious people value certified products from religious organizations</li> <li>• Religious people are values-oriented</li> <li>• Certified products attract religious customers</li> <li>• Religious logos are not permitted globally</li> </ul>

*Source* Author (based on the results of the study)

## DISCUSSION

The purpose of the chapter was to explore how people react to religion marketing in the context of the Philippines, and specifically if *Concept Formation*, *Large Segments*, *Stand Out Attitude*, *Tourism*, *Symbolism* and *Discipline on Norms* mediate the relationship between religion and marketing. Thus, we may also conclude that religion has impact on values, attitudes, symbolism that shape consumer behavior. As such, caution should be exercised when presenting controversial products to general population or the religious segment so as not to offend conservative values and lifestyle. In this case, secular media can be effective and economical when targeting the segment. Wilson and West (1981) suggest grouping controversial topics into the four product categories: gender/sex-related products, social/political groups, health and care products, and addictive products. In a similar study, Fam et al. (2004) explore the influence of religion on marketing of provocative products such as sex and drug-related products and controversial products that involved social/political groups in Malaysia, Taiwan, China, Turkey, Britain, and New Zealand. Overall pious consumers were more likely to find the advertisements of such controversial products more offensive than less pious consumers. Devout followers of Islam found advertisements for such products offensive, while devout Buddhists took offense except for product involving social/political groups. In addition, devout Christians found only sex and drug-related products to be offensive. Due to the strong relationship between religious people and a greater concern for maintaining high moral standards (Wiebe and Fleck 1980), marketers should be sensitive to the role of religion that can play in consumers' reactions to their marketing strategies. Although marketing often includes morality to gain public or consumer attention, marketers run the risk of offending stakeholders, particularly those with high moral standards. Also, the public may expect non-profit religious organizations to hold to a higher moral standard in advertisements than for-profit firms.

Given that highly religious people tend to be from collectivist culture such as the Philippines and want to help others, it is important to demonstrate how using socially-responsible products is the socially responsible thing to do. The first step may be to identify segments of the population that would score high on the religiosity scale. One approach is to find activities, interests and exhibited behaviors of individuals that have been shown to correlate with religious beliefs and tendencies. For

example, looking at values and lifestyles (i.e., VALS) categories, several people indicate the importance of worship, religion, and responsibility as key indicators of those that fall within these types. So in addition to demographic segmentation based on religion whereby individuals can be identified by religion membership or affiliation, psychographic segmentation methods may be employed as well to find the very people religion-based nonprofit organizations seek to identify.

Religious individuals may also have broader concept of the Corporate Social Responsibility aspects of businesses than non-religious types (Brammer et al. 2007). The more deeply held religious inclinations are the greater an orientation to corporate social responsibility and the need for symbolism. Sheffield (2006) finds that socially responsible firms are more responsive to committing to community projects, solving social problems and applying high ethical standards in business activities such as marketing. In other words, religiosity, whether at the corporate or individual level, is an important predictor of advertising contents. Indeed, corporate social responsibility is cause-related marketing too (Bronn and Vrioni 2001).

## CONCLUSION

To conclude, we argue that religion influences marketing; however, the value placed in religion marketing may vary from region to region. The customers and consumers who are active in religion are more conservative and bound by concepts and paradigms related to religion, are large potential segments, and have tendencies to desire to stand out from other members of the group. These customers and consumers appreciate peculiarities in tourism are motivated by symbolic means, and are most likely disciplined to follow norms and tradition. The identified dimensions in the chapter are convincing and persuasive to win the minds of the target customers and consumers through marketing.

## RECOMMENDATIONS FOR MANAGERS

Based on the study, we recommend managers to choose carefully a relevant context when co-opting religious symbols for their advertisements to avoid the indiscriminate placing of religious symbols in advertisements. A well thought-out use of such symbols can result in greater gains in

marketing effectiveness if managers evaluate the products for their suitability and religious relevancy for the segment of the target audience. We also recommend that managers should first evaluate the general attitude toward a religion in their relevant target segment before adopting and placing religious symbols in the advertisements. If the attitude is overly negative, it may be advisable to develop a specific sub-brand for the religious market. As shown, with an existing brand image in consumers' minds, if the risk of negative spillover effects is insignificant, the brands may be relatively stable for manipulations (Washburn et al. 2000).

Another major implication for managers is the choice of media. In countries such as the New Zealand and the UK, advertising controversial product categories such as weight-loss programs, charities, and drugs for sexual diseases for public consumption is acceptable. These advertisements can be found in broadcast and print media and they are often repeated during primetime or prominently displayed. In contrast, in Malaysia and Turkey where Islam is the predominant religion, advertising of such controversial products is restricted to personalized media such as direct mails and specialist magazines. Thus, managers need to have good understanding of the selection of the media in different countries as to how religious segment can affect their advertising choices. Although it is important to view each religious segment differently, it is equally important to see each segment as multi-dimensional such as the intensity or level of devotion of consumers toward religion.

In offering guidance and recommendations for a desired course of action for managers, the highly religious segment of the population appears to be a quite viable group to target. Nonprofits organizations can reach the religious segment by focusing efforts within the traditional *Bible-belt* region of the Philippines, as these residents may contribute substantially more to charity than their wealthier counterparts in other provinces in the Philippines. As such, a religious segment may have a history of donating money (e.g., tithing) and time (e.g., mission work, faith-based community work, etc.). Therefore, religion-based advertisements are effective in helping people buy or donate. The complicated and abstract nature of consumer behavior makes it challenging to study religion as one definable concept.

Religion-based organizations are also nonprofit in nature and involved in communities in some capacity. Religion-based nonprofit organizations also compete with other nonprofits for donations. Messages chosen by these organizations may influence the way the public responds to

nonprofit messages designed to increase donation intent (Keller and Lehmann 2008). It demonstrates a potential problem for religious nonprofit organizations as they attempt to target the religious segment; non-religious segment could be offended by the religious tenets. Thus, marketers need to develop an understanding of consumers' potential reaction to advertisements in order to mitigate the potentially harmful consequences of offending the public of the segment.

### DIRECTIONS FOR FUTURE RESEARCH

We suggest two future directions for research: First, as we have developed the theoretical construct, it should be tested empirically either in the Philippines or other parts of the world to validate the role of the six mediators in the religion-marketing relationship. We also recommend quantitative research to test moderating effects—concept formation, large segments, stand-out attitude, tourism, symbolism, and discipline on norms—between religion and marketing in a wider scope, larger settings, and contexts using the research instruments and variables that we generated in this study. It may possible that weighting of the constructs may vary in other culture as we developed it in the collective culture of the Philippines. As such, there has been a call to *unpack* culture to understand the underlying dimensions of cultural influences and their behavioral consequence (McCort and Malhotra 1993). For the measurement of the religious beliefs—theism or the belief in an omnipotent God—a facet of the Religious Practices and Attitudes Inventory (RPAI) can be used (D'Onofrio et al. 1999).

Second, religion is an important cultural factor. It is one of the most universal and influential social institutions that has consequential influence on people's attitudes and behaviors. Cultural norms have been studied in recent years as explanatory constructs for various dimensions of consumer behavior; however, religion as an element of culture has not received much attention in marketing literature. Previous studies in the area of culture and consumption indicate that cultural values are important factors in determining the consumption behavior of individuals (Shaw and Clarke 1998). Culture has been defined as values, norms, rituals, beliefs, and symbols shared by members of a group or society. It includes patterns of behavior, learned responses, basic assumptions, habits and traditional ways of thinking, feeling and reacting (Shweder

1991). Therefore, we speculate that culture also moderates the relationship between religion and marketing, which may be another line of novel enquiry.

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### DALUBHASAAN NG LUNGSOD NG SAN PABLO (DLSP)

DLSP (translation: Colleges of the City of Saint Paul) was conceptualized on March 19, 1997 by City Education Committee Chair, then Hon. Pablo O. Ticzon, during committee report in a regular session. He said that one of the cherished dreams of Hon. Mayor Vicente B. Amante was the establishment of a school for deserving but indigent children. Twenty-seven days later, on April 16, 1997, Ordinance No. 97-15 was enacted unanimously to approve in principle the establishment of a college in the City of San Pablo. On June 15, 1997, the permit to operate the college was granted by the Commission on Higher Education, which gave DLSP the authority to start holding classes on July 2, 1997. Now in its 23rd year, DLSP has more than 4000 students, more than 190 faculty members, offers different undergraduate degrees and technical courses, and hopes to achieve university status soon (Pasco 2018).

### SAN PABLO COLLEGES (SPC)

To meet the needs of the growing school-age population of the City of San Pablo in the Philippines and its neighboring towns, a group of pioneering men—among them were Major Ricardo Bonilla, Dr. Antonio

Azores, Mr. Ambrosio Alcantara and many others—founded and established the San Pablo Colleges in 1947. However, it was in the mid 1950s that the San Pablo Colleges began to build its prestige in becoming one of the notable institutions in the country. This time a comprehensive building program was undertaken. Judge Paulo de Gala Macasaet was the Chairman of the Board of Trustees and later College President. It was also during his time that the Graduate Institute was recognized and much later the Nursing Course. The objective then was to establish a school that would be second to none. Now in its 73rd year, SPC has more than 3000 students and offers grade school, high school, Sr. high school, undergraduate, graduate and post-graduate degrees. SPC also aspires to become a recognized university (San Pablo Colleges 2020).

### *San Pablo City*

*San Pablo City* is a component city in the province of Laguna, Philippines and has 80 barangays. The city has a land area of about 198 square kilometers or 77 square miles that constitutes 10% of Laguna's total area. Its population in 2015 was 266,000. The population density is 1400 inhabitants per square kilometer or 3500 inhabitants per square mile. The annual regular revenue of San Pablo for the fiscal year of 2016 was ₱934 m. Out of 1634 cities and municipalities, San Pablo City is ranked 38th in total population in 2015, 296th in terms of land area with 77 square kilometers, 55th in terms of population density in 2007, and 176th in population growth rate of about 1.3% in 2015 from 2010 (Philatlas 2020).

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PART V

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Education, Entrepreneurship,  
and Organizational Behavior



# Study the Role of Personality Traits on Academic Stress: A Comparative Study of Male and Female University Students

*Sourabh Sharma and Megha Sharma*

## INTRODUCTION

Personality is considered to be a blend of psychophysical structure where both mind and body come together to make it dynamic in nature. Personality provides a deep insight to the people and to their lives. The word personality is derived from a Latin word “persona” means “mask” which used in Roman Theaters. The word personality is used in various context. Sometimes it is used to refer to the physical appearance like color, height, weight, dress, voice, etc. and some refers it as intellectual traits such as thinking, reasoning abilities and some also refers it to be a social trait like empathy, honesty, and kindness. The researcher uses the term personality

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to indicate that real or inner qualities of a person which make one person different from another.

Personality is defined as the dynamic organization within the individual of that psychological system that determines his unique adjustment to his environment. Most of the definition describes personality as a characteristic or trait, which can be inherent as well, can be acquired. The big five model of personality is used widely to assess the personality traits. The five traits, which are measured, are Openness, Conscientiousness, Agreeableness, Extraversion, and Neuroticism. The same personality traits are found in the Male and Female university students and measured with reference to stress.

Stress among undergraduate and graduate students is multifactorial, arising from both academic and nonacademic factors, including socio-cultural, environmental, and psychological attributes (Brand and Schoonheim-Klein 2009). Stress levels may escalate to significant proportions in some students, to present with symptoms of anxiety especially during tests and examination periods. In fact, previous research suggested a modest prevalence rate of 10–35% of college students' experience functionally impairing levels of test anxiety (Chapell et al. 2005). However, not all students experience anxiety with the same severity. In the Social Survey of the German Student Union, it was estimated that approximately 15–20% of student's functioning become impaired by exam nerves in a "modest" to "high" degree (Neuderth et al. 2009). In addition, it was demonstrated that the delay and the dropout in university students occur significantly more often, in students with test anxiety and is associated with psychiatric morbidity including suicidal behavior and high economic costs (Schaefer et al. 2007).

Morse and Dravo (2007) utilized a modified version of the Dental Environment Stress questionnaire (41 items) to assess levels of stress among undergraduate students ( $n = 115$ ). Authors reported that there was slight to moderate stress. However, sources of stress were more prominent among female students and with the following items: full loaded day, followed by criticism from clinical supervisors in front of patients, amount of assigned work, fear of failing a course or year, examination and grades, financial resources, fear of employment after graduation, and fear of facing parents after failure (Morse and Dravo 2007).

Personality traits play a very important role in students' life to manage academic stress. Personality traits create the perception of a student in

experiencing pressure and academic stress. This study is trying to understand the role of personality traits on perceived academic stress of the university students, which may affect their academic performance. A questionnaire to measure the effect of Academic Stress on Big Five Model of Personality was circulated among the university students. Total 332 responses were recorded for data analysis. This study is an honest attempt to see the effect of big five model of personality on academic stress of Male and Female university students. Validity and reliability of the scale was tested in Indian context. Multiple regression method was used to make the comparison of Male and Female university students by analyzing the effect of big five model of personality on their academic stress.

### REVIEW OF LITERATURE AND RESEARCH GAP

In a number of studies, authors found that the most frequently reported factors contributing to stress and anxiety around the examination periods were extensive course loads, lack of physical exercise, and long duration of exams, reported by the students (Harikiran et al. 2012; Hashmat et al. 2008; Sansgiry and Sail 2006; Shah et al. 2010). The perception of extensive course load and long duration of examinations were found to be the most important sources of test anxiety in a number of research studies. For example, in a crosssectional study, Hashmat et al. (2008) examined factors contributing to exam anxiety among the final medical students ( $n = 120$ ), using structured self-administered questionnaire including questions about lifestyle, study style, psychological problems, and examination system. Authors found that the most frequently reported factors by the students, contributing to exam anxiety, were extensive course loads (90.8%), lack of physical exercise (90%), and long duration of exams (77.5%). Authors also reported that most students had poor knowledge of exam-taking and anxiety-reduction (Hashmat et al. 2008). Medical students' performance in periodic examinations was the most frequently and severely occurring sources of stress (Shah et al. 2010).

It was demonstrated in a number of studies that parental pressures and teachers' expectations were associated with stress around the time of examinations or about choosing particular academic study or a future career. For example, students who joined dentistry due to parental pressure, with associated fear of facing parents after failure, described greater stress than those who joined of their accord (Acharya 2003; Tangade et al. 2011). Authors recommend that parents need to be counseled



against forcing their children to join an educational program, not of their choice (Tangade et al. 2011). In addition, receiving criticism from supervisors about academic or clinical work was one of the sources associated with significant stress among dental students (Kumar et al. 2009). Other authors suggested that parental pressure predicted a higher degree of test anxiety, as the threat of negative evaluation from others is increased.

Other sources, which are commonly related to students' academic self-perceptions, involve such scores especially those related to their personality characteristics, intelligence, their past academic achievements, and other academic environmental and psychosocial sources. Hancock (2001) and Hembree (1988) reported that negative cognitions related to examinations, when such students underestimate their own abilities, or overestimation of the consequences related to their failure, are often accompanied by higher anxiety levels and poor performance. It was demonstrated that in a number of studies, among dental and medical students, stress was high enough to present with psychiatric disorders in substantial proportions of students. The experience of severe stress and anxiety among dental school students is well documented. Students often report stress-related symptoms that may range from mild anxiety to sleep and eating disorders, as well as resulting in reduced performance, inability to concentrate, hostility, depression, and other debilitating effects (Stewart et al. 2006; Westerman et al. 1993).

Goldberg has developed big Five Factors (dimensions) of personality in 1993. Each of the factors is then further divided into personality facets. Psychological researchers typically distinguish five major domains of individual differences in human behavior: cognitive abilities, personality, social attitudes, psychological interests, and psychopathology. A number of methodological errors commonly found in research on human individual differences that include (Bouchard and McGue 2003):

- Introduce a broad framework for interpreting findings from contemporary behavioral genetic studies,
- Briefly outline the basic quantitative methods used in human behavioral genetic research,
- Review the major criticisms of behavior genetic designs, with particular emphasis on the twin and adoption methods, and
- Describe the major or dominant theoretical scheme in each domain; and review
- Behavioral genetic findings in all five domains.

The relationship between personality traits and stress and anxiety related to taking examinations was also examined in a number of studies. For example, Liu et al. (2006) argued that test anxiety should be related to the personality and self-esteem, and that the prevalence of test anxiety should be higher in introversive, unstable emotional, apparent psychotism, or low self-esteem students. Xu et al. (2005) examined the effects of self-concept on the test anxiety among medical college students, using the test anxiety questionnaire and the English-learning self-concept scale. Authors found that all the dimensions of self-concept were significantly related to test anxiety, among which are the general self-concept and the academic self-concept. Others claimed that perceived academic competence was related to worry and tension (Putwain et al. 2010). The major research gap obtained from the prior literature studies is that, very limited empirical research works have been conducted to study the role of big five personality traits on academic stress in Indian universities and the assessment of the same in Male and Female students.

## RESEARCH MODEL

Big five personality traits i.e., Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness play a vital role in the perception of academic stress in Male and Female university students. The representation of the same is depicted as a model in Fig. 15.1.

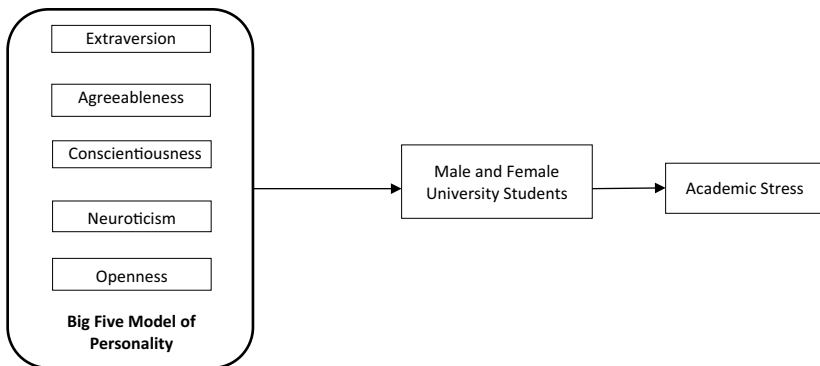


Fig. 15.1 Big five personality and academic stress model

As depicted, this research is going to see the role of five personality traits i.e., Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness on Academic stress for Male and Female university students. The objectives of the present study are as follows:

- To identify the factors of personality traits impacting academic stress (scale)
- To investigate the reliability of the scale used to identify the role of personality traits on academic stress
- To compare the impact of each personality traits on academic stress in Male and Female university students.

### *Sampling Technique*

Convenience sampling technique was used for data collection. An online questionnaire containing 38 items of Big Five Personality model and 18 items of academic stress were circulated among the Male and Female students. In response, the filled-up questionnaires were received from 332 respondents, divided into 170 Males and 162 Female university students.

### *Measures*

**Objective 1:** To identify the factors of personality traits impacting academic stress (scale)

Two questionnaires were used to identify the role of personality traits on academic stress in Male and Female university students. The first questionnaire was derived from the scale developed by John, O. P., and Srivastava, S. (1999), in which 38 items measure an individual on the Big Five Factors (dimensions) of personality. The second questionnaire was derived from Dalia Bedewy and Adel Gabriel (2015) to identify the items of academic stress among university students. Description of items is as stated below, which are administered using five-point Likert scale (1 = Strongly disagree to 5 = Strongly agree):

#### Extraversion

- EX1: I see myself as someone who is talkative
- EX2: I see myself as someone who is reserved
- EX3: I see myself as someone who is full of energy

- EX4: I see myself as someone who generates a lot of enthusiasm
- EX5: I see myself as someone who has an assertive personality
- EX6: I see myself as someone who is sometimes shy, inhibited
- EX7: I see myself as someone who is outgoing, sociable.

