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Mr. Sanjay Deshpande

Research Centre
Karnatak Law Society's
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From the Editor's Desk.....

Dear Readers,

Greetings from the IMER family!

We are pleased to present the Fourteenth volume of "Tatva" to you. "Tatva" is a peer reviewed journal published annually by the Research Centre of the institute. "Tatva" is a platform for scholars, researchers and practitioners to share their knowledge and experience in the field of management. This issue contains scholarly research articles, case studies and book review and we are sure that it will be of great value to you.

The first research article is about Mumbai Dabbawalas. This paper explores the ways in which Mumbai Dabbawalas operations can act as a model example to incubate and accelerate social entrepreneurship in Bangalore. This research has developed propositions in support of the argument that the Mumbai Dabbawalas can be effective incubators for aspiring social entrepreneurs. This second article establishes the impact of digital marketing. The study also probes into the learning of impact of digital marketing on rural markets and rural employment. Through research and analysis, the paper emerges some points which can be used as a blue print criterion for grabbing rural market.

Libraries all around the globe have responded to diverse difficulties postured by preservation of digital information and have encountered the technical, organizational, resource and legal issues associated with it. The third article evaluates Internet use and library use among the students of Hubli city. India can attract much larger foreign investments than it has done in the past. The fourth article has focused on the trends of FDI Flow in India during 2000-01 to 2016-17. The study highlights country wise approvals of FDI inflows to India. The fifth article analyses the customer's perceived risk in using the internet banking and the role of e-banking attributes on attitude development of the customers. It also analyses the impact of customer's perceived risk on attitude development.

The Sixth article discusses the Blue Ocean Strategy, its significance and compares with Red Ocean Strategy and Porter's Five Forces Model. The seventh article titled "Post purchase Customer Satisfaction on the Different Car Batteries" measures the post purchase customer satisfaction on the different car batteries in Warangal. The eighth article empirically analyses the influence of energy commodity price risk on firm value of Indian power sector firms. No Indian will ever have to pay for voice calls again - a single statement that marked the beginning of a new era when Mukesh Dhirubhai Ambani announced the launch of a new telecom operator Reliance Jio Infocom Limited at the 2016 Reliance Annual General Meeting. The ninth article authored by our faculty and student throws light on Jio as a new entrant into the Indian telecom industry, strategically posing humungous challenges to its competitors and future plans of success. Advertising over the internet aims at delivering marketing messages to customers quickly, efficiently and economical. The tenth article written by the alumnus of the institute, who is a research scholar with his guide, examines, the involvement of the website visitors based on the bounce rate. The conclusion drawn from the study is that posting multiple information on a single web-page related to the product and providing hyperlinks to other pages will reduce the bounce rate. This issue carries a book review of "The Gen Z Effect: The Six Forces Shaping the Future of Business" written by Tom Kouropoulos and Dan Keldsen published by Biblimotion Inc, USA.

We are thankful to all the members of our editorial board, reviewers for all their constant support and guidance in our journey towards continuous improvement. We thank all the authors for contributing research articles, case studies and book reviews. We thank all the our readers for their patronage, encouragement and invaluable feedback, we take this opportunity to invite contributions from you and your colleagues through research articles, case studies and book reviews

We wish you and your family a very happy and prosperous New Year.

Dr. Poornima M. Charantimath

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Mumbai Dabbawalas as Incubators for Social Entrepreneurs