### Agreeableness

- AG1: I see myself as someone who tends to find fault with others
- AG2: I see myself as someone who is helpful and unselfish with others
- AG3: I see myself as someone who starts quarrels with others
- AG4: I see myself as someone who has a forgiving nature
- AG5: I see myself as someone who can be cold and aloof
- AG6: I see myself as someone who is considerate and kind to almost everyone
- AG7: I see myself as someone who is sometimes rude to others.

### Conscientiousness

- CON1: I see myself as someone who does a thorough job
- CON2: I see myself as someone who can be somewhat careless
- CON3: I see myself as someone who is a reliable hard worker
- CON4: I see myself as someone who tends to be disorganized
- CON5: I see myself as someone who tends to be lazy
- CON6: I see myself as someone who perseveres until the task is finished
- CON7: I see myself as someone who does things efficiently
- CON8: I see myself as someone who makes plans and follows through with them.

### Neuroticism

- NEU1: I see myself as someone who is depressed
- NEU2: I see myself as someone who is relaxed, handles stress well
- NEU3: I see myself as someone who can be tense
- NEU4: I see myself as someone who worries a lot
- NEU5: I see myself as someone who is emotionally stable, not easily upset

- NEU6: I see myself as someone who can be moody
- NEU7: I see myself as someone who remains calm in tense situations
- NEU8: I see myself as someone who gets nervous easily.

### Openness

- OPN1: I see myself as someone who is original, comes up with new ideas
- OPN2: I see myself as someone who is curious about many different things
- OPN3: I see myself as someone who is ingenious, a deep thinker
- OPN4: I see myself as someone who is inventive
- OPN5: I see myself as someone who values artistic, aesthetic experiences
- OPN6: I see myself as someone who prefers work that is routine
- OPN7: I see myself as someone who likes to reflect, play with ideas
- OPN8: I see myself as someone who has few artistic interests  
(Source: Authors).

There are 18 variables on the perceived academic stress were used in collecting data and their analysis. A five-point Likert scale was administered in data collection and analysis (1 = Strongly disagree to 5 = Strongly agree). These variables are as described below:

1. Competition with my peers for grades is quite intense
2. My teachers are critical of my academic performance
3. Teachers have unrealistic expectations of me
4. The unrealistic expectations of my parents stresses me out
5. The time allocated to classes and academic work is enough
6. The size of the curriculum (workload) is excessive
7. I believe that the amount of work assignment is too much
8. Am unable to catch up if getting behind my work
9. I have enough time to relax after work
10. The examination questions are usually difficult
11. Examination time is short to complete the answers
12. Examination times are very stressful to me
13. Am confident that I will be a successful student
14. Am confident that I will be successful in my future career

- 15. I can make academic decisions easily
- 16. I fear failing courses this year
- 17. I think that my worry about examinations is weakness of character
- 18. Even if I pass my exams, am worried about getting a job (Source: Authors).

### DATA ANALYSIS

To check reliability of scale, the Cronbach alpha test is used for both the scales used in the study *i.e.*, Big Five Factors (dimensions) of personality and Academic Stress. Table 15.3 shows the results of reliability analysis. Cronbach alpha test for Big Five Factors (dimensions) of personality is exhibited in Table 15.1.

The Cronbach Alpha value for “Extraversion” is .896. The values in column labeled “Corrected Item-Total Correlation” are all above .3. All the items under “Cronbach’s Alpha if Item Deleted” contain less value than the original Cronbach alpha value *i.e.*, .896 and as this value denotes reasonable degree of reliability so no item in this factor is required to be deleted. Cronbach alpha test for Agreeableness variable is presented in Table 15.2

**Table 15.1** Cronbach alpha test for Extraversion

<i>Extraversion</i> <i>I see myself as someone who—</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item—Total correlation</i>	<i>Squared multiple correlation</i>	<i>Cronbach alpha if item deleted</i>
is talkative (EX1)	21.13	11.182	.732	.596	.883
is reserved (EX2)	20.31	10.297	.765	.629	.876
is full of energy(EX3)	21.23	10.691	.790	.668	.871
generates a lot of enthusiasm (EX4)	21.34	10.307	.699	.500	.892
has an assertive personalityPersonality (EX5)	21.21	10.442	.793	.674	.869
is sometimes shy, inhibited (EX6)	20.21	10.321	.754	.654	.876
is outgoing, sociable (EX7)	21.34	10.256	.723	.634	.879
Cronbach alpha = .896					

Source Author (based on the results of the study)

**Table 15.2** Cronbach alpha test for agreeableness

<i>Agreeableness I see myself as someone who</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item—Total correlation</i>	<i>Squared multiple correlation</i>	<i>Cronbach Alpha if item deleted</i>
tends to find fault with others (AG1)	21.82	4.959	.436	.263	.679
is helpful and unselfish with others (AG2)	22.72	4.582	.534	.318	.626
starts quarrels with others (AG3)	21.22	4.111	.455	.263	.679
has a forgiving nature (AG4)	20.01	4.030	.575	.339	.593
can be cold and aloof (AG5)	21.88	4.023	.489	.311	.689
is considerate and kind to almost everyone (AG6)	22.01	4.231	.564	.299	.569
sometimes rude to others (AG7)	21.45	4.560	.489	.321	.534
Cronbach alpha = .708					

*Source* Author (based on the results of the study)

Cronbach alpha for “Agreeableness” is .708. The values in column labeled “Corrected Item – Total Correlation” are all above .3 and the values in column labeled “Cronbach alpha if Item deleted” shows that none of the item related to “Agreeableness” is increasing the reliability if that item is deleted. Cronbach alpha test for Conscientiousness variable is shown in Table 15.3.

The overall Cronbach alpha is .827 for Conscientiousness. It shows the reliability of the factor. Tables 15.4 and 15.5 indicate the results of Cronbach alpha test for Neuroticism and Openness. The Cronbach alpha value for Neuroticism is .921, which shows the high level of reliability. The Cronbach alfa value for the variable on Openness is .889, which also shows significant reliability. In addition, 0.780 Cronbach value represents the high reliability for Academic stress scale used in the present study.

**Table 15.3** Cronbach alpha test for conscientiousness

<i>Conscientiousness I see myself as someone who—</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item—Total correlation</i>	<i>Squared multiple correlation</i>	<i>Cronbach alpha if item deleted</i>
does a thorough job (CON1)	24.36	6.134	.732	.542	.747
can be somewhat careless (CON2)	23.66	6.208	.553	.346	.836
is a reliable hard worker (CON3)	24.41	6.225	.741	.568	.744
tends to be disorganized (CON4)	23.19	6.628	.613	.452	.799
tends to be lazy (CON5)	24.34	6.367	.739	.567	.801
perseveres until the task is finished (CON6)	24.11	6.154	.639	.589	.791
does things efficiently (CON7)	24.78	6.023	.788	.401	.856
makes plans and follows through with them (CON8)	24.48	6.782	.603	.590	.780
Cronbach alpha = .827					

*Source* Author (based on the results of the study)

To address this objective, Linear Regression analysis method is employed. The Procedure involves estimating separate regression equations for each personality traits and its relationship with academic stress. Here each personality trait is an independent variable and “Academic Stress” is a dependent variable. If the relationship of both (independent and dependent) the variables is established then only the study was further analyzing the comparative study of that impact on Male and Female university students. First, the dependent variable i.e., “Academic Stress” was regressed on independent variables “Extraversion” to check the significance of relationship.

As per the NULL Hypothesis, there is no significance relationship between Extraversion personality trait and Academic stress. Therefore, it is not required to compare the same for Male and Female university students. People high of extraversion are more social, talkative, fun



**Table 15.4** Cronbach alpha test for Neuroticism

<i>Neuroticism I see myself as someone who</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item—Total correlation</i>	<i>Squared multiple correlation</i>	<i>Cronbach alpha if item deleted</i>
is depressed (NEU1)	24.57	13.871	.766	.616	.909
is relaxed, handles stress well (NEU2)	23.40	12.876	.872	.792	.887
can be tense (NEU3)	24.58	13.019	.840	.744	.894
worries a lot (NEU4)	21.60	13.629	.815	.727	.900
is emotionally stable, not easily upset (NEU5)	24.77	13.662	.694	.497	.924
can be moody (NEU6)	24.89	13.099	.689	.456	.934
remains calm in tense situations (NEU7)	24.09	13.890	.720	.782	.895
who gets nervous easily (NEU8)	23.89	13.786	.870	.693	.856
Cronbach alpha = .921					

*Source* Author (based on the results of the study)

loving, and of positive emotion. They are outgoing individuals and do not confine themselves in their inner world. These traits of extraversion personality in students help them to cope with academic stress. Extroverts have a better social approach to handle stress.

In Table 15.6, the  $p$  Sig. value is  $>.05$  i.e., NULL Hypothesis is accepted. In the second regression equation, the dependent variable i.e., “Academic Stress” was regressed on independent variables “Agreeableness” to check the significance of relationship.

Here the  $p$  Sig. value is  $<.05$  i.e., NULL Hypothesis is rejected, which means that there is a significance relationship between Agreeableness personality trait and Academic stress (Table 15.7). Therefore, it was further analyzed the significant impact of agreeableness on Male and

**Table 15.5** Cronbach alpha test for openness

<i>Openness I see myself as someone who—</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item—Total correlation</i>	<i>Squared multiple Correlation</i>	<i>Cronbach alpha if item deleted</i>
is original, comes up with new ideas (OPN1)	24.78	13.662	.789	.601	.919
is curious about many different things (OPN2)	24.09	13.099	.744	.709	.890
is ingenious, a deep thinker (OPN3)	23.67	13.890	.782	.698	.876
is inventive (OPN4)	23.90	13.786	.734	.790	.856
values artistic, aesthetic experiences (OPN5)	24.08	13.871	.766	.616	.909
prefers work that is routine (OPN6)	24.56	12.876	.872	.792	.887
likes to reflect, play with ideas (OPN7)	24.06	13.019	.840	.744	.894
has few artistic interests (OPN8)	24.78	13.629	.815	.727	.900
Cronbach alpha = .889					

*Source* Author (based on the results of the study)

**Table 15.6** Regression analysis to identify the role of extraversion on academic stress

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>p Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Extraversion	331	1.300	.001	.255

*Source* Author (based on the results of the study)

**Table 15.7** Regression analysis to identify the role of agreeableness on academic stress

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>p Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Agreeableness	331	42.208	.111	.000

*Source* Author (based on the results of the study)

Female university students. The relationship between agreeableness and academic stress among the Male and Female students.

Looking at the higher adjusted  $R^2$  value of male university students i.e., .133 over female university students i.e., .052, we may conclude that Male students with agreeableness personality traits are more prone to academic stress (Tables 15.8 and 15.9). Male face a hard time in saying no and therefore they are involved in so many activities which may create pressure and leads to stress. Male students are also involved in many academic and nonacademic activities at the same time, which at the end increases their academic stress.

**Table 15.8** The role of agreeableness on academic stress for male university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Agreeableness	169	26.839	.133	.000

*Source* Author (based on the results of the study)

**Table 15.9** The role of agreeableness on academic stress for female university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Agreeableness	161	9.752	.052	.002

*Source* Author (based on the results of the study)

In the third regression equation, the dependent variable i.e., “Academic Stress” was regressed on independent variables “Conscientiousness” to check the significance of relationship (Table 15.10).

Here the *p* Sig. value is  $<.05$  i.e., NULL Hypothesis is rejected. Which means that there is a significance relationship between Conscientiousness personality trait and Academic stress. It was further analyzed the significant impact of Conscientiousness personality trait on the academic stress of Male and Female university students.

In view of the results presented in the Table 15.11, the NULL Hypothesis is accepted. Which means that there is no significant relationship of male university students having Conscientiousness personality

**Table 15.10** Regression analysis to identify the role of conscientiousness on academic stress

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Conscientiousness	331	9.237	.024	.003

*Source* Author (based on the results of the study)

**Table 15.11** The role of conscientiousness on academic stress for male university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Conscientiousness	169	1.325	.002	.251

*Source* Author (based on the results of the study)

**Table 15.12** The role of conscientiousness on academic stress for female university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Conscientiousness	161	8.588	.045	.004

*Source* Author (based on the results of the study)

with academic stress. The role of Conscientiousness on academic stress for Female university students is exhibited in Table 15.12.

In view of the results on the role of Conscientiousness on academic stress for Female university students, the NULL Hypothesis is rejected, which means that there is a significant relationship of female university students having Conscientiousness personality with academic stress. Females are more organized, diligent, and hardworking and are obsessed to carry out every task with perfection and therefore sometimes they are too hard on themselves and on others, which increases their stress level. The same is also applied to the female students having conscientiousness personality trait, which increases their academic stress.

In the fourth regression equation, the dependent variable i.e., “Academic Stress” was regressed on independent variables “Neuroticism” to check the significance of relationship (Table 15.13).

Here the *p* Sig. value is  $<.05$  i.e., NULL Hypothesis is rejected. Which means that there is a significance relationship between Neuroticism personality trait and Academic stress and therefore, it was further analyzed the significant impact of Neuroticism on Male and Female university students.

**Table 15.13** Regression analysis to identify the role of Neuroticism on academic stress

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Neuroticism	331	61.900	.155	.000

*Source* Author (based on the results of the study)

Looking at the higher adjusted  $R^2$  value we may conclude that Male students with Neuroticism personality traits are more prone to academic stress. Neurotic persons are emotionally weak, pessimistic by nature, and take stress a threat to life. They are highly impulsive in nature. Male students with Neuroticism are more prone to depression and cross sectionally and longitudinally associate with academic stress (Tables 15.14 and 15.15).

In the fifth and last regression equation, the dependent variable i.e. “Academic Stress” was regressed on independent variables “Openness” to check the significance of relationship.

In view of the results on openness on academic stress as exhibited in Table 15.16, the  $p$  Sig. value is  $>.05$  i.e., NULL Hypothesis is accepted. As per the NULL Hypothesis, there is no significance relationship between Openness personality trait and Academic stress. Therefore, it is not required to compare the same for Male and Female university students. People having this trait means, they are more flexible in learning new things. The person with high level of openness trait will often enjoy venturing beyond his/her comfort zone and seek out new unconventional and unfamiliar experiences. They travel a lot to new destinations embracing different culture and practice.

**Table 15.14** The role of Neuroticism on academic stress for male university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Neuroticism	169	41.573	.194	.000

*Source* Author (based on the results of the study)

**Table 15.15** The role of Neuroticism on academic stress for female university students

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Neuroticism	161	20.514	.108	.000

*Source* Author (based on the results of the study)

**Table 15.16** Regression analysis to identify the role of openness on academic stress

<i>Variables</i>		<i>Df</i>	<i>F</i>	<i>Adjusted R<sup>2</sup></i>	<i>Sig.</i>
<i>Dependent</i>	<i>Independent</i>				
Academic stress	Openness	331	1.724	.002	.190

*Source* Author (based on the results of the study)

## IMPLICATIONS OF RESEARCH AND CONCLUSION

As we have seen the impact of each personality trait on the academic stress in Male and Female university students, it has become important to identify the students having the kind of personality traits which increases their academic stress. These identified students may be trained and counselled so that the academic stress can be reduced. As per the study, Male and Female students either with agreeableness personality trait or Neuroticism personality trait are more prone to academic stress so for their benefit, a special stress management seminar may be organized by the universities for these students to cope up with the increasing academic stress. This will further help them in the academic performance and in the overall development. In one of the personality trait i.e., Conscientiousness, it is observed that the girls having this trait are more prone to the academic stress whereas boys are not much impacted. So here girls with this trait may be trained in order to enhance the effectiveness of the academic performance and reduce the impact of the academic stress. Here, the universities are also required to provide a stress-free environment to all kind of students with different personality traits.

Based on the data analysis, we may conclude that the university students with Extraversion and openness are not prone to academic stress whereas students with agreeableness and Neuroticism personality traits are impacted by academic stress. For conscientiousness, boys are not impacted whereas girls are more prone to academic stress.

Like any empirical study, there are some limitations to this research as well. This study was conducted in a specific geographic location and generalization of results might have limitations. More mediating factors like optimism, self-efficacy, emotional intelligence could also be considered in further in-depth analysis. Stress management techniques can also

be included in future research. Length of the questionnaire might also be a barrier to attract the greater number of respondents.

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# Influence of Entrepreneurship Education and University Ecosystem on Individual's Entrepreneurship Readiness

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and Amit Kumar Dwivedi*

## INTRODUCTION

Entrepreneurship Education programmes have received much attention from researchers in different research contexts. Entrepreneurship Education creates a massive impact on individuals' behaviour, enhance employment opportunities, and foster regional economic growth (Lackéus and Middleton 2015). Universities have their unique contribution to entrepreneurship activities and provide an ecosystem for entrepreneurship growth. The positive outcomes of Entrepreneurship Education programmes are closely associated with ecosystem support provided by institutions (Alberti et al. 2004). Universities play a prominent role to nurture students and prepare them for entrepreneurship (Keat et al. 2011). The transition in Entrepreneurship Education shows its

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demand across disciplines (Blenker et al. 2014). Entrepreneurship courses develop creative thinking, innovation (Gottlieb and Ross 1997) and aware students for entrepreneurship as a new employment opportunity. Entrepreneurship Education also prevents students from unexpected failures during an entrepreneurial career (Shepherde 2000).

Entrepreneurship readiness is an individual's ability and inclination to initiate an entrepreneurial task (Lau et al. 2012). The individual's entrepreneurship readiness is strictly dependent on three main factors which include: command on a business idea, support, and encouragement to initiate new venture and source of finance for business. Entrepreneurship readiness nurtures individuals by enhancing their abilities for entrepreneurial opportunity recognition (Kourilsky and Carlson 1997). In this context, Entrepreneurship Education programmes work as a catalyst to enhance the individual's readiness level for entrepreneurship (Waldemar Staniewski and Szopiński 2015; Kourilsky and Carlson 1997). Various research has found a significant association between Entrepreneurship Education programme and young people's readiness (Olugbola 2017).

Similarly, the university ecosystem is found associated with individual's readiness formation. Universities provide a platform for young entrepreneurship to test and validate their ideas into entrepreneurial ventures. Therefore, the scholars from different corners of the globe have paid much attention to understand, design, and develop a suitable ecosystem for entrepreneurship (Greene et al. 2010). The previous studies highlight that Entrepreneurship Educations should focus on enhancing entrepreneurship readiness among individuals (de Clercq et al. 2013). However, lack of literature support and clarity on the association between entrepreneurship education, university ecosystem and entrepreneurial ecosystem leads to the research question, "Do Entrepreneurship Education and university ecosystem provides the support in entrepreneurship readiness formation?"

There is paucity of studies that highlight the contribution of entrepreneurship education and university ecosystem with students of higher learning institutions. This paper empirically explores the impact of Entrepreneurship Education and university ecosystem on individual entrepreneurial readiness. Majority of the studies have focused on Entrepreneurship Education from entrepreneurial intention perspective. Similarly, the university ecosystem is also measured widely to understand

the intention and behavioural aspect. Thus, this study followed by literature review and hypothesis development, research methodology, results in analysis and discussion and conclusion followed by implications and future research directions.

## LITERATURE REVIEW AND HYPOTHESIS

### *Entrepreneurship Readiness*

Entrepreneurship readiness represents the individual's perceptions, attitude, and belief towards entrepreneurship. The researcher has defined this phenomenon into the cognitive and non-cognitive field (Othman and Othman 2019). Entrepreneurship readiness can help individuals for their better career opportunities (Johnsen and McMahon 2005; Lee and Jones 2008; Cooper and Park 2008; Cope 2005). According to Lau et al. (2012), entrepreneurship readiness is an individual's capability and inclination to foster entrepreneurial initiatives. Youth have excellent ideas, but their capabilities are limited to convert into a business. The nature of a successful business highly depends on the individual's readiness to transform the idea into a sustainable business. The low level of available unexploited opportunities highlights the lack of necessary capabilities to run an enterprise (Barringer 2015), low motivational level (Ekpe et al. 2015) and less exposure to entrepreneurial training programmes (Peterman and Kennedy 2003). Youths require motivation and support from the internal and external environment such as universities, government, industries, family and friends to come with the new entrepreneurial profession. The various studies (presented in Table 16.1) explore entrepreneurship readiness in a different context. The finding poses the significant contribution of these studies in entrepreneurship readiness literature.

Moreover, Samsudin et al. (2016) have observed a significant and positive relation of entrepreneurship readiness with motivation and attitudes. Staniewski and Szopiński (2015) have identified the association between academic programme and student entrepreneurial readiness. Several previous pieces of research have highlighted some models to measure an individual's readiness for entrepreneurship with different variables (Coduras et al. 2016; Zulfiqar et al. 2017).

**Table 16.1** Entrepreneurship readiness research and findings

<i>Author</i>	<i>Key words</i>	<i>Approach</i>	<i>Findings</i>
Samsudin et al. (2016)	“Students’ readiness, students’ motivation, students’ attitude toward entrepreneurship”	Correlation	“Significant positive relationship between readiness, motivation and attitudes towards entrepreneurship”
Tipu et al. (2011)	“Entrepreneurship; entrepreneurial readiness; career preferences; employment; students; youth; Gulf Cooperative Council; GCC; United Arab Emirates; UAE”	T-tests, ANOVA	“Gender, academic performance and family background are significantly associated with (and therefore likely to) students’ readiness to undertake entrepreneurial activities”
Staniewski and Szopiński (2015)	“Entrepreneurship education; Poland; students; entrepreneurship; readiness to start own business; gender differences”	Chi-square tests	“Association between academic Programme and student readiness to start their own business”
Matlay et al. (2012)	“Malaysia, universities, curricula, Students, entrepreneurialism, readiness, internal environment, entrepreneurship education”	Cronbach’s $\alpha$ , Mean score	“Found strong readiness in terms of entrepreneurial willingness and capabilities in Malaysian students”
Coduras (2016)	“Readiness for entrepreneurship, information tool, entrepreneurs’ features, measurement, psycho- tests, entrepreneurial capacity”	The conceptual approach for Tool development	“Research proposed information tool to measure the individuals’ readiness for entrepreneurship.”

(continued)

**Table 16.1** (continued)

<i>Author</i>	<i>Key words</i>	<i>Approach</i>	<i>Findings</i>
Zulfiqar et al. (2017)	“Entrepreneurial readiness perceived behavioural control, entrepreneurial attitude, social norms, entrepreneurial attitude, Theory of Planned Behavior”	Correlation, Regression analysis	“Entrepreneurial attitude, social norms and perceived behavioural control have significant positive impact on entrepreneurial readiness”
Olugbola (2017)	“Entrepreneurial readiness, opportunity identification, motivation, resources, entrepreneurial ability, entrepreneurship training”	Moderation analysis	“Found a significant effect of educational training on young people readiness”
Schillo et al. (2016)	“NSE, multilevel analysis, entrepreneurial readiness, institutional pillars (regulative, normative, cognitive, and conducive)”	Conceptual paper/model	“Proposed an improved measure of Entrepreneurial readiness, which combines individual attributes into a single measure as opposed to multiple individual measures”
Wang et al. (2014)	“Qualitative casestudy, Entrepreneurial learning, Chinese high-tech private enterprises, entrepreneurial preparedness”	Case study	“Conceptualisation of entrepreneurial preparedness as a cumulative, social and purposeful learning process. Also highlighted the roles of experiential learning, social learning and entrepreneurial goals (both performance and learning goals) as mechanisms that enable EP in entrepreneurial management”

(continued)

**Table 16.1** (continued)

<i>Author</i>	<i>Key words</i>	<i>Approach</i>	<i>Findings</i>
Coduras et al. (2016)	“Entrepreneurial readiness”	Conceptual paper	“Demonstrates that to build a tool that effectively measures people’s readiness for entrepreneurship, implementing and following a scientific process is paramount”

*Source* Authors’ compilation

## ENTREPRENEURSHIP EDUCATION PROGRAMME

Entrepreneurs require a set of skills, which help them to survive and provide competitive advantages in the market. The most prominent skills involve decision-making power, communication and relational capital, strategic thinking, negotiation, persuasion, leadership and entrepreneurial marketing. Moreover, entrepreneurs create their business opportunities and sustain them in uncertain environmental conditions and cultural diversity (Luczkiw 2005). Creative thinking fosters their abilities to develop a novel possible solution to solve the old problems and provides a competitive advantage in uncertainty (Duxbury 2012). Various factors are responsible for nurturing creativity among youths (Blenker et al. 2014). However, Entrepreneurship Education and training create more impact on an individual’s creativity and skill building. Entrepreneurship Education provides awareness for potential career possibilities in the entrepreneurship field and develops the learning efficacy among students. According to Maritz and Brown (2013), Entrepreneurship Education is being considered as a pedagogical tool to understand the entrepreneurial attitude, enhance entrepreneurial skills and helps in developing the entrepreneurial personality of students. The entrepreneurship programme is mainly focused on enhancing the entrepreneurship initiatives (Matlay 2009), developing entrepreneurial tendency (Van Gelderen et al. 2015) and influencing entrepreneurial behaviour (Davidsson 2015; Fayolle 2010) which affect entrepreneurial outcomes (Solomon and

Matlay 2008). It is observed that suitable pedagogical techniques help individuals to achieve all the above.

Similarly, the contextualization of Entrepreneurship Education research shows its significant contribution in different domains. The researchers have highlighted the role of educator diversity (Jones 2010), entrepreneurial self-efficacy (Solomon and Matlay 2008), different nature of enterprise (Nekka and Fayolle 2010), educational background, teaching methods and pedagogy (Fayolle 2010) and international research (Fayolle 2010). Previous research has also explored gender issues, enterprise culture (Rae et al. 2010) and competitive offerings (Morris et al. 2013).

## UNIVERSITY ECOSYSTEM

Generally, entrepreneurial environmental conditions majorly possess legal and institutional frameworks. Literature suggest that the skilled labour force, presence of experienced entrepreneurs, accessibility of suppliers, favourable government policies, accessibility of customers or new markets, provision of training and support services and supportive infrastructure built a holistic entrepreneurial environment (Bruno and Tyebjee 1982; El-Namaki 1988; Gartner 1989; Staley and Morse 1971). The characteristics of people and their knowledge, skill, experience and motivation and entrepreneurial training foster the entrepreneurial initiatives (Manning et al. 1989).

Previous studies implicate the role of training and counselling services to budding entrepreneur's leads to a more significant number of new venture start-ups (Dana 1987). In addition, it is mentioned in the literature that the accessibility to secure funds, infrastructure and presence of universities for training and research is prominent factors to increase the rate of new venture creation (Pennings 1982). Studies also show that there are many barriers for entrepreneurs like a weak information system, lack of infrastructure, insufficient financial assistance, excessive taxes and strict policies, which discourage new venture creations. Therefore, the contribution of universities in developing and nurturing entrepreneurial environment (Gnyawali and Fogel 1994) is required due to the belief that teaching environments affect students' perceptions significantly and can result into entrepreneurial career choice.

Various stakeholders drive an entrepreneurship environment. It is a close network of an entrepreneurial community including budding



and experienced entrepreneurs, investors, mentors, government officials, policymakers, incubation centres, accelerators and universities-based cells. Researchers, entrepreneurship educators and academicians with a common interest in guiding entrepreneurs throughout the business life cycle not only launch but to sustain and scale their businesses emphasises the importance and significance of University-based in the area of entrepreneurship (Greene et al. 2010). Entrepreneurship education, course curriculum enhancing entrepreneurial tendencies among students, innovation in pedagogy and curriculum, hands-on practical and live situations, simulation activities, senior leadership sponsorship, entrepreneurship research centre, university incubation centre, networking events, entrepreneurship students club, funding events, links to angel and venture funds are few of the core elements of university-based ecosystem.

### ENTREPRENEURSHIP EDUCATION, UNIVERSITY ECOSYSTEM AND ENTREPRENEURIAL READINESS

In 2004, Colin Jones and Jack English mentioned that there is a need to establish a different learning ecosystem in order to promote Entrepreneurship Education within the university setting-up (e.g. Gibb 2002). Action-oriented pedagogy encourages experiential learning to help students learn problem-solving techniques, project-based learning, inculcate creativity, and is supportive of peer evaluation which is prerequisite to train students for entrepreneurship. This kind of support and exposure help students being more enterprising, develop useful skills, and exhibit entrepreneurial behaviour, which enables them to be more prepared and ready in order to create and manage new businesses. The entrepreneurial universities, therefore, can play an active role in a globalized economy (Röpke 1998, p. 5). Various researches show the importance of entrepreneurial universities' support for nascent entrepreneurs. University ecosystem broadly results into new venture creation assists family business helps new entrepreneurs for business research; provide infrastructure support, mentorship, industry-academia linkage as well as market research and product commercialization (Gibb and Hannon 2006).

Morris et al. (2013) further define the concept of the modern university and entrepreneurship programmes, and while emphasising Entrepreneurship Education programmes, under university ecosystem provide holistic entrepreneurship support to the students which requires

assistance from ideation to launching the idea. Students of such entrepreneurial universities get support at each stage of their journey of the start-up. The presence of incubators, accelerators, networking events, elevator pitch competitions, mentoring sessions, funding events and competitions entrepreneurship clubs and learning communities provide handholding to the budding entrepreneurs at every step. Due to the significant results of university ecosystem in creating new entrepreneurs, EE has now reached to different disciplines, and recent development in university ecosystem suggests that EE is widely spread in different streams like science, technology, engineering, and mathematics.

Previous studies have found a positive and significant impact of entrepreneurial attitude, perceived behavioural control and social norms on individuals “entrepreneurial readiness. Entrepreneurial knowledge affects entrepreneurial attitude, social norm and perceived behavioural control as suggested by the theory of Planned Behavior. Olugbola (2017) observed the effect of educational training on students” entrepreneurial readiness. Therefore, the study proposes the following hypotheses:

Hypothesis H<sub>1</sub>: There is a significant correlation between entrepreneurship education, university ecosystem and entrepreneurship readiness among undergraduates.

Hypothesis H<sub>2</sub>: Entrepreneurship Education significantly influences entrepreneurship readiness among undergraduates.

Hypothesis H<sub>3</sub>: University ecosystem positively influences Entrepreneurship readiness among undergraduates.

Hypothesis H<sub>4</sub>: Entrepreneurship Education and university ecosystem significantly impact on entrepreneurship readiness among undergraduates.

## RESEARCH METHODOLOGY

This section covers the selection of the items for the construct, questionnaire building and validity, sample frame, data collection and association between constructs. All constructs were taken from the well-recognized source from entrepreneurship literature. The questionnaire was structured after getting comments and suggestions from experts from psychology and entrepreneurship background. University graduates were selected to run the survey for the research.

### *Scale Development and Reliability Analysis*

A five-point Likert-scale from “Strongly Disagree” to “Strongly Agree” was used to measure all constructs. Entrepreneurship readiness is used as a dependent variable and measured by using ten items of attitude, opportunity recognition, innovativeness, will to succeed, self-confidence, risk-taking behaviour, and internal locus of control (Tiftik and Zincirkiran 2014; Geri 2013; Yurtkoru et al. 2014). Entrepreneurship Education and university ecosystem used as independent variables. Entrepreneurship Education was measured with eight items opted from (Keat et al. 2011). University ecosystem was measured with 15 items, which include mentorship, incubation, financial support, industry linkage (Lüthje and Franke 2002; Keat et al. 2011).

The reliability of the construct was analysed based on a pilot survey (50 respondents) to check the appropriateness of the scale. The construct reliability was analysed using Cronbach alpha score, which fulfils the threshold limit criteria ( $>0.070$ ) for analysis (Nunnally and Bernstein 1978).

### *Sample Design*

This research is based on primary data, collected from interdisciplinary students from well-reputed Indian institutions. The students’ response from engineering, management and social science streams, including final year undergraduates, postgraduates and above have been recorded. The questionnaire was sent through emails and online forms to more than 2000 individuals out of which we received around 520 responses from the students of various universities. After cleaning of data, 327 responses were selected for final analysis. There are 73.7% male respondents and 26.3% female respondents. The education background shows that 69.3% are from postgraduate courses and 30.7% represents are from undergraduate courses. However, students from Science disciplines (Science/Engineering/Technology background) have 52.4% response rate, where social science and management students have total 47.6% response rate during data collection.

**Table 16.2** Mean, SD and correlation analysis

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Age</i>	<i>Gender</i>	<i>EL</i>	<i>EE</i>	<i>UE</i>	<i>IER</i>
Age	22.73	3.314	1					
Gender	1.27	0.443	-0.07	1				
Education label	1.7	0.458	.344**	0.044	1			
Entrepreneurship education	28.06	6.761	.124*	-.125*	.185**	1		
University ecosystem	31.15	8.589	0.108	-0.046	.162**	.615**	1	
Individual entrepreneurship readiness	38.79	5.762	.156**	-.126*	.307**	.407**	.246**	1

Note Sig: \*\*\* $\leq$ 0.001, \*\* $\leq$ 0.05, and \* $\leq$ 0.01, two tails

Source Author (based on the results of the study)

## DATA ANALYSIS AND DISCUSSION

### *Mean, SD and Correlation*

The correlation results (Table 16.2) shows the positive and significant correlation between age, educational level, entrepreneurship education, university ecosystem and entrepreneurship readiness. The analysis reveals the negative and significantly low correlation between gender and Entrepreneurship Education as well as between gender and entrepreneurship readiness. The results also highlight that the gender of the respondents has no significant correlation with education level and university ecosystem. The education level of the respondents shows a significant positive correlation with Entrepreneurship Education and university ecosystem, as well as with entrepreneurship readiness. Entrepreneurship Education shows the positive and high correlation with university ecosystem and moderate correlation with entrepreneurship readiness. The finding reveals that overall gender has a negative relationship, which may be due to a different perspective of two groups (male and female) towards entrepreneurship.

### *Regression Analysis for Entrepreneurial Readiness*

In Table 16.3 results for linear regression Model 1 presented that Entrepreneurship Education was a significant predictor ( $\beta = 0.407$ ,  $p <$

**Table 16.3** Regression model

<i>Independent variable</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
Entrepreneurship education	0.407***		0.336***
	8.021		4.996
University ecosystem		0.246***	0.107
		4.577	1.596
$R^2$ Value	0.166	0.061	0.172
Durbin-Watson	1.601	16.68	1.598

*Note* No. of observations: 326; Sig: \*\*\* $\leq$ 0.001, \*\* $\leq$ 0.05, and \* $\leq$ 0.01, two tails

*Source* Author (based on the results of the study)

.001) of entrepreneurship readiness across independent variables with an  $R^2$  value of (0.166). The results provide the facts to validate hypothesis 2, Model 2 shows the impact of on entrepreneurship readiness and obtained a beta value ( $\beta = 0.246$ ,  $p < .001$ ) with six per cent of total variance explained in a regression model. Thus, we can understand that both indicators (Entrepreneurship Education and university ecosystem) have their significant impact on entrepreneurship readiness when running independently in the regression model. In hypothesis  $H_4$ , we assumed that Entrepreneurship Education have a positive impact on entrepreneurship readiness. Model-3 observed with the highest  $R^2$  value of (0.172). The beta coefficient for Entrepreneurship Education ( $\beta = 0.336$ ,  $p < 0.001$ ) and a beta coefficient for ( $\beta = 0.107$ ,  $p = ns$ ), shows no impact of university ecosystem on entrepreneurship readiness in the model (Model-3). The findings are supported with previous studies which show Entrepreneurship Education makes individual ready towards entrepreneurship (Waldemar Staniewski and Szopiński 2015; Olugbola 2017; Matlay et al. 2012).

This research reveals the significant impact of university ecosystem for entrepreneurial initiatives among university students (Matlay et al. 2012). The finding from Model 3 highlights the non-significant relationship between university ecosystem and entrepreneurship readiness. This finding reveals the low contribution of university ecosystem in readiness. Various researchers have found the unique contribution of university ecosystem in developing an entrepreneurial interest (Greene et al. 2010).

## CONCLUSION

The study highlights the impact of EE and the university ecosystem on entrepreneurship readiness among university students. The positive relationship between variables reflects that EE enhances student's readiness towards entrepreneurship. The study found a positive impact of EE on entrepreneurship readiness and, readiness is stronger in the students pursuing entrepreneurship courses (Maritz and Brown 2013). However, the university ecosystem does not support entrepreneurship readiness. It indicates that universities do not have the proper infrastructure to create interest in entrepreneurship among students. Previous research highlights the importance of university ecosystem to enhance the individuals' entrepreneurial behaviours and make them ready for new enterprise creation (Morris et al. 2013). Only Entrepreneurship Education could not help individuals to develop the capacities to start a business without university support (Gibb 1996; Morris et al. 2013). Therefore, the university should strengthen its infrastructure and built capabilities to create more entrepreneur from their campus (Autio 1997). The entrepreneurial university is well-reorganized constructs, which discourse the role of university campuses in creating a suitable and student-friendly environment. University can develop entrepreneurial culture by providing various kind of support: mentors for students, university linkage, incubation support, financial support and freedom to start a business (Greene et al. 2010). This study has some research limitations. We have tried to explore the role of Entrepreneurship Education and university ecosystem in entrepreneurship readiness building. Due to the lack of literature, we are unable to justify our research findings. This research is limited to selected academic institutions, and the sample size is small. Therefore, there are many possibilities to conduct this study on a large sample set. Further, future research may include the role of various associated factors to understand this relationship.

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# Perceived Organizational Fit: Analyzing Negative Effect of Work Stressors on Employee Outcomes

*Bindu Chhabra*

## INTRODUCTION

Over the last three decades, plethora of studies has shown that work-related stress has devastating effects on employee performance (Newton and Jimmieson 2009; Siegrist 1998). A large number of factors, ranging from technological changes, global competitive pressures, job insecurity, and ever demanding customers to hazardous work environments and overbearing bosses, have been recognized to be contributing factors. Across a range of organizational contexts and cultures, research has consistently shown that experiencing stress has a deleterious effects not only on employees' mental and physical health, but also on organizational outcomes such as job satisfaction, job performance, and employee turnover (Ngo et al. 2005; Kahn and Byosiere 1992; Newton and Jimmieson 2009; O'Driscoll and Beehr 1994). The realization that

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occupational stress of the employee also has damaging effects on the organizational well-being (read profits) has made many companies wake up to the seriousness of the issue.

In the recent past in India, there have been reported instances of top executives dying of heart attack or committing suicide, apparently due to a combination of lifestyle issues and overall environmental stress. The toll on working professionals is evident from the survey by Associated Chambers of Commerce and Industry of India (ASSOCHAM), which included the sample of 1500 employees from 250 organizations across 18 sectors like media, IT, telecom, etc. According to the survey, demanding schedules and increasing stress levels are leading to problems like daytime fatigue, psychological issues, physical discomfort, and absenteeism and performance deterioration. Almost 60 to 65% of the executives reported suffering from stress-related ailments like hypertension, diabetes, heart disease, and asthma. The malaise is not confined to the higher echelons only but is widespread. More than 40% of employees sleep for less than 6 h in a day, which leads to severe sleep disorders. Many do not get time for any kind of exercise, further complicating the problem.