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Abstract

This paper explores the ways in which Mumbai Dabbawalas operations can act as a model example to incubate and accelerate social entrepreneurship in Bangalore. Their delivery model has sustained for more than 130 years and their delivery standards were found to be better than six sigma level of excellence. The food delivery men make only one error in 6 million transactions. They adopt green logistics measures to deliver what the customer wants and believe that service to customers is akin to serving God. They have a strong sense of community orientation and the simplicity of their operations has made them endure for so long. However, the sweeping changes in India post-globalization has somewhat dented the demand for their services. Growing urbanization, influence of Western culture, services led industrialization and high levels of disposable incomes have made people opt for a wider variety of food services available today. Despite the above setbacks and competition for the business, the Mumbai Dabbawalas stand apart and are known for their service delivery excellence and social entrepreneurship. The paper makes an attempt to utilize the rich repertoire of experiences of the Mumbai Dabbawalas which can be gainfully applied for mentoring the aspiring social entrepreneurs in the field. This research has developed propositions in support of the argument that the Mumbai Dabbawalas can be effective incubators for aspiring social entrepreneurs. The objective of the paper is to propose a conceptual model by which the Mumbai Dabbawalas can successfully incubate social enterprises.

Key words: Incubation, Mumbai Dabbawalas, Service Delivery Excellence, Social Entrepreneurship.

Introduction

The Mumbai dabbawalas are food delivery couriers known for their excellent service delivery model and has six sigma certified by Forbes magazine. The food delivery men of Mumbai popularly called as 'Mumbai Dabbawalas' have become globally renowned after an article on them was published in Harvard Business Review in 2012. Later on, the visits by Prince Charles and Richard Branson (of Virgin Atlantic Airways) to meet them has further enhanced their popularity. But the dabbawalas' operation has been successful only in the island city of Mumbai and elsewhere similar attempts have failed to take off. The reason is not far to seek. The Mumbai rail infrastructure is the backbone of the dabbawalas operations. That apart, the dabbawalas have a simple and flat organisation structure, clearly delegated lines of authority, excellent team work and a remarkable sense of resilience. They have managed to withstand the market pressures resulting due to structural changes in India's economy after globalization. Their community orientation has a crucial role to play in their sustainability. Their passion for delivering food to the customers, treating the service akin to service to God and their logistics agility are exemplary. Noteworthy is the contrarian fact that despite not having profit as the main goal of their operation, they have managed to sustain their operations for more than a century. This research attempts to explore ways in which the Mumbai dabbawalas can act as successful incubators for training start-ups.

After the formation of a stable government in India in 2014, there is an increased impetus by the Government on encouraging start-ups, digitization and promoting fresh investments in the manufacturing sector through the "Make in India" campaign. The Companies Act was amended in 2013 to make it compulsory for businesses to invest in corporate social responsibility efforts subject to certain conditions. Though the number of start-ups in India has swelled in the last few years, most of them are in the IT domain. The numbers of social enterprises that have been established in India are few

and far between. Social entrepreneurs have heterogeneous needs that change with time. They have to rely on external support to grow their ventures. There is a research gap in terms of the know-how required for incubating and sustaining social ventures (Vandor et al, 2015).

The Mumbai dabbawalas have played the role of social entrepreneurs with perfect lean and panache with utmost humility. Ironically, the dabbawalas' efforts came to the limelight only after the Western world recognized their efforts. Prince Charles and Richard Branson appreciated their service delivery excellence and this flashed the spotlight on the simple food delivery men of Mumbai who believe in living a simple & uncomplicated life bereft of avarice that is characteristic of the modern world. Their collective wisdom and enduring business model make them the ideal resource for incubating & training social entrepreneurship ventures.

Despite the use of sound business principles by social entrepreneurs, there is dearth of academic research in the area of strategies of successful entrepreneurs. Why are some social entrepreneurs more successful than others? (Smith, 2015). A glimpse into the operation of Mumbai dabbawalas can expose us to their success strategies from which other start-ups can learn from. It is unfortunate that most researchers have labelled the Mumbai Dabbawalas as illiterate. Though this may be technically correct, the lack of proficiency in the Queen's language need not be a setback for entrepreneurs who are smart, intelligent, hardworking, perseverant, and resilient, committed and display a remarkable sense of customer focus. The fact that a unique codification system has contributed to their logistics excellence is ample proof of their ingenuity though the dabbawalas may not have had a formal education. This research has developed a conceptual model and propositions in support of the argument that the Mumbai dabbawalas can be effective incubators for aspiring social entrepreneurs.