The survey also points out that sleep deprivation and the consequent stress costs about \$150 billion a year in reduced workplace productivity. According to the findings of 2018 Cigma 360 Well-Being Survey, stress levels are higher among Indians compared to people from other developed and emerging countries like United States, UK, Germany, France, China, Brazil, and Indonesia. According to this survey, 95% of Indian millennials between the age group 18–34 years feel stressed compared to the global average of 86%. The older generation 35–49 is not better off either. In addition to the work-related stressors like ambiguous roles, unreasonably high targets, and pressing deadlines, these sandwich generation Indians often have to take care of their elderly parents and/or young children simultaneously. In such a complex environment, ensuring employee well-being while extracting optimum performance concurrently is an unenviable task for the Human Resource Managers.

Situation in even developed or emerging economies is apparently not much better either. In China more than 80% of all employees were found to be overworked and under mental and physical stress as per the survey by Wuhan University of Science and Technology. Another peculiar phenomenon, which is emerging, is that while the manufacturing sector does not indicate much work overload, 85% of the White-Collar workers have to work overtime as per the reports of Zhaopin, a job

recruitment website. The phrase “996” symbolizes the work culture especially in Technology industry, which refers to 9 am to 9 pm working hours, 6 days a week making it 72 hours of work a week as against the regular 44 hours week prescribed by the government. This work culture was defended and even promoted by no less than Jack Ma although many tech companies like Baidu, Tencent, and Ele.me are now starting to retract from this position by recognizing the need to provide some relief to the employees. Data from Didi Chuxing, China’s biggest ride hailing platform showed that employees of internet, finance, and media companies were most likely to be working until late in the night. A study by *Lancet* medical journal (2015) provides evidence that people working over 55 hours a week face increased risk of stroke and coronary diseases. In Japan, this ailment is known as “Karoshi” which means death from overwork. It has been now recognized as an actual phenomenon and cause for concern and intervention in countries like Japan, South Korea, and Taiwan.

Although the detrimental effects of work stress on employees’ physical and mental health cannot be challenged, there is no panacea to solve these ills. As organizations become more competitive and lean to retain market shares and overcome economic headwinds, there is little scope for them to provide relief to the employees by eliminating the stressors. What cannot be cured must be endured. Following this dictum, the focus has been on better management of the stress phenomenon by building up the capacity of the employees to cope effectively with stressors. Researchers have investigated a large number of factors that may moderate the negative effects of work role stressors on the organizational outcomes. This kind of research can be extremely beneficial to the human resource practitioners and other managers as it can help in designing strategies, which can reduce negative effect of work role stress. These include Type A behavior (Kushnir and Melamed 1991), locus of control (Daniels and Guppy 1994; Vahtera et al. 1996), self-efficacy (Jimmieson 2000), self-esteem (Makikangas and Kinnunen 2003), proactivity (Parker and Sprigg 1999), trust in management (Harvey et al. 2003), perceptions of the balance between effort and rewards (Siegrist 2002) and subjective fit with organizational culture (Newton and Jimmieson 2009). While many such task and individual variables have been identified, there is still need to identify additional variables, which can buffer negative effects and create a healthy work environment without lowering the job demands. The present study aims to investigate the stress buffering effect of person-organization (P-O) fit.

Further, the current understanding of the nature, antecedents and consequences of work role stress is based largely on the research conducted in Europe and United states. The findings of these studies cannot be generalized to other cultures as the individuals' perception and experience of stress may be affected by societal factors. For example, in the societies characterized by high power distance like India, China, and most Asian societies, the employees are more tolerant of getting orders and scolding from their superiors than the employees working in cultures low on power distance. This lack of autonomy and discretion does not lead to stress in the employees from high power distance cultures but can be a source of continuous stress for the employees of low power distance societies.

Work Stress can lead to physical and psychological disorders that reduce job performance and negatively affect other employee outcomes. However, researchers have investigated a large number of factors that may buffer the negative effects of work role stressors on the employee outcomes. The present study is aimed to explore the direct effect of work role stressors and subjective P-O fit perceptions on the employee outcomes of job satisfaction, organizational citizenship behavior (OCB) and turnover intentions. The study further aimed to investigate the moderating role of person-organization (P-O) fit, in the relationship between work role stressors and the above-mentioned employee outcomes. The sample of the study was 317 professionals from five sectors. Hierarchical multiple regression results showed that work role stressors were negatively related to job satisfaction and OCB and positively related to turnover intentions. Subjective P-O fit was seen to be positively related to job satisfaction and OCB and negatively related to turnover intentions. The analysis also found some support for the stress buffering effect of high subjective fit in the prediction of job satisfaction, OCB and turnover intentions. The results of the study highlight the importance of the concept of subjective fit for the managers and the employees to help them in coping up with the demands of the job. They provide support for the fact that matching employees to their organization can help in the mitigation of employees' stress resulting in positive employee outcomes, hence benefiting the organization in the long run. The findings of the study can have important implications for the organizations in countries like India and China where the employees are suffering from various stress induced disorders having long-term effect on their physical and psychological well-being.

To fill the above-mentioned gaps, the present study aims to contribute to the existing body of literature by examining the direct effect of work role stressors on employee outcomes of job satisfaction, OCB and turnover intention in the Indian Organizations. The study further aims to investigate the moderating effect of person-organization (P-O) fit in the relationship between work role stressors and the above-mentioned employee outcomes.

## OBJECTIVES OF THE STUDY

Following objectives were set to conduct this study:

- To study the direct effect of work role stressors on the following employee outcomes
  - Job satisfaction
  - Organizational citizenship behavior
  - Turnover intention
- To study the direct effect of person-organization (P-O) fit on the above-mentioned employee outcomes.
- To investigate the moderating effect of person-organization (P-O) fit in the relationship between work role stressors and employee outcomes.

## THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

### *Work Role Stressors and Employee Outcomes*

Research in the field of stress has mainly focused on the stimulus response paradigm suggesting that the employees in an organization have to work in stressful working conditions (stressors), which can result in a response characterized by negative attitudes and behaviors (Netemeyer et al. 2005; Walker et al. 1975). Research on organizational stressors has focused mainly on role stress, comprising of role ambiguity and role conflict (Kahn et al. 1964). The excessive emphasis on role ambiguity and role conflict in the organizational stress research is undermining the importance of another critical stressor at workplace namely role overload. For this reason, the present study focuses on three types of work role stressors



namely, role ambiguity, role conflict, and role overload that have been identified as the common sources of the stress in the workplace (Boles et al. 2003; Cooper et al. 2001; Jackson and Scbuler 1985; Mulki, Laskk, et al. 2008).

Role ambiguity occurs when the employees do not have clear understanding about their role in the organization (Rizzo et al. 1970). Role conflict is the result of incompatible expectations faced by the employees in their jobs, such that the compliance with one expectation makes it extremely difficult or impossible to comply with other expectation (Kahn et al. 1964). Role overload refers to the total amount of work and the period in which the work must be completed (Cooper et al. 2001). It occurs when the employees feel that there are too many responsibilities or activities expected of them in the light of time available, their abilities and other constraints (Rizzo et al. 1970).

Job satisfaction is one of the most researched attitudes and reflects how well people like or dislike various aspects of their jobs (Spector 1985). Work role stress leads to emotional exhaustion in the employees leading to the feelings of helplessness, lowered self-esteem and lack of accomplishment (Cordes and Dougherty 1993; Moore 2000). The employees thus feel anxious and frustrated and develop negative attitudes toward their organizations, their work and toward themselves. This, in turn leads to job dissatisfaction. A large number of studies have shown a negative relationship between work role stressors and job satisfaction (Chang et al. 2009; Mulki, Jaramillo, et al. 2008; Ngo et al. 2005; Örtqvist and Wincent 2006).

However, the impact of work role stress has not been as widely studied on another work outcome namely OCB. Citizenship Behaviors are defined as the discretionary behaviors on the part of an individual, not formally recognized by the organizational reward system, yet they contribute to the effectiveness of the organization (Bateman and Organ 1983; Smith et al. 1983). The employees to support the interests of the organization even though they may not directly lead to individual benefits (Moorman and Blakely 1995) often perform these behaviors. Since OCBs are acts that typically go beyond an employee's roles and duties, it is likely that work role stress will discourage employees from indulging in such behaviors. When the stress at work becomes excessive and exceeds available resources, employees respond by reducing OCBs rather than compromising on their task performance. This is because of the fact that the negative consequences associated with lower OCBs are less as

compared to those associated with lower task performance (Organ 1997). Further, social exchange theory (Cropanzano et al. 2003), effort-reward imbalance theory (Siegrist 1996), and resource allocation theory (Kanfer and Ackerman 1989) all propose that higher levels of work stress will lead to lower levels of OCBs. Recently, Jain and Cooper (2012) conducted a study on 402 operators working in business processing organizations (BPO) organization in northern India, to study the impact of stress on OCB. They found that stress was negatively related to most dimensions of OCB.

Working in a stressful work environment leads to lower job involvement and psychological withdrawal from the work group (Brief and Aldag 1976) and hence increases the turnover intentions. Intentions to leave may be regarded as the last stage in the sequence of withdrawal cognitions, ranging from thinking of leaving to intending to search for alternative employment (Tett and Meyer 1993). Work role stress is considered an important antecedent of withdrawal cognitions and turnover behavior (Hom and Griffeth 1995). According to the theories of role stress, ambiguous or conflicting role demands evoke role strain (Kahn et al. 1964; Netemeyer et al. 1990), which in turn leads to dissatisfaction and turnover behavior (Fisher and Gitelson 1983; Jackson and Schuler 1985; Ngo et al. 2005).

The review of literature for this section demonstrates that role ambiguity, role conflict, and role overload will have a negative impact on employee outcomes. However, to further explore the relationship between work role stressors and the important employee outcomes of job satisfaction, OCB and turnover intentions, the following hypotheses are proposed:

- $H_{1a}$ : Work role stressors will have a negative effect on job satisfaction of the employees
- $H_{1b}$ : Work role stressors will have negative effect on OCBs exhibited by the employees
- $H_{1c}$ : Work role stressors will have a positive effect on the employees' turnover intentions

### *P-O Fit and Employee Outcomes*

The concept of fit has been extensively studied in the organizational behavior literature (Cable and DeRue 2002; Chang et al. 2010; Gregory

et al. 2010; Guan et al. 2011; Kristof-Brown et al. 2005; Schneider 1987) and has been shown to influence job applicants' decision to choose certain organizations (Judge and Cable 1997; Saks and Ashforth 1997) and the recruiters decision to hire the participants (Cable and Judge 1997; Kristof-Brown 2000).

Person-organization fit is referred to the congruence between an employee's personal values and organization's culture (Edwards 1991; O'Reilly et al. 1991). Employees are expected to be more energetic and persistent in accomplishing their job tasks when they perceive a similarity between their values and the values of the organization (Cable and DeRue 2002). Attraction-Selection-Attrition (ASA) theory states that the individuals are attracted to and seek employment in the organizations where they perceive a high P-O fit (Schneider 1987). In addition, the employees whose values match with the values of the organization are also likely to stay in the organization for a longer period than the employees having lower levels of P-O fit. Recent meta-analysis by Kristof-Brown et al. (2005) confirmed that high level of fit with the organization resulted in higher job satisfaction, organizational commitment, and lower intentions to leave the organization. Subjective P-O fit has also been found to be positively related to organizational identification, job satisfaction, occupational commitment, perceived organizational support, and OCBs (Cable and DeRue 2002). Recently, P-O fit was found to be positively related to organizational commitment and citizenship behaviors (Boon et al. 2011; Guan et al. 2011), job performance, job satisfaction and turnover intentions Wang et al. (2011), in-role performance and job satisfaction, (Gregory et al. 2010), OCB (Yaniv et al. 2010) and task performance (Chi and Pan 2012).

The review of literature for this section demonstrates that P-O fit will have a positive impact on employee outcomes. However, to further explore the relationship between the subjective fit and the important employee outcomes of job satisfaction, OCB and turnover intentions, the following hypotheses are proposed:

*H2a:* Person-organization fit will have a positive effect on job satisfaction of the employees

*H2b:* Person-organization fit will have a positive effect on the OCBs exhibited by the employees

*H2c:* Person-organization fit will have negative effect on the employees' turnover intentions

***Moderating Role of P-O Fit in the Relationship Between Work Role Stressors and Employee Outcomes***

As shown in the previous section, there has been a lot of research showing the direct effect of subjective fit on a large number of employee outcomes. However, very little work has been done with respect to the role of subjective fit in the stress coping process. The concept of fit is especially prominent in the organizational stress research (Hecht and Allen 2005; Kreiner 2006; Kristof-Brown et al. 2005). According to the person-environment approach (Lewin 1935; Murray 1938), person and environment work as joint determinants of employee well-being. How employees react to the work stressors or job demands might depend on how well the employees are matched with their organization and their jobs. Work stress will have minimal impact on negative employee outcomes when the employee works in a conducive environment. Employees with high P-O fit will have a better understanding of the wants and needs of the organization as their norms and values match with the norms and values of the organization (Erdogan and Bauer 2005). Because of this fit between the values of the person and the organization, the employee will be better able to understand the “reasons for the presence of the stressor and their exposure to it” (Kahn and Byosiere 1992, p. 662). This, in turn, will have less impact on work outcomes like job satisfaction, citizenship behaviors, and turnover intentions, with high P-O fit acting as a buffer between the work stressors and negative employee outcomes. In contrast, with low P-O fit, the employees will not be able to understand the need for the presence of the stressors in the organization, as their values do not match the values of the organization. For these employees, stress will directly impact the employee outcomes and will lead to job dissatisfaction, decrease in the citizenship behaviors, and increased turnover intentions.

The review of literature for this section demonstrates that P-O fit will act as a buffer between work stressors and employee outcomes. However, to explore in future the moderating role of subjective fit in the relationship between work role stressors and important employee outcomes of job satisfaction, OCB and turnover intentions, the following hypotheses are proposed:

*H3*: Person-organization fit will moderate the relationship between work role stressors and job satisfaction (*H3a*), OCBs (*H3b*) and turnover intentions (*H3c*) such that the relationship will be stronger for the employees having low P-O fit than for employees having high P-O fit. The above-mentioned hypotheses can be depicted with the help of the proposed model give below Fig. 17.1.

## METHODOLOGY

### *Sample*

Purposeful (maximum variation) sampling was employed (see Patton 1990). In order to enable investigations of patterns relating work role stressors, subjective fit perceptions and employee outcomes, participants were contacted from a diverse range of organizations. In all 350 professionals were contacted but only 317 completed questionnaires were collected (response rate 91%). The sample consisted of the executives mainly from five sectors viz. education (39), service (100), information technology (105), manufacturing (41), and health care (12) working in Delhi and the National Capital region (NCR). However, 20 respondents were from the other sectors. Respondents ranged in age from 21 to 62 years (mean age 34.84 years and SD 9.94), 232 of them were males

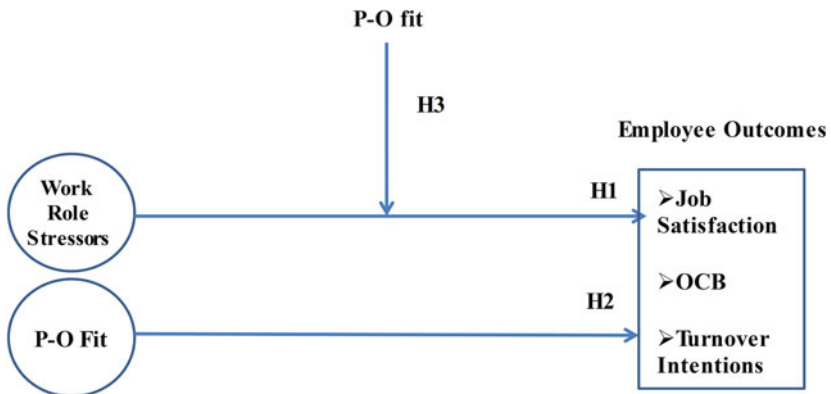


Fig. 17.1 Proposed Model

and 85 were female. 210 respondents were married and 107 of them were single. Maximum number of respondents fell in the age range of 31–40 (104) and the majority of them (198) had the tenure ranging from 1–7 years in the organization.

### *Methodology*

The employees of the various organizations were contacted and were asked to fill in the questionnaire. They were appraised regarding the academic purpose of the study and confidentiality of their responses was ensured.

### *Research Instruments*

- Person-Organization fit: The 3-item scale developed by Cable and DeRue (2002) was used to measure the person-organization fit. Responses to these items were on a 5-point scale (1 = strongly disagree and 5 = strongly agree). High scores imply high P-O fit and low scores imply low P-O fit. The sample item of the scale is, “The things that I value in life are very similar to the things that my organization values.”
- Role Conflict: The 3-item scale developed by Peterson et al. (1995) was used to measure the role conflict. Responses to these items were on a 5-point scale (1 = strongly disagree and 5 = strongly agree). High scores imply high role conflict and low scores imply low role conflict. The sample item of the scale is, “I often get involved in situations in which there are conflicting demands.”
- Role Ambiguity: The 5-item scale developed by Peterson et al. (1995) was used to measure the role ambiguity. Responses to these items were on a 5-point scale (1 = strongly disagree and 5 = strongly agree). However, the scores of all the 5 items were reversed. The sample item of the scale is, “I have clear planned goals and objectives for my job.”
- Role Overload: The 5-item scale developed by Peterson et al. (1995) was used to measure the role overload. Responses to these items were on a 5-point scale (1 = strongly disagree and 5 = strongly agree). The sample item of the scale is, “There is a need to reduce some parts of my role.”

- **Job Satisfaction:** Facets of job satisfaction was measured using nine items chosen from Cellucci and DeVries (1978) questionnaire. There were two items for satisfaction with pay, three items for satisfaction with coworkers, two items for satisfaction with supervisor and two items for satisfaction with work itself. The sample items for measuring these four facets, respectively are, “My organization pays better than competitors.” “When I ask people to do things the job gets done”, “The managers I work for back me up.” and “My job is interesting.” These nine items were rated on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). High scores imply satisfaction with the facets of job satisfaction and low scores imply dissatisfaction with the facets of job satisfaction.
- **Organizational Citizenship Behavior:** OCB was measured by adapting the Podsakoff et al. (1990) OCB Scale. The three OCB factors included were sportsmanship, conscientiousness, and civic virtue. Examples of these items are “is willing to risk disapproval in order to express individual beliefs about what is best for the company” and “turns in budgets, sales projections, expense reports, and other documents earlier than required.” These items were rated on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). Scores on the eight items were averaged to yield a summary score reflecting OCB.
- **Turnover Intentions:** A 3-item scale originally developed by Vigoda and Kapun (2005) was used. The sample item is “I will probably not stay with this organization for much longer.” The scale ranges from 1 (strongly disagree) to 5 (strongly agree). A higher score meant higher intentions to leave the organization or department.

### *Control Variables*

Control variables in this study included gender, age, marital status, industry type, and organizational tenure. Gender was assessed using a dichotomous scale: male (1) and female (2). Marital Status was also assessed using a dichotomous scale: married (1) and single (2). Industry type was assessed using a nominal scale: education (1), service (2), IT (3), manufacturing (4), health care (5), and any other (6). Age and organizational tenure was measured in years using a continuous scale. Gender, age, marital status, industry type, and organizational tenure were controlled

for all regression analysis in order to minimize their influence on the focal variables in the study.

## DATA ANALYSIS OVERVIEW

Hierarchical multiple regression analysis was used to examine the potential main effects of work role stressors and subjective fit on employee outcomes. Each employee outcome indicator, i.e., job satisfaction, OCB and turnover intentions, was regressed on the antecedent sets in four steps. Control variables were entered on Step 1, work role stressors on Step 2, subjective fit indicators on Step 3, and interaction term (i.e. work role stressors  $\times$  subjective fit) on Step 4. The magnitude of  $R^2$  change at each step of hierarchical regression analysis was used to determine the variance explained by each set of antecedents. The beta values reported were used to determine the effect of each variable in the antecedent sets on employee outcomes.

## RESULTS AND DISCUSSION

Descriptive data (means and standard deviations), correlations, and Cronbach (1951) alpha coefficients are displayed in Table 17.1. As can be seen all scales demonstrated good internal consistency.

### *Work Role Stressors and Employee Outcomes*

It was predicted that the work role stress will be negatively related to job satisfaction (H1a), OCB (H1b) and will be positively related to employees' turnover intentions (H1c). As can be seen from Table 17.2, entry of work role stressors in step 2 accounted for a significant increment in variance on job satisfaction,  $R^2$  ch. = .23,  $F = 15.72$ ,  $p < .01$  (supporting H1a), OCB,  $R^2$  ch. = .16,  $F = 8.78$ ,  $p < .01$  (supporting H1b) and turnover intentions,  $R^2$  ch. = .11,  $F = 8.35$ ,  $p < .01$  (supporting H1c). With respect to the work role stressors, the analyses revealed that role ambiguity and role overload were negatively related to job satisfaction (role ambiguity,  $\beta = -.60$ ,  $p < .01$  and role overload,  $\beta = -.25$ ,  $p < .01$ ) and OCB (role ambiguity  $\beta = -.40$ ,  $p < .01$  and role overload  $\beta = -.097$ ,  $p < .05$ ). As expected, these two stressors were positively related to turnover intentions (role ambiguity,  $\beta = .10$ ,  $p < .10$  and role overload,



**Table 17.1** Descriptive statistics and correlations for focal variables

<i>Variables</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Role Conflict	3.22	.78	(.71)								
2. Role Ambiguity	2.20	.60	.067	(.78)							
3. Role Overload	2.85	.82	.154**	.212**	(.86)						
4. P-O Fit	3.37	.79	-.147**	-.358**	-.259**	(.85)					
7. Job Satisfaction	3.37	.52	-.141*	-.460**	-.309**	.482**	(.74)				
8. OCB	3.67	.42	-.004	-.388**	-.192**	.264**	.283**	(.72)			
9. Turnover Intentions	2.74	1.02	.117*	.208**	.302**	-.354**	-.315**	-.205**	(.87)		
10. Age	34.84	9.94	-.063	-.186**	.005	.200**	.140*	.152**	-.179**		
11. Tenure	7.84	7.58	-.121*	-.199**	.007	.180**	.108	.139*	-.238**	.772**	

*Source* Author (based on the results of the study)

*Note* Cronbach's [1951] alpha reliability coefficients appear in the diagonal \* $p < .05$ ; \*\* $p < .001$

**Table 17.2** Hierarchical multiple regression analyses employee outcomes (P-O fit as a moderator)

<i>Independent variables</i>	<i>Job satisfaction</i>				<i>Organizational Citizenship Behavior</i>				<i>Turnover intentions</i>			
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
Step 1-Control Variables												
Gender	-.71	-.54	-.67	-.69	-.03	-.07	-.11	-.10	-.70*	-.93**	-.86**	-.85**
Age	.03	.02	.01	.01	.05	.04	.04	.04	.004	.009	.01	.01
Marital Status	-1.28**	-1.23**	-.76	-.71	.40	.43	.58	.53	-.002	.09	-.16	-.11
Industry Type	-.46**	-.21	-.13	-.13	.13	.25*	.28**	.27*	.074	-.003	-.04	-.05
Tenure with Organization	-.003	-.04	-.04	-.04	.02	.004	.003	.001	-.11**	-.10**	-.10**	-.09**
Step 2-Job Stressors												
Role Conflict		-.13	-.08	.20		.04	.06	.02		.07	.05	-.17
Role Ambiguity		-.60**	-.48**	-.65**		-.40**	-.36**	-.22		.10*	.03	-.02
Role Overload		-.25**	-.18**	.11		-.097**	-.07	-.24		.22**	.18**	.58**
Step 3-Person-Organization fit												
Person-Organization fit			.61**	1.09**			.20**	.09			-.33**	-.02**
Step 4-Interaction terms												
Role Conflict x P-O fit				-.03				.003				.03
Role Ambiguity x P-O fit				.02				-.02				.006

(continued)

Table 17.2 (continued)

Independent variables	Job satisfaction $\beta$				Organizational Citizenship Behavior $\beta$				Turnover intentions $\beta$			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Role Overload x P-O fit				-.03				.02				-.04**
Adjusted R <sup>2</sup>	.04	.27	.35	.35	.01	.17	.18	.17	.05	.16	.20	.22
R <sup>2</sup> change	.23**	.08**	.08**	.005	.16**	.02**	.02**	.003	.11**	.05**	.05**	.02*
F change (p-value)	3.72**	15.72**	19.61**	14.91**	1.87*	8.78**	8.62**	6.53**	4.54**	8.35**	10.03**	8.3**

Source: Author (based on the results of the study)

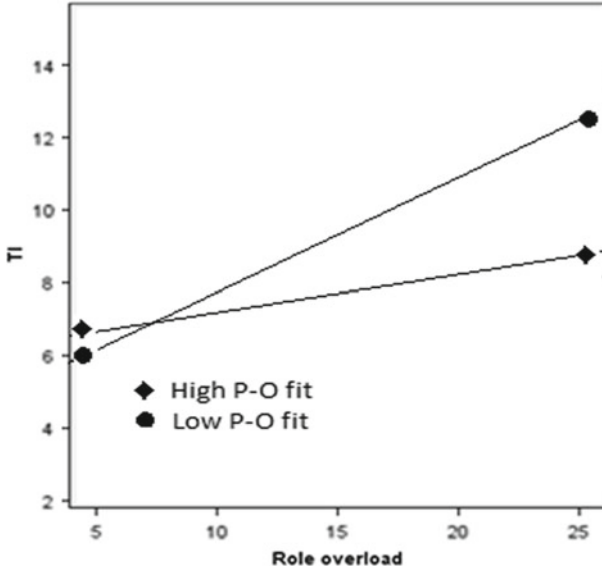
$\beta = .22, p < .01$ ). However, role conflict was not significantly related to any employee outcome.

### *Subjective Fit and Employee Outcomes*

The hierarchical multiple analyses were continued to assess the effect of P-O fit on job satisfaction (H2a), OCB (H2b) and turnover intentions (H2c). P-O fit was entered on Step 3 (see Table 17.2) after the control variables (Step 1) and work role stressors (Step 2). Entry of P-O fit on Step 3 accounted for the significant increment of explained variance in job satisfaction,  $R^2$  ch. = .08,  $F = 19.61, p < .01$  (supporting H2a); OCB,  $R^2$  ch. = .02,  $F = 8.78, p < .05$  (supporting H2b) and turnover intentions,  $R^2$  ch. = .05,  $F = 10.03, p < .01$  (supporting H2c). The analyses revealed that P-O fit was positively related to job satisfaction,  $\beta = .61, p < .01$  and OCB,  $\beta = .20, p < .05$  but negatively related to turnover intentions,  $\beta = -.33, p < .01$ . The hierarchical multi-level regressions are presented in Table 17.2.

### *Subjective Fit and Work Role Stressors-Employee Outcomes Relationship*

The hierarchical regression analyses were continued to investigate the impact of subjective fit on the work role stressors-employee outcomes relationship. As can be seen from Table 17.2, the work role stressors X P-O fit interaction was entered on step 4. Entry of three interactions as a set in each regression analysis did not significantly explain further variance on the dependent variables. However, only the interaction of Role Overload X P-O fit on turnover intentions was found to be significant,  $\beta = -.04, p < .001$ . In line with H3c, the positive relationship between role overload and turnover intentions was stronger for employees reporting low P-O fit ( $\beta = .299, t = 5.29, p < .001$ ) than for those reporting high P-O fit ( $\beta = .073, t = 1.33, ns$ ). As can be seen from Fig. 2, the positive effect of role overload on turnover intentions was reduced for the employees reporting high P-O fit. The graph of Two-way interaction of role overload and P-O fit on turnover intentions has been plotted in Fig. 17.2.



**Fig. 17.2** Two-way interaction of role overload and P-O fit on turnover intentions

## DISCUSSION

This study endeavors to contribute to the existing research literature by studying the moderating role of subjective fit perceptions in the relationship between work role stressors and employee outcomes, apart from studying its main effects. Based on the extensive review of literature, it was hypothesized that work role stressors would be negatively related to the employee outcomes of job satisfaction, OCB and would be positively related to turnover intentions. Additionally, the employees' perception of P-O fit were predicted to impact job satisfaction and OCB positively and turnover intentions negatively. Further, P-O fit was expected to act as a buffer and weaken the relationship between work role stressors and employee outcomes.

### *Work Role Stressors—Employee Outcomes*

In line with the previous research (e.g. Chang et al. 2009; Fisher and Gitelson 1983; Jackson and Schuler 1985; Jain and Cooper 2012; Mulki et al. 2008; Ortqvist and Wincent 2006) and supporting H1(a), H1(b) and H1(c), the results demonstrated that work role stressors, as a set, were significantly related to less favorable employee outcomes. Role ambiguity and role overload were significantly and negatively related to job satisfaction and OCB and positively related to turnover intentions. However, the results with respect to role conflict were not significant but nevertheless in the expected direction. These results are in line with the study by O'Driscoll and Beehr (1994) which showed the direct impact of role ambiguity on job satisfaction but no significant impact of role conflict was seen on job satisfaction.

### *Subjective P-O Fit*

In line with the existing literature (e.g. Kristof-Brown et al. 2005; Wang et al. 2011), the results revealed that P-O fit was significantly related to positive employee outcomes, hence supporting H2(a), H2(b), and H2(c). This shows that when employees perceive a similarity between their values and the values of the organization, they are expected to be more satisfied with their job and organization and tend to remain with the organization for a longer period. They are also more likely to indulge in extra role behaviors.

While further research is needed in different contexts and organizations, the results of the study provide support for the theory that a high fit with the organizational culture tends to ameliorate attitudes and behaviors associated with work role stressors. It is interesting to note here that while P-O fit is significantly related to all three employee outcomes studied

With respect to the moderating role of subjective fit in the relation between work role stressors and employee outcomes, several discussion points arise. In all, only one interaction between work role stressors and subjective fit was found to be significant in the prediction of employee outcomes. This interaction is in line with the stress buffering hypothesis so that the higher fit buffers the negative effect of stress on some aspects of employee outcomes. This interaction highlighted the role P-O fit plays in buffering the negative effects of role overload on turnover intentions

such that for the employees perceiving high P-O fit, the positive relationship between role overload and turnover intentions was weakened to the extent of becoming insignificant. In line with the previous research (Kahn and Byosiere 1992) and supporting H3(c), the results indicate that the employees perceiving high fit between their values and the values of the organization intend to stay with the organization even in the face of high role overload. These results provide some support for an organizational identification approach according to which strong identification with the organization can lead to reframing the stressors to the point that they can actually become a source of eustress (Branscombe et al. 1999).

It is worth noting here that though one interaction was found significant, there were many interactions which were not tested significant. The reasons for these non-significant results are unclear, but some explanations can be offered. Some stressors might be so debilitating that ensuring identification with the organization might not offer enough protection from their harmful and negative effects. Alternatively, there can be other factors, like certain personality attributes, which can have a stronger influence on this relationship between stressors and employee outcomes than the perception of fit. Further, these results may be specific to the sample used in this study. However, the importance of these results should not be understated.

## IMPLICATIONS

Previous findings on the relations between work role stressors, subjective fit, and employee outcomes have been established mainly among the employees from western cultures (e.g., United States, Europe); this study provides significant findings from Indian culture, which suggest universality of the impact of these variables on employee outcomes albeit with some nuances.

This study contributes to the organizational behavior literature by focusing on the fact that the negative effects of work role stressors on employee outcomes can be mitigated by identifying the variables which act as a buffer to weaken this effect. The results of the study highlight the importance of the concept of subjective fit for the managers and the employees to help them in coping up with the demands of the job. The finding that the high perception of fit with the organization can mitigate the negative effect of the work role stressors on employee outcomes has significant positive implications for the organizations and the managers.

Since it is not always possible to reduce stressors from the workplace, increasing the employees' perception of fit with the organizational values can lead to a less strained workforce relatively satisfied and willing to continue its membership with the organization. When the employees perceive a high fit between their values and organizational values, the work role stressors are experienced in a way, which is not so demanding and damaging for the employee and the organization. In some cases, these stressors may even become a source of eustress.

Practical implications of the study include the importance of fit concept for both the employees and organizations. For employees, P-O fit is crucial for improving job satisfaction, reducing work stress, and enhancing personal growth. For organizations, fit becomes essential for attracting and retaining talented workforce, utilizing their skills effectively, and in general leveraging human potential most critically. It will be useful for the organizations to develop fit scales and standards, which can then be used during the recruitment and selection to assess the fit of the candidates resulting in high P-O. The concept of fit can be further applied even after organizational entry, i.e., during training and socialization.

### LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

As the design of the present study was cross-sectional, causal conclusions concerning the impact of work role stressors and subjective fit perceptions on employee outcomes cannot be so easily drawn. For example, the present study suggested that work role stressors lead to negative job outcomes like poor job satisfaction. However, it can be possible that such dissatisfaction itself with the job might be leading employees to view their role as more conflicting or ambiguous. Similarly, alternate job opportunities might be the reason for high turnover intentions but the employee may rationalize it by perceiving a low subjective fit. With the cross-sectional design there is no way of teasing out the relative contribution of these effects. In short there is no clear causality like in most social science studies. At best we can claim a correspondence of the two phenomena. A longitudinal study where the work role stressors and subjective fit perceptions are related to employee outcomes at a later point in time would provide a more rigorous test of relationships. This study uses self-report measures to assess work role stressors, subjective fit perceptions and employee outcomes. Although the measures used were reliable, the very fact that the independent, dependent, and moderating



variables were assessed using self-report measures could lead to the problems of common method variance. Further, with self-report measures, social desirability biases become a cause of concern. Future studies can also employ qualitative techniques to identify emergent themes in this area.

Other organizational and dispositional factors (e.g. Personality) that were not included in the study may also play a significant part in how employees respond to any such study. Future research can focus on such variables to get more comprehensive explanation of the results. The sample of the study was only limited to the Indian employees from Delhi and NCR. There might be some culture specific aspects relating to the social and geographical area of the study. Future studies may benefit from an exploration of a wider range of employees at different organizational levels, cultures, and sectors.

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PART VI

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## Entrepreneurial Case Studies



## Entrepreneurial Journey of Bastav Das: A Case Study

*Devesh Baid*

Bastav Das is at NASSCOM incubation center, Bangalore, India. He is developing an online payment application using mobile technology. The entrepreneurial journey for him started five years back when he was in fourth year of engineering. He believed his earlier ideas were good, used technology to address needs of people/organization. But the ventures failed as it could not get adequate funding. Now this was his third venture and if same thing happened, he will have to give up his dreams of entrepreneurship and get back to job. He was really worried whether this time he will be able to grab attention of investors.

### CONTEXT AND BACKGROUND

The contemporary trend in the society in emerging markets is leaning toward self-employment driven by the startup initiatives. In view of the growing competition in the market place there has been

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an entrepreneurial up thrust toward innovation and technology to compete with the existing competitive dynamics. The startup enterprises thus are emerging as socio economic pillars which are supported by entrepreneurial zeal and the governmental policies. In this context a study of Bastav Das is presented here.

Bastav's childhood and schooling happened in Rourkela, Orissa, India where his father had his own business. His grandfather was a civil engineer and a government employee but father did not want to be in such a job. He wanted to do his own business. He discontinued his engineering studies from Regional Engineering College, Rourkela as he did not enjoy it and started a printing press in 1989 publishing books and novels. After completing his schooling in 2008 from Rourkela, Bastav got admission for Engineering in Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar.

### PARTICIPATING IN BUSINESS COMPETITIONS

Bastav was good at speaking and presentation skills. His friends suggested him to join the students' group working on new ideas and business plans to be presented at technology festivals (Tech Fest) of 2009 conducted by KIIT where several other engineering colleges were to participate. For him it was an opportunity to make some money if his team won. He only had Rs. 1800 which he got as pocket expenses from home while he needed more as had a girlfriend also so readily agreed to work with this team. This was Bastav's first experience to work on business plans. Team presented a business plan on aggregator model for farming. Although they did not win any competition that year, he enjoyed it and had good learning experience. He learnt about generating ideas, making b-plans, managing teams, and presenting b-plans. This year's failures had lessons, which he wanted to convert into recipe for future successes. Now he was ready to lead his own team next year, as he had understood the winning formula.

### IDEA GENERATION

In January 2010, Bastav prepared a new team of three people to participate in Tech Fests for the coming year. These fests are normally held during October to December each year. One could present the same idea at various Tech Fests. Bastav and his team started generating ideas. As

Bastav was majoring in civil engineering so idea generation was more focused on roads and buildings. Environmental awareness was increasing and any project, which talked of green venture, was sure to get more attention from the judges. Project also had to be commercially viable so that it could be a successful business plan. These facets of success he constantly kept in mind whenever they sat for idea generation.

Bastav observed that near his college there was a dedicated pathway for cycling which was underutilized. Hardly few people drove bicycle on it. As per Newton's law if you ride bicycle on a flat surface you have to apply more force and so it is tiresome and you cannot go long. Therefore, they started thinking about making bicycle riding a more pleasant experience, which could be fast and still consumed less force as compared to riding on a flat surface. Many ideas were generated and evaluated. One idea was of having an elevator, which would take the bicycle up, and then the person would drive down the slope but this was not practical and commercially viable. Another idea was to have gradients (bumps) on roads. This idea had come from NICCO Park, Bhubaneswar where there was a similar cycling track and people pedaled for fun on payment basis. Same technology is being used in roller coaster rides. Technology was well accepted. It was not costly. Bastav's team thought of applying it to their project of cycling track. Project was technically and financially viable. They had the right idea.

### WINNING STROKES

In third year Bastav's team presented this idea and business plan at various tech fests conducted in 2010–2011. They had taken two more members in their team. One was having a car and so helped them in moving to various colleges. Another one they added helped them develop a model of their bicycle path. They got first prize of Rs. 5000 at IIT Bhubaneswar and second prize of Rs. 1000 at NIT Rourkela. They were so excited by their success that on more than one occasion they thought of presenting their ideas to different colleges even during exams. In one such situation in order to overcome the tension of exams and get a moral boost before going to one such competition in exam season they took a few drinks. What happened was that their team member with car being a bit tipsy backed out so they decided to go by two scooters. While driving, his teammates on another scooter met with a small accident and so could not present their idea. This was their level of commitment and passion for

work. That year was full of lessons, applauses, awards, and recognition. They all were excited to start their own business. It was now summer vacation and after that, they would meet for the last year of engineering. It was now time for them to fix their business and entrepreneurial agenda.

### HELPING FATHER IN BUSINESS

During summer vacations, his father asked him to write something for school students. He used to publish books for school libraries. These were more of storybooks and not course books. Bastav wrote a book “India Coming Soon” that narrated stories of Arya Bhatta, Pre British era, and successful Indian businesspersons. With this, he tried to motivate students that even if they do not have resources but if they decide to do something on their own, they could very well accomplish. They should think differently and not be structured by routine studies and take up a nine to five job. Although the book never was published.