Entrepreneur and Social Entrepreneur

Entrepreneur is an agent of change, one who combines the concept of a product or service, or the use of available resources in an innovative way (Schumpeter, 1934). An entrepreneur is adept owner of a small business in a competitive environment who manages to create better management systems and who introduces new innovative products and processes (Gray, 2002). Entrepreneurs are individuals who operate an enterprise in the profit or non-profit sector and whose business behavior is characterized by innovation, growth, risk taking, reorganizing resources and creating work places. Entrepreneurship fills the gap between technological knowledge and innovations through creation of start-ups. (Nirali & Vijaylaxmi, 2014). An entrepreneur is someone who can create something that is truly exceptional. Strategy, the workability of the business idea, marketing & public relations, loyalty and expertise of employees, economic and political environment are the factors that contribute to the success of entrepreneurship (Csigas, 2015). In simple terms, an entrepreneur is a businessman who initially establishes his business venture with his own capital.

Essentially, the enduring quality of entrepreneurs is their ability to take risks. An entrepreneur must have the ability to deal with disequilibria. The behavior of human beings is governed in terms of the ability to manage constraints efficiently. Suppliers of labor services have allocative ability and efficiency – the ability to reallocate resources in response to changing economic conditions (Schultz, 1975). This is characteristic of the Mumbai dabbawalas when you consider their agility and flexibility in delivering the service. Internal strengths of an organization help them in dealing with the vagaries of the external environment (Manimala & Panicker, 2015).

Emerging economies are low income, rapid growth countries using economic liberalization as a means to achieve growth despite severe constraints. Due to problems like inadequate governance, poor infrastructure, difficulty in accessing funds and inconsistent policies of government, entrepreneurs have to face various challenges to set up and grow their ventures. The time and effort needed to deal with these constraints makes it rather difficult for entrepreneurs to deflect their focus on developing their innovative capabilities to market their products and services. This is the reason why incubation of aspiring entrepreneurs is crucial. Despite these challenges, emerging economies are more resilient than developed economies as is evidenced from economic recession in the past (Manimala & Wasdani, 2015).

Entrepreneurial leadership in India is a cumulative and social influence process which helps in the discovery, evaluation and exploitation of entrepreneurial opportunities. Successful entrepreneurs are enthused to achieve their goal buttressed by their commitment to the cause. They have good judgement and possess the ability to look at the wider

picture (Chopra & Sharma, 2012). Entrepreneurs decide to create a new venture based on their perceptions of the environment. So, policy makers have to factor this aspect. More favorable perceptions pertain to individual competencies, peer group support and the socio-cultural support (Manimala, et al, 2015). Incubational resources can only strengthen this perception.

Startups evolve through discrete stages of development. Each stage can be measured with specific milestones and thresholds. Learning is a fundamental unit of progress for start-ups. Leading indicators of a start-up's growth include customer development, product development, team, financials, business models and market. (Marmer et al, 2011). Startups therefore need incubation support in the initial stages.

There is a thin line between confidence and overconfidence among the entrepreneurs. Despite the high failure rate of many start-ups, new entrepreneurial ventures continue to abound and fail. As entrepreneurs develop confidence, they sometimes end up taking wrong decisions about resource allocation. They also take more risks. This increases the likelihood of failure of such entrepreneurial ventures (Hayward et al, 2006; Tang, Li & Liu, 2015). Entrepreneurs also end up setting highly ambitious and unrealistic goals which ends up in a sub-optimal performance for the organisation (Baron, Mueller & Wolfe, 2016; Hmieleski & Baron, 2009).

Social entrepreneurship is defined as a process of creating social value by combining resources in new ways (Mair & Marti, 2006; Mort et al, 2015). Social entrepreneurship is defined as the development of new social ventures with an organizational focus on both social impact and financial performance. The antecedent factors in an individual's decision to become a social entrepreneur are the need and the drive to achieve something and hence attraction for financial gains is secondary (Germak, 2015). What actually drives successful social entrepreneurship? A leadership style that has a long term vision, ability to innovate to translate the vision into reality and efficient management of resources defines and drives entrepreneurial success (Chopra & Sharma, 2012). Social innovation benefits from sharing knowledge. Success of an entrepreneur is determined by social capital which helps in knowledge management and in long term sustainability. Social capital has a profound influence on incubation, collaborative relationships and subsequent innovation. (Nicolopoulou et al, 2016).

Ordinary entrepreneurship aims to maximize owners' wealth through capital accumulation. Social entrepreneurs use the principles of entrepreneurship to create ventures that solve social problems and create social change (Kamath, Lee & Zhang, 2013). The four elements of social entrepreneurship have been identified as entrepreneurs, organizations, opportunities and ideas (Prayukvong & Hoopes, 2015). Social entrepreneurship adopts market mechanism to deliver social value through a proactive approach (Ishak, Omar & Moen, 2015; Mort et al, 2015). Social entrepreneurship refers to ventures that strive to create social value rather than profits. Social entrepreneurs initiate and lead change processes that veer towards growth (Swanson & Zhang, 2011). However, for social entrepreneurship to contribute to economic development and be sustainable, social ventures need to aim for profit too (Roy & Tripathi, 2015). Highly educated individuals are more attracted to social entrepreneurship. Higher education closes the gender gap for social entrepreneurship (Estrin et al, 2015). Students are passionate about making a positive difference to the lives of others and social entrepreneurship can prove to be the right platform for them. (Pirson, 2015).

Organisations that have a voluntary membership open to all, serve as examples of co-operative entrepreneurship. Community forms the base of activities. This can be classified under social entrepreneurship that serves the everyday and daily needs of ordinary people. As they have a social cause to address, the operations of such entrepreneurs are restricted to their locality and hence scalability of the business model is limited. Governance is achieved by instilling ethics, values and principles in employees and by holding employees accountable at all times (Patel & Vedula, 2006; Chopra & Sharma, 2012). As they have to reach more people with scarce resources, scalability of business model of social entrepreneurship needs an innovative approach (Bornstein, 2007). Social entrepreneurs are needed for addressing the development needs of the poor (Raman & Vijayalakshmi, 2015). Social entrepreneurship involves activities to enhance social wealth by creating new ventures or managing existing organisations in an innovative manner. (Zahra et al, 2009). Innovative solutions are needed to tackle social problems. (Swanson & Zhang, 2011). Social entrepreneurship combined with organizational capabilities leads to success of innovative efforts and sustained competitive advantage. Pro activeness and risk management are other dimensions of the business model (Mort et al.,

2015). Community action and social entrepreneurship can bring about social transformation. Emerging alternative options can complement each other (Daskalaki et al., 2015).

Dual identity social entrepreneurship (DISE) entails the creation of ventures wherein the founders attempt to create a strategic balance between social and economic value of the enterprise. Developing a financially viable business model is crucial for sustainability of social entrepreneurship (Busenitz et al., 2015; Abhi et al., 2015). The SLEN (sustainable local enterprise networks) approach developed by Wheeler focuses on development of self-reliant and sustainable enterprises at the bottom of the pyramid. These enterprises can function on their own without support from MNCs or domestic firms. Self organizing networks of local enterprises, nonprofit organizations and local community involvement contribute to the success of poverty alleviation programs and business development efforts at the bottom of the pyramid (Kamath et al., 2013).

Social entrepreneurship is positively related to networking capability. Social interaction ties represent the structural dimension of social capital. Social interactions are the channels for information and resource flows. It is due to social interactions that innovators can go across formal lines and levels in the organization to find what they need. Social capital of an entrepreneur relies on shared vision which represents the collective goals and aspirations of the members of an organization. Shared vision increases the entrepreneur's capability of networking (Mort et al., 2015). A shared sense of social value resulting from networks between humans and institutions also increases the possibility of success in scaling up the operations (Hausmann, 2015). Social workers practice social innovation, social intrapreneurship and social entrepreneurship. As nature of clients' problems keep changing, social workers have to act like change agents (Nandan and Bent-Goodley, 2015). Co-operative entrepreneurship has a social orientation and a community feeling which acts as the real driving force (Chopra and Sharma, 2012). The dabbawalas' model can be cited as an example of co-operative entrepreneurship.