### START OF OWN VENTURE

After summer vacations, when he joined college back in fourth year, he had only one thing on his mind. He wanted to start his own venture. Idea of building cycling path based on their business plan was time and resource consuming. They had to deal with the impending gauntlet of the cumbersome and depressing government machinery. Most of his teammates were interested in taking a job so he thought of starting something, which required small investments and relatively faster returns. Again, he started searching for another new idea. Since he was frequently visiting restaurants with friends he thought of starting a website, which would give discount coupons redeemable, could when visiting restaurants. This was an “Aggregator Model” where he would provide coupons of several different restaurants. Numerous portals to promote their business including Snap Deal etc. used discount coupons those days. For this, he had to create a website and tie up with restaurants. When he tested this idea with restaurant in Bhubaneswar, around his college, they found his idea quite interesting. This way they could increase their business and he would get a fee for discount from customers. He also discussed the same with his roommate Shasikant Mittal and asked him to join. He readily agreed.

From July 2011, they started tying up with restaurants in Bhubaneswar and got coupons from them. They sold the coupons to students of various colleges. They distributed pamphlets and visiting cards outside various colleges with help of juniors. Placing ads was not possible as it was a costly affair. Now they had to get website ready and running as soon as possible. Since none of the two knew anything about website designing, they spoke to their juniors and asked them to create a portal. They readily agreed for a small sum of Rs. 500<sup>1</sup> and a party. Getting the done from professionals would have cost around Rs. 25000/-30000/-.

### STRUGGLE WITH OWN VENTURE

Their website makemyhangout.com was ready and functioning by November 2011. They started approaching more restaurants and reaching out to more people to in order to expand their business. Things however were moving slow. At this time, companies had started coming for campus placements. Faculties and friends advised them to at least sit for interview and postpone the decision of joining only after they are selected and the offer letter has been received. They suggested their business plan could be a backup plan for them. Therefore, they sat for the interview. Their experience of presenting business plans and working on business ideas worked to their advantage. Bastav got selected by Tata Consultancy Services (TCS), one of the largest IT firm in India and most sought after by students of their campus.

They still continued with their business plan and wanted to scale it up. In mean time their final exams got over. They both were from outside Bhubaneswar and after passing out had no place to live. They asked college authorities for permission to stay in hostel so that they could proceed with their business. It was a low cost set up for them but the college refused. They were so keen on doing their business that they sold all their books and other belongings and somehow arranged a decent dwelling place. They continued with their business. Business however was not making sufficient money. It was just not scaling up. It was now one year and despite their modest and tight budget expenses and meager subsistence existence, they were still not making enough money to make

<sup>1</sup>All financial figures hearater are presented in INR

ends meet. They had to join by September 2012 so with a very heavy heart, they closed the business and Bastav joined TCS.

## LIFE AT TCS

At TCS, he was into software testing. It was dull and monotonous, just sitting on a computer and pressing algorithms. Senior suggested him that if he worked hard he might get the opportunity to go abroad. He however did not apply for a passport. He was not enjoying his job. He wanted to create a unique product, develop something new, which would find solutions for the common people. This job profile was not about that.

In November 2013, just after three months of joining, he wanted to leave the job but other friends were not ready. Alone he knew he would not be able to manage. He needed a team. They suggested that perhaps they should take up their business plans as part time engagement along with their regular jobs. In addition, once they are able to make it paying they could put in their papers. Job would give them initial money, which will help them to meet their expenses and grow their business. It would surely be difficult to ask for further monetary assistance from parents and relatives. He realized father was already re-paying his education loan and asking more from him would not be correct. Printing business was not making good money. Therefore, he continued with the job but re-started the same venture of restaurant coupons by the name of De Wallet along with two other friends on part time basis.

Bastav was in Chennai while his friends were in TCS Gurgaon. This time they hired professional IT companies for website designing and paid from their salaries. Initially his in hand salary was mere Rs. 22000. He had taken a PG accommodation at Rs. 7500 per month on a sharing basis but later as he needed private space to work and a kitchen to cut on eating out he opted for a small kitchen separate unit at an additional cost of Rs. 5000 per month. He lived a modest life and saved as much money as possible to invest in business. He approached restaurants in Chennai for discount coupons. This continued for the entire 2013.

Being most depressed and under a heavy cloud in this period by October 2013 he started going to Art of Living center in Chennai. He had been associated with Art of Living since his childhood. They advised him to pursue MBA from Sri Sri University (SSU), Cuttack. He was confused and again in two minds. Business was not taking off, it required

more time. He again asked his friends to quit job and pay full attention to their start up. They were not ready. They did not want to leave their job and Bastav was sure none of his business ventures would take off while he was at his TCS job. He knew the business would not be fruitful if he was not totally entirely immersed in it.

Eventually he decided to talk to his father. His father advised him to go for higher education. His girlfriend's mother was not in favor of his resigning from TCS. She wanted him to continue with the job and go abroad. He wanted to do his own business. The situation was one of conflicting priorities and responsibilities. Decision-making was willy-nilly impossible. One thing however, he had decided was to quit from TCS. SSU, Cuttack was also offering MBA in entrepreneurship. He inquired about this MBA Program. He realized in SSU at least he would be among like-minded people, get more time to work on his business plans, hone up his knowledge about managing business, which to some extent he lacked today. After much ado and hard thinking Bastav finally he resigned from TCS in July 2014 and enrolled for MBA in Entrepreneurship at SSU. At back of his mind, he knew he had to build up his own business in two years' time.

## JOURNEY AT SSU

Soon after joining SSU, in the first month itself he went and met faculties of Entrepreneurship. His major concern was funds for his business. From past two ventures he had realized that it takes time to generate sufficient revenues and make profit. Money is required to sustain through this period. One faculty suggested that he should start as early as possible so that the business had sufficient revenues flowing before he left the campus. He had vague ideas like extending D Wallet concept but more than that he was looking for partners. He believed that one might have good ideas but there was always a greater need for a good team to implement the idea. It was not always enough to get work done through salaried employees. Combination of good ideas and committed individuals made the difference. He spoke to a few students about starting a venture but they wanted to start it next year after entrepreneurship courses had been taught. In his batch, there were IIT pass outs, who in some measure shared his experience. He understood that they needed to start early so that they had revenues flowing before they passed out of college otherwise they would face the same problem of meeting their

expenses. College for them was like an incubation center. They needed to incubate and accelerate their business in the two-year time in campus and then go out in the “real” world.

In three months’ of joining college, by September 2014, he identified Chandra Mauli and Nikita as like-minded people. For ideas about business, they held regular discussions in library, convocation hall, and other vacant places. They tried to look at problems around them and see if they could provide a solution for it. These meeting continued for long hours. They wanted to work on ideas, which were scalable. Finally, they decided to work on digital payments. Payments, goes without saying was something, which everyone did. Online payments was already happening. They decided to make payments happen through mobile app. These days everybody had a mobile. They struck upon this idea when they saw long queues at many big chains of retail stores/departmental stores, etc. This would be a new revolution.

Soon they realized that building digital payments needed big infrastructure, technical employees so they thought of building a business initially around payments. They decided to start with feedback system and gradually move on to payments. They again chose restaurants as Bastav had experience of dealing with restaurants. By November 2014, they had a business plan ready and they started looking for people who could develop mobile app for feedback at restaurants. He approached Naman who was working with him in TCS Chennai and now was with Accenture at Bangalore. He was good at app making and had been his partner in De Wallet project earlier. He showed interest in joining the project and they three formed a private limited company with equal shares with Naman investing the initial amount as app development. Nitika had dropped out of their team due to personal reasons. As Naman was in a full time job and they needed the app at the earliest he appointed a young person Anurag staying in Gwalior under his supervision on minor payment basis for coding. Since experienced people are good at advice, they still need young, energetic, and enthusiastic people for coding so the team agreed to Naman’s decision.

In January 2015, they also approached an IT company in Bhubaneswar for web portal. They quoted Rs. 55000 for the work. Luckily, Bastav had his provident fund money of Rs. 20000 from TCS, which he paid to IT Company as advance. By April 2015, the app was ready while they had some pending issues with IT Company related to web portal design. Their work was not up to their requirement so they discontinued with

the company. As first year was getting over and summer internship period was approaching, they decided to opt out of summer placements and go to Bangalore to work on their product and company. Naman was already there and Bangalore was a technology hub so it was their obvious choice.

### HIRING INTERNS FOR OUR OWN COMPANY

To speed up the work, they asked Anurag to join them in Bangalore and also took Jayesh, their classmate at SSU, as intern to work with them. They all four stayed in one room of 300 sq ft. which had 4 bunker beds. As Naman used to join them often, one of them had to sleep on floor. They were looking for more interns to fasten their product development but they were short of space. They started looking for a bigger space. In July 2015 they got a big office space with 2 to 3 computers for Rs. 20000 per month which they also used for living. It belonged to an ex BPO owner who had closed his business and agreed to give them this space against advance of Rs. 10000/-. Now they hired more engineering graduates as summer trainees for no compensation and in their team grew to nine people. This speeded up their work of product development.

### INITIAL FINANCING FOR THE PRODUCT DEVELOPMENT

By this time Bastav, Chandra, and Naman had invested substantial amounts in the business. Bastav had invested Rs. 58000 of his provident fund and taken another Rs. 100000 from his father and fiancée. Chandra has taken Rs. 80000 from his father and Rs.100000 from his uncle and Naman has invested around Rs. 125000 from his savings. In all around Rs. 500000 had been invested so far. They were incurring operating expenses of Rs. 80000 per month which included office rent, power (and inverter rent), food, and transportation expenses. Now they had a viable product, which they took to market.

### UNIQUE PRODUCT FEATURES AND REVENUE MODEL

Their app and website was ready and functioning by August 2015. Their product had some unique features.

- It was fastest feedback app as only three questions were compulsory and then respondent had option to exit.



- It also captured the location of the person and helped in cross selling by showing pictures of food items and asking them if they would like to have it.

They went to hotels and restaurants owners and showed their app. First sale happened in October 2015. They charged Rs. 40000 for one application for one year. They loaded app on tablet, which was separately purchased by owner for price ranging from Rs. 5000 to 7000. All data from app was sent to their webpage where they generated reports on periodic basis. Discounts were offered based on number of applications a hotel/restaurant purchased. They were going to each owner on their own and so it took time to generate sales.

They also wanted to scale up the product and include payments in their app. They did not want to label themselves as only a feedback Company. For this they needed more resources—more money, more people, and more machines. They started looking for investments. Although by this time their college had started, but they skipped the semester. They went in turns and came back. Somebody was always there to see the business. Summer interns had already left. With not many hands, working their sales has started flattening out. It became difficult to meet their expenses. Bastav invested his college fee also into business, which created problems at college. He was not allowed to attend classes. His father this time paid fee to college and advised him to complete the course. Chandra was having student associated debit card and whenever he withdrew money his father would give him a call and counsel him. With no investments coming, the team started coming apart. Naman withdrew from the project and went back to his full time job. By January 2016, he and Chandra also came back to college.

### NASCOM 10000 START UP IDEA COMPETITION

Their failure had not disappointed them. They knew they had an excellent idea. Digital payments using mobile phones would soon be a reality. Back then, only phone re-charges were being done digitally Bastav believed that very soon it would be used for all kind of payments. Nobody was using scan and pay, which they had thought of, and people had liked the idea. It would be a convenient mode of payment. They only wanted their idea to reach the right place. While they were in Bangalore, they came to know about NASSCOM 10000 Warehouse, Bangalore. They decided

to apply for it. They were required to send the idea only initially. They sent their idea of payment system using mobile phone. On February 28, they got mail from NASSCOM that their idea had been selected and they had to present their product on March 10, 2016. Out of 13000 entries, only 25 ideas had been selected and they were one of them. They knew they had made it. This platform would provide them with the required eco-system to develop the product and gather the finances. They had hit the right code.

Somehow, they got a prototype prepared for Rs. 15000/- with help of an IT professional. They did not have Android-based phones nor the money to buy it so they thought they would take a phone on rent in Bangalore. They reached Bangalore on the day of presentation. In the morning, they went to market to get a phone on rent but to their surprise, no available phone was supporting their app. They were getting late so rushing to the venue they began asking people there to lend their phone for the presentation. One kind woman helped them. They installed their app on her phone and it worked. As they were late, they got the last slot of 1.00 PM. They just had 5 minutes for the presentation and they had to convince the audience in those short five minutes. Bastav started by saying that he knew it was 1.00 pm and that all would be hungry and eager to take lunch. He said had an idea, which would make their lunch payments from their phones with the click of a button, for whatever menu they cared to take. With this, he presented the app and the payment system and everybody was happy. There were lots of applause' for them. They were hopeful that they would be selected.

They did not have return tickets for same day. Staying in hotel was costly in Bangalore so they decided to go to Tirupati (Holy temple of Hindus) which is 250 km from Bangalore. At Tirupati stay is free and food reasonable. They spent the night by sleeping on floor. A dog was sleeping beside Bastav and he was no dog lover. He felt very uncomfortable and could not sleep. That was just the nadir of his career. By next day train, they came back to Bhubaneswar and concentrated on their studies as exams were approaching.

### SUCCESS AT NASSCOM INCUBATION CENTER AND WAY AHEAD

In April 2016, they got invitation to join NASSCOM Incubation Center (NIC). Their idea had been selected. They completed their exams and joined NIC. They got a workstation at subsidized rate of Rs. 3500/-per

month. Tea and coffee was free. They stayed in a PG, which cost Rs. 5000 each per month. Their total expense was Rs. 10000 each. They worked on their product development. It was taking shape. On May 07, 2016, they registered a company by name of Autodidact Tech Solutions Pvt Ltd with registered office at Bangalore. On October 08, 2016 they filled application for trademark “Limitless Circle” through Chennai Intellectual Property office. Now his major concern was finance. His last two ventures failed due to lack of funding. He was wondering whether he would be able to attract investors this time.

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## Happy Laundry Services: What Next?

*Rajeev Verma and Pável Reyes-Mercado*

### INTRODUCTION

This case deals with the managerial dilemma of whether franchising a well performing family business will give you better results or leveraging on existing expansion potential is a good idea. The dilemma takes place in a context of almost unattended professional washing services, Happy Laundry Services Pvt. Ltd. and their unique value proposition of express delivery time and eco-friendly packaging, that appeals the mid segments in an emerging market such as India.

Happy Laundry Services Pvt. Ltd., is a company run by Mr. Ramadhar Singh aka., Happy Singh who is 2nd generation laundryman (*dhobbi* in Hindi) and 1st generation entrepreneur. Mr. Singh joined his family profession of cleaning and ironing clothes way back in 1986, time when the whole job used to be performed manually. There was no automation, no machines except a coal-based iron for ironing purposes. This type

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of business was operational from late 1970's until early 2000, wherein whole business was operated from *dhobi-ghat*. In total, they use to clean an average of 150 clothes/day.

With changing requirements, Mr. Singh initiated Happy Laundry Services Pvt. Ltd. in early 2000 with an initial investment of INR 2500. It was his first effort to introduce automation in the service process. To do so, he first rented a shop in a busy locality (keeping in mind the changing consumer base) and purchased machines for washing, drying, and ironing. He also registered his firm under the Startup Scheme of the State and successfully managed his organization for 18 years. It has already achieved breakeven on the total investments and currently earning an average profit of INR150000/month. Business is currently been served to around 200 regular (loyal) B2C customers. There are many more B2B customers seeks their services especially from hospitality and health industry. His current demand is high, but he could not cater them all. The results so far have showed a good performance in spite of some operational issues. His company has become a household name in the city with very high brand equity. Other competitors in the market include Urban Zila, Osho laundry, and Roxy charging premium pricing.

In terms of customer feedback, he was aware that there is lack of professionalism in this type of service provision. So, there came the idea that why not to start this type of business where they can meet unmet need with professionalism and complete reliability. Mr. Singh said "large section of this industry was of unorganized service providers, and there was no concept of customer satisfaction into it. It was a completely demand driven industry with huge supply constraints." While implementing the business idea, promoters found it challenging to handle this blooming growth, managing and controlling the resource flow. As there was no marketing platform and hence the awareness level in terms of service differentiation was very low among the end consumers. Although the services provided by the company were well accepted by the customers and they were quite satisfied, still there were some challenges that they had to face in the coming years.

To meet the unserved demand, Mr. Singh is having a plan to introduce completely automated German machines to his business along with a 100% on-demand service for smartphone mobiles, wherein he needs heavy investment for asset creation and facility establishment. He requires loan borrowings and proper project planning. At present, he is in dilemma whether to go ahead with his plan of organic expansion or open new

branches in other localities on franchise model. Having no proficiency in handling financials, other taxation requirements and unproven competency of handling large teams, he is unsure about which business path he should follow. As an owner, he is eager to take the business another step ahead: To franchise or not to franchise? Alternatively, to say, expand organically and inorganically is a big business dilemma.

## COMPANY BACKGROUND

Understanding the problem of unprofessionalism and non-reliability with the service provision of household laundry services, Mr. Singh found a gap in the market of unorganized laundry services and hence Happy Laundry was launched in the year 2000 with an objective of providing professional laundry services at lower cost. Happy Laundry Pvt. Ltd. is an extension of the same household business that Mr. Singh joined in the year 1986. He started this professionally managed business with an aim to provide convenient, reliable, committed, and affordable laundry services at customers' fingertips.

With the idea to fill-in, quality and reliability gap in the market to provide standardized services, Mr. Singh first introduced professional dryers and steam irons instead of coal-based conventional iron. Initial days were full of struggle, with lots of hard work with small jobs. Even employees were not ready to take up new automated machines. Operational cost shoot-up exponentially because of electricity consumption and poor man power planning. In initial days, customers were not ready to pay even small premium upon the regular service however, it was other way round in the B2B segment.

In around 6 months, they got their first major break from one of their old customers, Retd. Major R. Jha, who had been a regular customer since 1979. He referred Happy Laundry to one of his friends who owns a big hotel in Patna and looking for some reliable washing services. It was a major breakthrough in business in the year 2002 and with passing time more such offers started coming in. As the days passed on, awareness, reliability of the professional services increased and the company started getting stable.

## HOUSEHOLD LAUNDRY SERVICES: GLOBAL LANDSCAPE AND LOCAL COMPETITION

There was a changing trend in Indian consumers; with increased purchasing power due to market, liberalization and busy life schedule of urban people more and more consumers were looking for outsourced professional laundry services. In the year 2004, total number of professional laundries moved to nine from mere two in 2002. Seeing this, number of firms were trying to offer services for house hold laundry in the name of Express washing, Dry cleaning, or Steam washing. The trend of organizing this home-focused service sector was prompted by the anticipation of increasing disposable income of India's burgeoning middle class. The laundry market in India had experienced a surge that reached a total industry value of 2,20,000 crore INR<sup>1</sup> (López and López 2016). Most of the laundry business comprised micro and small business with fewer than 10 employees while the traditional dhobi industry represented about 97–98% represented the informal share of dhobis and other informal players (López and López 2016).

The Washio, an on-demand laundry that started operations in some cities of United States in 2013, inspired Happy Laundry's business model. The venture received \$16.8 USD million from angel capital and institutional investors (Crunchbase 2018). With the tap of a mobile app, Washio offered 1-hour pickup time and 24-hour turnaround time. Within 4 years, Washio had operations in seven-cities of United States. Washio's business model started as a platform business. On one side, those customers looking for a convenient service that accommodates into their busy business life would request washing services. On the other side, Washio would coordinate a network of established laundries willing to expand their operation—and promising profits. On 2016, Washio shut down operations arguably due to low-margins in the revenue stream as well as through competition from other platform business.