Thus, there are subtle differences between an entrepreneur and a social entrepreneur. Both of them need incubation support and network benefits while the later being most important. For social networks to be strengthened, an entrepreneurs need to develop social capital and a shared sense of social vision. This can open up the channels of communication between institutional frameworks and aspiring social enterprises leading to a sustainable social enterprise.

A Brief History of Mumbai Dabbawala Operations

The operations commenced in 1890 by a group of people from the similar ethnic background in Pune and it was characterized by cohesive community bonds. Comparisons can be made to a modern guild where work and social identity; devotion and economic gain; and mutual aid and shared goals are indistinguishable from one another (Roncaglia, 2013). As per the historical evidence of the organization, the practice of delivering the tiffin boxes started from Havji Bacche, a young man from Pune who entered Mumbai in the late 1880s. A Parsi banker employed Bacche to visit his home in Grant Road, Mumbai, collect the tiffin and deliver it to his office in Ballard Pier. It was during 1890s when the events took place when the British were colonizing India. Parsee women had begun cooking food in their homes and were making money/business out of it. But these women found commuting to be a hindrance to their cooking business. During those times, there was also no dearth of unskilled workers and often many were found at cross roads, sitting there with their topis or hats on without any work. Hence, one day it was a coincident that one of the women asked one such laborers to deliver food and he willingly agreed. He started carrying 20-25 tiffins from Girgaon to VT station (Roncaglia, 2013). Bacche was impressed by this trend and decided to recruit his fellow villagers for the delivery service in pursuit of creating an organized working group.

Organisational Structure of Mumbai Dabbawalas

Mumbai Dabbawalas is a flat organisation with three hierarchies of authority and a decentralized structure. There are 5000 workers and 800 mukadams. Executive committee is involved in conflict resolution; setting the agenda and administering the welfare activities. They have a corporate code of conduct. Their rules include that no customer should go without food. The time table of the railway system and the common delivery deadline for the tiffins coincides and creates a natural clock speed into the delivery operations. Their meticulous timing and coordinated team-work contribute to their success. Teams share a common agenda with each other (Balakrishnan and Teo, 2008).

Efficient inner organization, trust, loyalty, common ownership and equitable share of wages have played a crucial role in the success of the Mumbai dabbawala operation (Csigas, 2015). The hierarchical levels within the organization include dabbawalas, mukadams, directors, treasurer, secretary and President. The second line of operations is coordinated by over 800 mukadams who supervise the tiffin route as far as the final delivery. The mukadam participates in the recruitment of new dabbawalas assessing their suitability by considering both their reputation and shared origins with other members of the organisation. Forming a culturally homogeneous group allows members to identify with a shared religious and historical tradition. Each area of Mumbai served by the dabbawalas has a director. The areas are defined in relation to a railway station. The directors are in contact with one another and ensure that there are no problems in distribution. They don't have an office, but work on trains, station platforms, dabba handover areas etc (Roncaglia, 2013).

Spiritual values are combined with business values. The Varkari samparadaya (of which the dabbawalas are ardent followers) way is to live, earn and work correctly. These delivery men resolutely believe in eschewing illegal means to earn money. The dabbawalas enjoy their work, share a unique sense of bonding with their fellow workers and treat their work as worship. They are able to communicate in their own language essential to address their business needs. Despite the hard labour, there are lower levels of stress (Menon et al., 2012; Krishnan, 2014). They are less ambitious and live by simple rules characterized by lack of avarice. The dabbawalas have also been involved in constructing dharamshalas (or free transit accommodation services) at places like Alandi and Bhimashankar. This can be considered as effort by the Mumbai Dabbawalas in fulfilling their obligations towards social responsibility (Roncaglia, 2013).

The three less successful strategic orientations for business organisations are Self-centered trap; Customer compelled trap and Skepticism trap. When a firm takes its place in the market for granted, it leads to a self centered trap resulting out of complacency. Customer compelled trap is not unusual. For example IBM wanted to satisfy large and medium sized customers in the early 1990s resulting in an incoherent offering. This can be called as a customer compelled trap. Likewise market research can often be misleading and this leads to a skepticism trap (Day, 1999). However, the dabbawalas through their ingenuity, managed to steer clear of these traps. Besides they have also overcome co-ordination and delivery hurdles that emerge with changing times. The team members have slack capacity. Substitutability among the members in a team is easy. Flexible manpower deployment at the destination ensures operational accuracy. More than one team operating in an originating train station ensures internal competition and operational efficiency (Ravichandran, 2005).

Service Delivery Model

Supply chain is an integrative process used to create and sustain competitive advantage based on the delivery to customers of basic and unexpected services (Bates & Slack, 1998). Proper matching of supply with demand coupled with a reliable logistics system has been the hallmark of Mumbai dabbawalas (Baindur and Macario, 2013). Similarly, jugaad innovation is a type of innovation that helps in dealing with economic and resource constraints in an efficient manner. The delivery model of Mumbai dabbawalas is furnished in Figure 1, which exemplifies a classic example of Jugaad which is a low cost service innovation model (Nirali and Vijaylaxmi, 2014; Roncaglia, 2013).

Redefining the logistics process for optimizing the links between different actors and improving efficiency through better co-ordination has resulted in improved customer service. In 1998, the American magazine Forbes conducted a study of the dabbawalas service and awarded the organisation a six sigma with a 99.9999% accuracy rate (Roncaglia, 2013). Less than 6 errors are reported in 13 million transactions (Ravichandran, 2005). Their core competency is on-time, cost effective and reliable delivery services (Balakrishnan and Teo, 2008; Patel and Vedula, 2006; Csigas, 2015). The consistency of the delivery process has made it enduring for so long (Bondre, 2013). The planning, implementation and monitoring of delivery operations is done in an impeccable manner (Roncaglia, 2013). Adding to the above advantages, studies reveal that delivery of home-cooked food strengthens the nutritional ties between family and work. No external catering service can ever hope to match that level of quality as home-made food has that ingredient called love (Chakraborty and Hargude, 2015).

Hub and Spoke Model

Hub and Spoke model is used for distribution operations of the food delivery service. The logistics network is a combination of milkman route, hub to hub transfer and hub to spoke distribution. The operations employ a judicious mix of

transportation economics. At the collection point, it is a milk man route structure. This, supported by a hub-hub transfer to handle large volumes, reduces operational cost. At the destination it is hub-to-spoke to ensure response time and handle volume flexibility. The rail infrastructure ensures flexibility and lower cost of operation (Patel and Vedula, 2006). There is perfect symmetry in the reverse logistics operation (Ravichandran, 2005; Balakrishnan and Teo, 2008).

Time is essence and delays are not just possible. On an average, each dabbawala is responsible for collecting 30-35 dabbas, the number depending on personal ability to memorise customer addresses and the physical strength for carrying the tiffin baskets. Dabbas have to be loaded quickly in the 30 seconds the train stops on the platform. If the trip is very long and includes a line change, the dabbawalas in charge of the final delivery takes their own dabbas to a collection and sorting point. There are several strategic nodes near railway stations that serve as main centres for final sorting. Mukadam supervises the efficient coordination of the delivery. (Roncaglia, 2013)

The third stage is the final delivery from the strategic collection point – the cooked lunch is taken to the place of work of the “receiver-customer” at about 12.30 pm. The tension gradually eases and the dabbawalas can rest, eat their lunch and also prepare to make the journey back following a circular route that begins and ends in the same way every day of the week except Sunday (Roncaglia, 2013). To save time, the delivery of the lunch boxes is consolidated at the floor level at the consumer location. The customers also participate in the last step of the lunch box delivery process and also in the initial step. Information on collection route is known to every other member in the team and so exigencies if any are well-managed (Ravichandran, 2005).