On the bright side of the landscape, Flycleaners a startup located in New York, raised \$2 USD million (Fast Company 2014) and offers a wide variety of services in very specific geographic areas (Manhattan and Brooklyn) which help the supply chain to become more efficient with the consequence of delivering in short times (Business Insider India 2014). Another example is cleanly, a similar venture that operates in four

<sup>1</sup>Approximately 32.84 billion USD at the Exchange rate 1USD = 67 INR.



cities in USA. The big picture of the laundry market in India seemed similar. Estimations say that the laundry market size in India is about Rs 2 lakh crore that is mainly attended by *dhobis* and domestic staff; well-established companies only attend about 3–4% of the market (Economic Times). Market size could reach \$76.5B USD by 2018. Excitement and funding had permeated the start-up ecosystem. Dhobilite is an on-demand laundry servicing areas in Delhi NCR and offers franchising options. Wassup is another laundry venture with operations in Chennai since 2011 and received Rs. 8 crore (about \$3.2 USD million) in 2017 (Economic Times) which made it one of the top seed funding companies in 2017 (Economic Times). UClean, which had scaled its presence to 15 cities with more than 50 franchises (Economic Times), which received Rs. 4 crore<sup>2</sup> from angel investors (Economic Times). The start-ups were heterogeneous in the services they offered and had different business models.

Above all, it was clear that many stakeholders exhibited interest in the growing on-demand laundries as a way to push forward the sharing economy. Investors were eager to invest money and see early profits. As some industries were more prone to be disrupted by the sharing economy, they were eager to see successful experiments in the household service ecosystem. Entrepreneurs were being funded and developing innovative business models, for example, those oriented toward market platforms. They relied in that customers would grow the customer base by attracting them with a novel value proposal at the time the supply side of the laundry services would absorb the existing demand. This posed the challenge of developing a strong network effect to quickly create value between the laundry service supply and the customers. The more traditional business developed under owner and franchise schemes still proved to be effective. Family businesses were willing to maintain ownerships of the washing equipment in view that they become part of the familiar assets. Franchise schemes were more risky since the business environment distrusted unknown partners and legal disputes took so long time to be solved.

<sup>2</sup>Approximately 0.6 million USD at the exchange rate 1USD = 67 INR.

## CURRENT CONSUMPTION

Most of Indian families accomplish their washing chores using the services of a dhobi—a social group in India whose traditional occupation is washing clothes (Economic Times 2017c). The dhobi usually goes to households, pick up the clothes, wash them, and brings them back. In general, householders develop long trusting relationships which prevent them from trying other types of services as the regular washing and ironing from small businesses. When washing needs are not based on a regular relationship, the service turns problematic. For example, residential students unwilling to do their own washing can hire a dhobi. However, as a PGDM student commented in an interview with the authors “When I started my 2-year program, I hired a dhobi that would go my Institute to pick up the clothing bag but he never delivered on time. Moreover, he lost one of my Levi’s jeans and refused to pay. I’d better started to visit a local laundry although it was time consuming but it was worth.” In all, the industry challenge was about a “task of category creation – changing a consumer behavior that hasn’t changed in decades.”

Another consumer segment referred to the double income families who were eager to purchase a washing machine in order to ease the pain of having their clothes washed. They usually replaced the services of a dhobi with the in-house maiden. Therefore, they avoided an extra cost. However, there are certain clothes that demand extra attention such as woolen clothing, delicate intimate wear, stained clothes, and high-end bridal dresses. Customers of on-demand had an average ticket between 200 and 4000 INR. The already existing on-demand laundries managed 90 orders per day (for example LaundryPrime) while the large suppliers could manage up to 600 orders per day (Doormit) (INC42 2016). Happy Laundry tries to fill in the gap where the prices need to be easy on pocket (less than half a dollar/cloth).

## HAPPY LAUNDRY BUSINESS MODEL

Happy Laundry has come up with an advanced web and app-based booking platforms. This Platform provides services to both B2B and B2C customers. B2B model constitutes services to hospitals, guesthouses, hostels, gyms, hotels and likewise. B2C model constituted services to individual households, which includes regular services like dry cleaning, stain removal, ironing, and steam wash and premium services such as intimate

wear, bridal apparel, and delicate washing. B2B model constituted 60% of total revenue and B2C model constituted 40% of total revenue.

### *Operating Model*

Happy Laundry since its inception was clear that they were going to leverage the IT capabilities and the reach of smartphone at its fullest. Hence, they focused entirely on developing an interface between the supply and demand of the services required. In the initial period only, the company launched their mobile app to reach at the fingertips of the end consumers. They also launched a website so that the customers can understand the company and fill-in their request for pickup and drop services. The website and the app recorded complete detail and queries of the customers, and later contacted by the team and the service provider.

Company tried to serve every customer within first 24 hours. They do have some special services such as Sixer (within 6 hours), Nine is fine (within 9 hours), cupid (personalized delicate apparel services), and eve (bridal laundry). With the presence of customized service packages, customers were able to avail professional and reliable services at earliest possible time without any problem. Happy Laundry had more than 30 trained and verified professional service providers on the partnership model and they had served more than 15000 customers.<sup>3</sup> They had so wide coverage of service providers (team members) that in case if any service provider was busy or unable to reach the customer location, the company could easily send someone else on the customer site. Company claimed that they have achieved more than 93% of delivery within 24 hours.

The value proposition included that the customer may schedule home pickup and delivery times, a speedy time of 12–24-hour turnaround times with continuous updates of the laundry order. The service targeted a segment of consumers, those who did not want to spend their time going and coming forth and back from the laundry spot and those who were not willing to wash their clothing, especially in a city in which heavy traffic jams occurred every day. Above all, the venture aimed at developing the convenience dimension of the service as a sustainable competitive advantage. One of the ways to engage customers in a profound way was to

<sup>3</sup>Company sources.

maintain a close communication with them. Happy Laundry invested in developing an Uber-like mobile application through which the consumer scheduled their pickup and delivery times. A telephone line and a webpage were available to handle customers' orders.

The core laundry process relied on professional washing, ironing, and dry press machines that could handle dozens of kilos of clothing. Happy Laundry was able to deliver three services: A basic service of wash & fold in which customers simply put their clothes in a bag, when the bag reached the facility, they were separated, washed, folded, and put again in a bag (ranging from 30 INR for women kurta or jeans to 300 INR for a blanket). A similar operation was conducted for ironing and dry-cleaning services (70INR for kurta and 80 INR for jeans). To convert one-time customers, Happy Laundry had included a number of packages that can be paid on a monthly basis. Under this scheme, customers receive fortnightly visits to pick up clothing bags.

### *Revenue Model of Happy Laundry*

1. For fixed charges services like washing, drying, steaming, and ironing fixed charges goes as per the rate chart.
2. Subscribed customers may go for per kg rates.
3. For customized services like cupid, eve etc., premium prices are charged as per rate chart and product delicacy. Complete anonymity is maintained for these services.
4. Surge charge of 20% for express services.
5. In B2B services it was completely based on tender bidding rates.

### *Service Booking*

For booking a service a customer had to go through the website or had to download the Happy Laundry app from Google play store, or they had to search through web search. Through the app, customers could select the kind of service that it required and could see the rate card of the different types of services. After booking on the app, customer's unique booking ID was generated. They could also go through the terms and conditions that the company had and give feedback about the services they had received. The app also gave the mode of payment to the customer. Pick and drop facility are also available with the company.

### *Service Delivery*

The administrative interfaces of the mobile app updated the booking information in the real time. Google maps and the GPS helped to reach the customer location and after understanding the need and requirement of the customer, an appropriate service provider was traced and asked to reach the customer location and provide the required services.

In fact in the words of Mr. Singh, *“I never want to put in my children into the same business of laundry until it became automated. Washerman in India is seen as unskilled jobber with no respect. Each cloth attaches a risk with it in terms of its price, in case of getting it lost or damaged. This unseen loses dent our business a lot. Apart from this, other risk comes as health hazard. You never know what type of disease or infection any cloth carries and my get transmitted. However, automation has helped us to make our services more professional and acceptable”*

### *Payment*

Many of the payments were done using the digital payment modes like e-wallet payment, Paytm, website, and through the app. The company maintained complete transparency with the customers and generate GST bills. Customers, who made booking through the app, made their payment as computed by the software and reflected on the app. Some of the payments were also taken as cash depending on the situations. Charges were also customized according to the customer profile and customers services provided.

### *Pricing*

As service providers of unorganized service did not have any standard pricing so they charged anything they wished. Happy Laundry had transparent pricing policy which was competitive in the market. Company did not charge premium prices even during festival periods. This was much less than what the other freelance service providers professionals charged.

## MARKETING STRATEGIES

### *Happy Laundry Logo and the Tagline*

The logo of Happy Laundry talks a lot about the business in which it works. In the logo a smiling face has been shown that symbolizes happy customers and the tag line, “clean – delivered” denotes hassle free cleaning process.

### *Digital Marketing*

Company was using Facebook, Google Search, and Instagram as major media platform to sell their agenda. They were also having their own websites and video on YouTube Channel and Instagram. Happy Laundry had also invested heavily in SEO marketing. Company’s Facebook page had more than 2000 followers and likes. Facebook and Instagram were helping the company to develop a connection with the customers, which lead them to search for the company. Company had a philosophy that the quality of service provided acts as the most successful medium of success, therefore, they tried to provide their best professionals in the segment.

### *Offline Marketing*

In Offline marketing tactics they had used Automobile advertisement and pamphlet distribution in the newspapers. They had also participated in Trade Fair, to increase their awareness among the prospective customers. It had resulted in strong awareness in the city. Company was having strong presence in the local newspaper. Happy Laundry was never active on television due to budgetary constraints but it was active on radio to create awareness among the local customers. Service providers were also given T-shirts with the company’s logo, to give unique professional look to the service providers of company and give them recognition in the market.

## KEY DIFFERENTIATOR

### *Customer Segments*

Based on the type of customers, Happy Laundry divided its customers into two segments. One individual consumer who used to book the

services for their own requirements like individual laundry, steam ironing, express washing, etc. Generally the individual consumer's queries used to come through the app or a website, whereas the big business customer's queries generally used to come through call, personal relation, word of mouth, and networking, so the approach to handle both the types of customers were different. The online system gave unique ID for the booking and it stored the complete details of the customer, which acted as the database for the future lead generation. In offline enquiries, team members maintained the details and requirements so that the service providers could be directly sent to the service location and serve the customer. Other segment is of B2B customers who seek institutional services and seek high negotiations for contract agreements.

## KEY CHALLENGES

### *Manpower Planning*

In the current business model, one of the most important challenge is about uneven demand in the market that peaks up in winters and dips down in off-season. This led to challenge in terms of manpower planning. Further, as the company was growing very fast, they continuously needed ever-expanding team of service providers (team members). The company is following penetration and expansion together. Hence, there is always a need for more professional service providers. There has already been a theft of bridal wear from the laundry and hence we do not want to take any chance, Mr. Happy Singh adds.

### *Awareness*

Awareness was very much required for ensuring that the customer would look for the service. Although the company had used some of the BTL promotions techniques to build the awareness level, but still the awareness level of the company and its services was very low in the city. Company had to work out some action plans so to increase their awareness level in the market. Promoters realize that there is a huge market for some specialized services such as delicate apparel wash, stain removal, and bridal wear washing, however only few know about it.

### *Other Challenges*

High-speed Internet availability and affordable and high-quality electric transmission is very important for running business of this nature and it was really low in Bihar. Apart from this, washing pattern and cloth usage behavior of customer also needed to be understood for better resource planning projections.

### BUSINESS DILEMMA

After successfully being in the business of washing clothes for more than 35 years, Ms. Singh was facing a business dilemma. Whether they should go with the original plan of expansion with more automated machines and grow with increasing B2B customers or go for franchising the whole business. They had already started getting and executing big B2B projects with lots of dedication and commitment. Although it requires high facility expansion and resources but having good projected returns. The other alternative that needed to be considered was that to go for making franchisee for their brand and let other do the business on their name. Will this dilute their brand? Will it reveal all the trade secret to all franchisee owners?

The laundry market was growing very fast in Indian context and it was estimated that the smart home solutions market was growing 30% year on year.<sup>4</sup> The company needed to take a strong decision at this point that, what should be their next course of action. The company founders were not able to take decision that what should be their stand for developing a business model which will be more sustainable and profitable in long run.

### APPENDIX

See Tables 19.1 and 19.2

<sup>4</sup>“Smart Home Market in India growing steadily”, <http://www.mobilityindia.com/smart-home-market-in-india-growing-steadily/>, 27 July 2017.



**Table 19.1** Financial performance of the company (2016–2019)

in INR			
<i>Particulars</i>	<i>2016–2017</i>	<i>2017–2018</i>	<i>2018–2019</i>
Revenue	12,00,000	23,00,000	44,00,000
Operating margin	30%	20%	35%
Capital employed	5,00,000	7,00,000	9,00,000
ROCE	69	74.6	96.2

(Source Company sources)

**Table 19.2** No. of queries generated at Happy Laundry per day

<i>Type of channel</i>	<i>Lead generation</i>
Internet	5
Website	37
Personal relations	0–1
Advertisement	2–3
Word of Mouth	1–2
Total	48

(Source Company sources)

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## Mapping Entrepreneurial Growth: A Case of BivinoS Restaurant in Australia

*Nidhi Gupta and Kapil Pandla*

### EARLY STORY

Mr. Rajeev Kumar was born in a small town of Punjab, a province in northern part of India and was brought up in a middle-class family. He was an average student throughout his academic career and was not having any professional qualification. He completed his Master's in History and soon started working in a telecom company as a Sales Executive to support his family. Although he was doing well in his job but never found job so encouraging to match his desires. He tried for many options to change his career, but nothing fructified. In his home state people aspire to go abroad to earn money, Rajeev also thought of acquiring an academic degree from abroad and parallelly earn money as well. While exploring he got an idea to apply for institutions of higher learning in Australia, which was considered much easier and less expensive option than going to Europe and America. In spite of not getting early success he

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didn't give up and continuously tried hard for it. Due to his perseverance, finally he got admission in 'Diploma in Management' in Australia.

He reached Sydney with a little money borrowed from his father which wasn't enough to survive for three months even. Therefore, he was left with no option but to work part time to sustain himself in the foreign land. He started searching for part time jobs and did whatever opportunity came to him to earn his bread. There were days when he ended up doing multiple jobs simultaneously.

### NEW BEGINNING

In the month of May 2001, Rajeev's friend who was working in a restaurant, requested him to work as a substitute for few days as he was traveling to India. Rajeev ascended to his request and started working at pizza section without any prior experience in the field. As an inquisitive learner with high dignity for work he quickly mastered the art of making pizzas and added new varieties of pizzas in the menu. Rajeev was very good in planning and optimizing the resources. Assessing his potential, the owner of the restaurant, Mr. Biviano offered him task of making rosters (majority of workforce was temporary, depending on the requirements daily roster was prepared) later on Mr. Biviano developed such a trust in Rajeev that he made Rajeev handle all the accounts of the restaurant as well.

### DEFINING MOMENT

There was a property dispute in owner's family (comprised of him, his wife and four children) which led to his distractions from work and he could hardly focus on the business. Rajeev was worried since he was managing accounts; he knew that the restaurant is going into losses, which was in tune of AUD 2000 per week. Rajeev knew that the restaurant would face the shutdown soon if urgent measures were not taken. In August 2005, Mr. Biviano finally decided to sell the restaurant and with this decision Rajeev was very much disturbed as he really worked hard to develop an emotional bond with the customers to strengthen the brand, he could not see restaurant failing.

Just for the fire in the belly, to do something of his own in life and grit to accept challenges, he discussed the matter with his wife, Mrs. Rajwant Kaur (fondly known as Raj) and decided to buy the restaurant and thought of continuing with the same brand name 'BivianoS.' It was

really a difficult decision to buy a business, which was already running in losses. Rajeev examined all the figures carefully to find out what were the strengths and weaknesses of the business. With no business background, no formal qualification in business, or running a business, he took the decision only with a conviction that hard work and sincerity would bring back the restaurant on the growth trajectory. This behavior coincided with Joseph Schumpeter's view of entrepreneur whom he termed as 'sociologically distinct individual.' Even after buying the business, he fought a long battle with the landlord for extension lease.

### BIVIANOS-THE RESTAURANT

Mr. Belmonte, resident of Sydney, Australia started the restaurant in the upscale location of the city, Dural in the year 1998 with a different brand name. The property was on lease. Later he sold the business to Mr. Silvio Biviano who renamed the restaurant and gave its current brand name BivianoS. Present owner Mr. Rajeev Kumar bought the business in 2005. Since beginning, BivianoS was known for serving authentic Italian food to its customers. (Annexure 1)

Time when Mr. Rajeev bought the business, the land of restaurant was on lease. When the lease period was on the verge of expiry, he thought of purchasing the property as well so that he could do the renovations as per his choice. The owner of the land quoted AUD 1.8 million as price of the property where as its actual worth was AUD 1.1 million that was the time when legal battle between landlord and Rajeev started for the renewal of lease, which lasted for nearly 5 years. Later, Mr. Rajeev dropped the idea of buying this property and went on for a search of another land. Soon he found a good 5 acres land nearby with a cafeteria, a nursery, a godown, and a house built on it. Although it was a risky decision because shifting to a new place could have hampered the business, but he listened to his sharp intuitive mind and went ahead with the decision to buy this new property for the restaurant. He bought the new property for AUD 2 million and another AUD 5 million was invested on the construction.

### CRUCIAL DECISIONS

After becoming the Owner of the Restaurant, Mr. Rajeev took some extra-ordinary decisions to turnaround the business, such as he stopped the vendor delivery for food and other stuff. He along with Raj started

getting up early in the morning for buying fresh vegetables at reasonable prices. This decision not only saved million Dollars, but taste and quality of the food also got improved. Another bold decision he took was to discontinue outsourcing the cleaning services and started cleaning the whole restaurant by themselves. They changed the old menu, which was static for a long period and appointed a new chef to bring change in the food taste.

There was no media promotion of the restaurant earlier; he started promoting the restaurant through all possible media. Enhanced PR activities by talking to customers, connected with schools, universities, gave donations to create awareness about restaurant. Gradually, because of his 360-degree effort restaurant started getting good footfall. He increased the size of workforce, created the ambience, which a customer looks for while visiting a restaurant and he also developed small botanical garden to provide a scenic view to the customer. His brother Sanjiv who was residing in India procured entire furniture, cutlery, etc., from India. There were primarily two main objectives to get the stuff from India first one was to create an artistic look which would give customer a new experience and second it saved him lot of money.

Great thing about Rajeev was his customer orientation, if he was around, he made sure that he met all the customers dining in the restaurant and see that they were treated well and got the worth they paid for. Urge for doing better and hunger for growth made him put humongous efforts in expanding the business. Along with restaurant, he got into two businesses one related and other very new business. He opened a banquet hall for arranging birthday parties, baby shower, engagement parties, and for other occasions. Rajeev also purchased a gas station, which was totally unrelated business.

## ROADBLOCKS

It is not the success from which you learn and grow but most of the times failures teach you, life-long lessons. It happened with Rajeev as well; the gas station, which he started after getting a commitment from a known person that he would manage the entire operations, offered him a bad experience. Rajeev invested the money, the other person was a working partner, and Raj used to visit the gas station to support the partner. After some time, partner informed Rajeev that the business was incurring losses, whereas, the truth, which unearthed later, was that he started minting

money for himself without disclosing it to anyone. Later Rajeev came to know from the trusted source that the partner purchased another gas station without informing him. Without dragging the issue further, he decided to sell off the gas station and since then he never entered into partnership.

Earlier also he faced a severe problem while building the restaurant. He hired a builder to construct the restaurant after demolishing the cafeteria. In mid-way builder informed that nearly double the money, which was estimated, would be required to finish the work. This was the critical time of his life because he had no money to invest further. This was most difficult phase of his life, Rajeev and Raj gave a thought in detail about the consequences and decided to change the builder mid-way. They sold off their house and all other properties belonged to them, sold off Raj's jewelry, borrowed money from friends and relatives to fund the remaining construction of restaurant. Finally, he could succeed again with his dedication, hard work, and uncanny knack of going with his gut feeling.

## PRESENT VIEW

BivianoS is the finest dining space for food especially Italian food. Apart from many accolades in the past, the restaurant got the prestigious *Brides Choice Award for Best Venue Restaurant and Australian Small Business Champion in 2019*. Rajeev has started a Function Centre for bigger events. Centre can host gathering of around 500 people at a time. His wife, Raj had already ventured into a new business of real estate, which is also doing well. She visits the restaurant at least once in a day and been rock solid behind Rajeev. Average footfall at the restaurant is around 4000 plus per month. The restaurant is now debt free. An independent agency estimated the worth of business including cost of the property around AUD 20 million.

Rajeev is as energized as decade ago putting his heart and soul in scaling the business and still not afraid of experimenting and taking calculated risk. Satisfied employees create satisfied customers. Sole business mantra at BivianoS, 'For creating better customer experience focus on employee experience.' 'Right staffing is important for any business to survive we are blessed to have committed employees and that is why journey so far has been very exciting and rewarding but still lot of work

to be done to make it the best restaurant not only in Sydney but in entire Australia' said Rajeev with glittering eyes.

## THE ROAD AHEAD

About plans, Rajeev told while relaxing on his chair, which he brought from India, 'I don't know I am in big dilemma, whether to keep a stand-alone Restaurant and expand this restaurant by adding other services or open another outlet in some other city? Sometimes, it also crosses my mind that should I open a restaurant with the same brand name at my motherland.' He further added 'I am still confused whether to own the future outlets or go with the franchisee model? However, one thing is sure I came to this country to work hard and grow not to relax and consolidate. Expansion plans are on cards, I would be finished if don't create something new every day.'

## APPENDIX

### *Milestones*

- 1998—Mr. Belmonte started the restaurant
- 1999—Mr. Rajeev Kumar landed in Australia
- 2001—Mr. Silvio Biviano purchased the restaurant
- 2001—Rajeev started working at BivianoS
- 2005—Rajeev purchased the business
- 2009—Legal battle over lease of property got over
- 2010—New property was purchased
- 2012—Construction on the new property completed
- 2013—Restaurant started on new property
- 2015—Raj started her own property dealing business
- 2018—Restaurant got the best Italian and Seafood restaurant award in Sydney
- 2019—Function Centre Started

### *Life Sketch of Mr. Rajeev Kumar*

He was a mediocre in studies but always dreamt to do something big in life. His father was a veterinarian posted in small town in northern part of India and was socially very active. Rajeev used to accompany his father

in club meetings where his father was an active member. Being eldest among the siblings he was aware of his responsibilities toward them. He knew he had to achieve something so that his younger brother and sisters should also follow the same footsteps. Initially Rajeev wanted to become a badminton player which is still his first love but later decided to go abroad and earn loads of money for his family. Rajeev discussed his plans to go abroad on student visa to learn first and then earn, with his father who was also been a rock-solid support to his kids. His father told him frankly I would certainly give you money to go abroad and money to sustain yourself for maximum 2–3 months but later you have to earn for your living. Rajeev readily accepted his father's words and decided to go to Australia with little money. He was so confident that he will do any job to sustain himself but will never come back empty handed to his motherland which he proved later.

It is a common saying that behind every successful man there is woman and Rajeev is no exception. He met Rajwant Kaur (Raj) during their student life and decided to marry her but not before establishing himself. They both went to Australia on student visa and also started working part time. Raj supported him in every decision and stood by him in turbulent times. In fact when they decided to buy Biviano she had to sell all her jewelry.

She said, 'I knew Rajeev from student days whatever task he took, he never left it unfinished.'

Rajeev is people's man, he told, 'You can't have satisfied customers if you don't have committed staff, I am blessed to have many.'

Even after riding on success, he is still grounded devote on an average 12–14 hours in the restaurant. Never hesitant to wash utensils or serve the customers.

When asked about so many awards the restaurant got, he replied, 'My biggest award is when my customers and employees say they are happy to be at BivianoS.'

Since beginning, Rajeev was unassumingly humble person always ready to help others. Anyone who came from India carrying his reference, he helped them finding job and shelter. Even his own residence at times looks like a motel where so many acquaintances were dwelling in.



PART VII

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## Epilogue



# Entrepreneurial Strategies, Managerial Implications, Prospects, and Dilemmas

*Rajagopal*

## INTRODUCTION

Entrepreneurship has become a learning ground for start-ups in emerging markets though experiential analysis and adapting the best practices. The state and social governance support consortium policy of the growing micro- and small enterprises in developing countries. Large companies are developing alliances with local enterprises at various destinations to get the products manufactured at low cost. The consortium business strategies are extended from manufacturing to marketing and services today. Consortium production strategies have become popular among multinational companies since 1990s in order to stay cost effective and to reduce the corporate liabilities in carrying business at overseas destinations. This strategy is similar to contract manufacturing but is implemented within an agglomeration of small and medium firms at the destination country or across the firms in the neighborhood. In the consortium production

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strategy, the parent company holds product designing, control of manufacturing process, quality control, marketing strategies, and customer relations management, while the associated firms in consortium are engaged only in production activities. The consortium firms receive required training, and transfer of technology and knowledge, and are connected through common information and communication networks. The multinational companies in India, South Korea, Thailand, and other Asian countries often appreciate such manufacturing process. The consortium production targeted to boost cooperation in the semiconductor industry through interactions between public and private companies has become increasingly international. The countries that form consortium based on economic factors may further lead to various business advantages through economic diplomacy.

## ENTREPRENEURIAL STRATEGIES

The socio-commercial scenarios are developing new entrepreneurship platforms to grow small enterprises independently in an open niche. Acquisition entrepreneurship is becoming a new society-led consortium form of integrated enterprise development concept. It is all about buying and running an existing operation that has radical, reverse, or frugal innovation, and potential of its commercialization. In this process, developing systems thinking between small and large enterprises to match managerial skills, confidence, persuasiveness, persistence, zeal for learning, and tolerance for stress are the important parameters to be evaluated. In addition, assessment of the transformational leadership that could change the work culture of small enterprises and develop potential of win-win situation is needed before planning to acquire the enterprises at local level (Ruback and Yudkoff 2016).

Strategic entrepreneurship has developed in the emerging markets with the advancement of technology and the support of public policies. The strategic thinking encourages entrepreneurs to simultaneously exploit their current competitive advantages and explore opportunities for expansion of business. The strategic entrepreneurship develops a balance between exploration of resources and exploitation of markets across geo-demographic segments. Strategic entrepreneurial approach sets balance between exploiting the factors of production at low cost and exploring new markets with economies of scale. In the strategic approach, exploitation and exploration are operationally-, structurally-,

and culturally distinct processes. Therefore, in the competitive environment, entrepreneurial firms increasingly look for agile strategies for their enterprises to get quickly adapted to the technology and change. Small and medium enterprises are capable of establishing a certain level of performance with the existing technologies. However, these firms face challenges in adapting to the speed of innovations and technologies (Ireland and Webb 2007).

In context of the conventional small enterprises, entrepreneurship is a process of slow business performance within a niche, which can be easily predicted. However, the changing technology and innovation demands strategic renewal of manufacturing, servitization, and marketing approach of these enterprises. Development of an existing business through the creation of new products, services, and activities; and building resistance to new competitive threats in the market call for strategic approaches to growth. The strategic approaches of small enterprises are implemented through systems thinking. The strategic enterprise process allows the enterprises to co-evolve with other enterprises, stakeholders, or entrepreneurial gatekeepers. Thus, small enterprises are investing on strategic business models through building managerial capabilities to unfold the latent entrepreneurial potential. Frugal innovation, co-evolution of reverse innovation business designs, development of participatory innovation models, and collective intelligence (crowd-sourcing) offer new insights to small enterprises and enable them to gain corporate entrepreneurship (Elia and Margherita 2018).

## MANAGERIAL IMPLICATIONS

A successful entrepreneurship ecosystem consists of social and economic elements around local conditions, stakeholders, manufacturing and marketing potential, cultural and ethnic attributes, and public policy. These elements are critical to entrepreneurship and can be integrating them into one holistic system (Isenberg 2010). Successful enterprises implement their business models and managerial policies by engaging employees and stakeholders rather than driving the implementation process through the top-down hierarchical administration, monitoring, and control. Small enterprises deliver shared business goals across employees and stakeholders unlike large companies. Employees and stakeholders get associated personally and emotionally with business goals and processes and invest in their work to maximize the collaborative

gains. Such collaborative efforts drive to translate the business model into operation under the collective strategic direction.

Social enterprises are promoted by the state and private organization, which build a culture of performance horizontally across the customers, stakeholders, and market players. This requires design-to-market and design-to-value business models, which are largely based on customer-centric performance, not on the typical top-down approach. Analysis of end-user feedback to improve business performance is carried out consistently through internal and external improvements within the enterprise. In addition, marginal calibrations in the operational approaches help in streamlining the business processes with customer requirements.

Success of small enterprises largely depends on consensual decision-making involving stakeholders and market players. However, the influence of power and politics in organizations slows down the bureaucratic decision-making, which is harmful to the performance of enterprises. Most small and medium enterprises that are acquired by or merged with large organizations, and co-evolve as business partners, are able to implement structural reforms in their organizations on decision-making processes by applying appropriate organizational designs and best practices. Entrepreneurial development is a planned process influencing changes in an organizational culture through behavioral science technology, research, and theory, which tends to improve the problem-solving capabilities and helps in managing changes in its external environment. It is a system-wide process of information management, diagnosis, action planning, process intervention, and evaluation aimed at enhancing the organizational structure, process, strategy, people, and culture. Co-creating entrepreneurial solutions and inculcating change proneness are greater responsibilities in the organizational development process (Burke 1982).

Diagnosis of the enterprise development process involves employee engagement and cultural perspectives. Group diagnostic models examine clarity of goal, task structure, performance norms, and team functioning as the key design components. As with any open-systems model, the alignment of these parts is the key to measure effectiveness. Employee engagement, organizational design, autonomy, and feedback systems help to deliver outputs of work with desired level of satisfaction and quality. Entrepreneurial firms employ different approaches to enforce quality in the organizational work culture as it contributes significantly in improving organizational performance. The quality of work culture

is crucial to ensure that the employees provide a better service to the stakeholders. The transactional leadership significantly influences toward quality of work culture (Ali et al. 2015). Organizational culture therefore, drives choices around individual behavior within organizations, whereas social values establish a link between organizational culture and strategic outcomes (Bachmann et al. 2016).

Developing an effective organizational culture requires an understanding of employee personality, social values, and diagnosis of individual vs group behavior in managing tasks. In order to achieve the best results, culture development requires leaders to align organization strategies and decision-making with cultural perspectives. Culture is easy to understand, feel, and express but hard to measure in an organization. The cultural fit in the process of organizational development and change is important, but the cognitive diversity integrates teams during ideation process. The best organizational cultures encourage diversity to drive innovation, which are anchored by shared core beliefs that help in delivering organizational development and change effectively (Corritore et al. 2019). Organizational culture is a powerful force that coordinates the work of employees as a system under close supervision. Culture also identifies distinctive competence of an organization to external constituencies and employ culture effectively as a leadership tool. Accordingly, firm's culture enables socialization and training of employees to share the firm's values, and rewarding employees to involve them in change management and organizational development (Chatman et al. 2003).

Most companies with rapid business growth model tend to invert the organizational pyramid for effective decision-making. This idea refers to the shape of a typical hierarchical organization in which each management layer gets larger and responsive, and more employees and stakeholders engage in production and marketing operations. This entrepreneurial model is called as Beehive Enterprise Model (BEM), which is central to the big emerging markets, typically China and India. Consequently, responsibilities shift from deciding, directing, thinking and making choices to doing, supporting, enabling and executing the directives of those at the bottom (Smet 2018).

## PROSPECTS AND CHALLENGES IN ENTREPRENEURSHIP

Micro-, small-, and medium enterprises need to be supported by the public policies to operate in niche, but tend to expand access to capital,

increase intellectual-property protections, learn modern entrepreneurship, and update on financial regulations. These initiatives drive intensive efforts by policy makers, business leaders, and entrepreneurs to augment the social and economic performance of small enterprises. Consequently, public policies and consortium production model of large companies put forward a new growth formula that complements the conventional enterprise model and builds a sustainable future. The boom of software enterprises has substantially exploited the growth of technology, and the start-up enterprises have taken the maximum share of this technological growth in emerging markets. Entrepreneurship in information technology-based enterprises has grown manifold and yet to reach far in the cyberspace.

The start-ups, and small- and medium sized technology- based enterprises have found high prospects in radio frequency identification (RFID), industrial sensors development, customer-centric technologies, and in manufacturing social innovative products. The stakeholders in technology-oriented enterprises have increased manifold and received the crowdfunding. The social and sustainability-led technology enterprises have also seen the 'sliver-line' funding from venture capitalists. The availability of private capital available has increased in the recent years in selected technology-based enterprises such as health care, education, sustainability, packaging, logistics and inventory management, and community development. Consequently, the prospects of capital investment in start-ups, and small-, and medium enterprises engaged in technology and sustainability-driven business has increased with an influx of acquisitions, mergers, and venture financing business models.

The industry dynamics today illustrates umbrella business opportunity by integrating small manufacturers across the region to employ cost-effective business model and stay competitive in the market. Such dynamics has several implications for investors and entrepreneurs. Prospective private valuations tend to advise acquisition or mergers of local enterprises, make new investments, and employ a profitable business model. Financial institutions in developing countries have developed low-interest financing schemes for technology-led micro-, small-, and medium enterprises as these enterprises have tactical, disruptive, and high-returns in short-term. These enterprises have shown a lifecycle trend of growing fast and dying slow in the business-to-business segment as compared to customer-centric markets (Erdogan et al. 2016). Large companies in the ancillary sector like packaging are focusing on innovation and transferring

the technology (ToT) to small- and medium enterprises by encouraging them to manufacture necessary packaging at low cost. Such ToT strategy combined with secure-supply business model is encouraging contract manufacturing firm in small- and medium industrial segment, which is also driving profitable growth and value creation in broader perspective. If some small and medium enterprises exhibit business potential by operating at lower capacities the desired, mergers and acquisition can occur to fill their gap and drive more growth. However, before a company undertakes any deals, it has to be financially sound and capable of creating value. All packaging companies need to get better on the digital-service side before they move to solutions. The digital enterprises at local destinations can operate as service providers on managing and sharing logistics information with customers and co-evolve block-chain technology for large companies.

Emerging companies at prosperous destinations explore opportunities to thrive in a competitive environment and face challenges with innovative business models. Trends such as the circular economy, fair trade, and the sharing economy are some of the many emerging entrepreneurial approaches that the small and medium enterprises aim to pick for a slow and steady start. Previous research studies and industry experiences on sustainable business models reveal that these emerging approaches are yet obscure and vague due to lack of long-term business continuum and profit guarantees. The fashion accessories businesses attract many start-up enterprises, which increases innovation opportunities, low cost business models, and low environmental impacts within the fashion industry. Consequently, innovative and sustainable business models in the fashion industry provide profitable opportunities to small enterprises (Todeschini et al. 2017).

Multinational companies have shown interest in the acquiring the local enterprises by committing resources to fugal and reverse innovation initiatives such as training to accelerate the growth of start-ups, which was supported by the Microsoft Corporation in India. In addition, large companies are engaged in eliminating the conventional systems by introducing gradual transformation. The conventional work process of small enterprises constrains the productivity, cost, time, and quality, and involves risks in working with large companies (Prashantham and Yip 2016).



Digital transformation strategies have become a major challenge for conventional small and medium enterprises as they differ in the motivation and target of transformation, leadership style, importance of skills like creativity and entrepreneurial spirit. These enterprises suffer from the fear of potential failure during the digital transformation process, In addition, employees are also intolerant to risks and challenges faced in the process, and possess lack of managerial tactics to gain quick stability in business. By providing heuristics and a systematic basis for comparison of different strategies, it is believed that the proposed framework will be useful to researchers and managers responsible for and interested in digital transformation.

### THE DILEMMA: DARWINIAN FITNESS

Digital marketing has opened massive opportunities to deliver new consumer experiences and strengthened the relationships with consumers across destinations in the global marketplace. Digital disruption has created new dimensions in consumer marketing to drive compulsive buying behavior through the benefits of large-scale promotions and convenience. Platform economy has shown a huge shift in creation of consumer value. The platform economy distinctly comprises a new set of business and economic relations that depend on the Internet, computation, and data (Rajagopal 2020). Consequently, the industrial revolution adapted to the technological progress and began to keep pace with the population. Such growth in the industrial products and services for consumption and business needs created new markets; and by the middle of the nineteenth century, the global transformation in product and financial markets were observed. The customer-centric marketing approaches gave an easy access to the multinational companies to develop latitudinal expansion of their business and penetrate the local markets. Accordingly, relationships with customers and global-local alliances have grown as critical success factors for multinational companies engaged in marketing. The increased interest in these concepts has triggered a paradigm shift from mass marketing toward relationship marketing. It has been observed by end of twentieth century and that only a relationship orientation secures firms' success (Hedaa and Titter 2005). The theories of social identity, persuasion and multiculturalism have motivated global-local moves among the multinational companies to do business in the local geo-demographic market segments. Ethnic marketing has

the potential to reach the diverse consumer segments across regions and generational cohorts. Ethnicity attributes in marketing have driven the local enterprises to develop tie-up alliances with multinational firms. Ethnic marketing approaches develop a strong socio-cultural sensitivity that bridges the global-local differences in geo-demographic expansion of companies (Harrison et al. 2017; Licsandru and Cu 2019; Rajagopal 2020).

Business expansion has observed a phenomenal change in the global marketplace over the years, which resulted into the economic dynamism in both developed and developing economies of the countries across the continents. Accordingly, many countries jumped into the market fray and started to produce a larger variety of products, making them more substitutable, raising the price elasticity of demand, and strengthening competition. Such market development had driven higher competition to modern growth and competitive firms aimed at larger territorial expansion at lower markups with prolonged break-even. As firms grow larger, they find it easier to cover the fixed cost on diffusion and adaptation of innovation and technology. As the size of the market is large with significant competitive driving force, the market innovation grows endogenously. This, in turn, pushes the market to grow exponentially, providing additional incentives to mount competition. The market economy thus moves in the global marketplace to the era of competition, which is consistent with the Darwinian theories of struggle for existence and survival of the fittest (Rajagopal 2020).

Darwinism refers to evolution of biological life, but it can be analogically fit to the growth of global-local business, as multinational companies are penetrating down to remote geo-demographic area while the local companies are recovering their strength to move out of niche and grow global. These bi-directional shifts symbolize the Darwinian principles of survival of the fittest (multinational companies exploring remote geo-demographic markets) and struggle for existence (local companies aiming to grow national, regional, and global). Therefore, Darwinism is becoming obvious in global markets and contemporary industrial revolution (Rajagopal 2012, 2020).

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