The dabbawala operational performance measures are real time, transactions based. Every transaction is monitored in terms of its collection, transportation and delivery. Periodic revenue collection and volume-based employee productivity ensure a model that is self-corrective (Ravichandran, 2005). Flexibility is the hall mark of the operations.

The dabbawalas' elegant logistics system involves 25 km of public transport and 10 km of foot work involving multiple transfer points. The dabbawalas use the rail network very effectively by employing simple, straight rules mostly north-south and limit sorting to a few central points. This is the key to the dabbawalas' efficiency and success (Patel and Vedula, 2006; Chopra and Sharma, 2012). The dabbawala services can also be cited as an example of green logistics services (Bondre, 2013) (Roncaglia, 2013) that demonstrate a high level of technical efficiency (Chopra and Sharma, 2012).

Unique Coding System

Though the dabba may change hands as many as six times, it is this coding system that is easily deciphered by the illiterate dabbawalas that makes the system flawless and ensures seamless movement of dabbas (Balakrishnan and Teo, 2008). The system limits the routing and sorting to a few central points. A simple colour code determines not only packet routing but packet prioritizing as lunch boxes travel from train to bicycle and from bicycle to foot. The process gets united at the delivery end though it may appear bit competitive at the customer's end (Chopra and Sharma, 2012).

Entrepreneurial Abilities of Mumbai Dabbawalas

Each dabbawala considers himself a shareholder and entrepreneur. From a social standpoint, the system enhances work place conditions by providing a good place for employee development through mentorship and trust (Patel and Vedula, 2006).

A sustainable enterprise is one which is aligned and co exists with society, environment and financial opportunities available in the market-place through the model/systems of strategy, leadership, innovation and technology (Patel and Vedula, 2006). Use of a modified network framework combined with the entrepreneurial spirit of Mumbai dabbawalas has led to sustainability of the dabbawalas operations (Kamath, Lee and Zhang, 2013).

Systems theory calls for an integrated approach to technological innovations. It refers to a system as a whole that can't be taken apart without loss of its essential characteristics and hence must be studied as a whole (Ackoff, 1972). Without the coding system, the delivery risks increase and aggravate. In the absence of a flexible operational model the dabbawalas system would have been relegated to the pages of history. The dabbawalas operations also signify innovative entrepreneurship (Kulkarni, 2015). This innovation has spanned the entire value chain of Mumbai dabbawala operations.

The Mumbai dabbawala business model which is given in Figure 2, is an epitome of simplicity, efficiency and dedication. The dabbawalas have a mission to serve the society driven by their entrepreneurial instincts and this is what acts as drivers of their performance (Chopra and Sharma, 2012). These entrepreneurs have unintentionally internalized features of efficient supply chain management (Roncaglia, 2013).

The focus has to be on the actors who co-create services with local communities to deliver strategic value who are in the bottom of the pyramid environment (Ben & Reynoso, 2015). Haji Bacche who conceptualized the dabba delivery model executed it serendipitously.

However the success of the Mumbai Dabbawalas has not spread to other cities. One of the reasons for the failure of other cities to replicate the model is the absence of several structural elements which is characteristic of Mumbai city missing in other Indian urban contexts. They include extensive transportation network, a large working class using the mass transportation and cultural unity of the dabbawalas (Roncaglia, 2013). This makes it difficult to imitate the service in other cities in the similar form and strategy.

Incubators

There are different categories of incubators related to technology commercialization, economic development and entrepreneurship. Incubators can have different priorities. The first priority is how they can train start-ups in becoming models of self-sustainable business development. The second priority involves ensuring collaboration between industry and academia to support business investment and growth. The other priorities like employment generation and creation of a congenial environment for the growth and development of the start-up are equally important and relevant (Al-Mubarak et al, 2015). A business incubator accelerates the growth and success of start-ups by providing resources, physical space, coaching, and access to capital and connection to networks. Incubators help start-ups assess and evaluate risks in the initial stages of developing the business. Start-ups can face challenges such as inability to recruit skilled staff, absence of strategic management, lack of processes and inadequate funding.

Incubators facilitate exchange of ideas and technologies between entrepreneurs. A study published by the German Society for International Co-operation states that the incubator market in India is still in a nascent stage. There are very few social enterprise incubators and ecosystem of Mumbai Dabbawalas is equipped to mentor the aspiring social entrepreneurs. The dabbawala system works on the four pillars namely organization, management, process and culture. Their unique coding system and its simplicity has led to its enduring existence. ^[2] Their strategic orientation as incubators is essential and could be useful for the budding social entrepreneurs in the similar or related filed.

Research Methodology and Questions

This is a conceptual review paper based on a comprehensive literature review of the Mumbai dabbawalas operations and the need of social enterprises. The paper builds on theoretical framework and presents propositions. The objective of the paper is to propose a conceptual model by which the Mumbai Dabbawalas can successfully incubate social enterprises (supported by evidences from literature). Some of the research questions the paper intends to explore include. What aspects of Mumbai dabbawalas operation endear them to act as incubators of social enterprises? How can the service delivery model of Mumbai dabbawalas can be gainfully employed in other types of social enterprises? Can the Mumbai dabbawalas provide value added services as an incubator to aspiring social entrepreneurs? How can incubation be a possible strategy for replicating the dabbawalas' success in Bangalore? How can incubation of a social enterprise contribute to its sustainability? How can networks aid the success and sustainability of business enterprises? Although not all the above questions have been addressed completely, there are two specific areas where the Mumbai dabbawalas can act as incubators which have been highlighted.

Theoretical Framework

Network theory

Organizational theory focuses on individual organizations instead of actions. This lacuna is addressed by social network analysis. Firms interact with each other as their boards are involved with one another. As organizations interact,

networks develop. Social network analysis helps in understanding the interactions organizations have and how the relationship develops over a period of time and proves to be beneficial to other organizations in the network (Salancik & Burt, 1995).

Structuration Theory

Social life is not determined merely by social forces. Social structure results from acts of individuals. But this structure – be it traditions, institutions, moral codes, established ways of doing things etc can be changed if people start ignoring them or replacing them (Giddens, 1984). Social entrepreneurs need to develop networks to grow business and sustain the operations. Following the incubation, social enterprises need accelerators to grow the business in a measured way and they can also enhance the social networks. This can be a strategic move as knowledge gets transferred and relationships are nurtured. Taking a cue from structuration theory, one can claim social entrepreneurs act as actors. Through their actions to comply with business ethics, moral code of conduct and better governance, they lay the foundation of an enduring social enterprise that can be resilient to cyclical depressions/ recessions in the economic landscape.

Propositions

The logistics system of Mumbai dabbawalas has been difficult to replicate. Proper matching of supply and demand is one crucial aspect of the Mumbai dabbawala system. The dabbawalas have developed a logistics system that is reliable and affordable (Baindur & Macario, 2013). The Mumbai suburban rail infrastructure, the unique coding system of the Mumbai dabbawalas, the flexibility of the operations, the environmental friendly and the cost effective delivery model etc are the crucial aspects that can act as treasure troves of information for training new social entrepreneurs. It is a delivery that is accurate to the point of having achieved the six sigma certification and hence serves as a unique model for the rest of the world. The dabbawalas are integral part of the Mumbai culture and have established a bond with the people and society. Community feeling within an organization represents a sense of belonging to and caring for something outside the boundaries of the work place. Based on this, we can arrive at the first proposition:

Proposition 1: A supporting infrastructure, unmatched service delivery excellence, community orientation, environment friendly operations, matching of supply & demand and operational flexibility are critical aspects of the dabbawalas operation that qualify them to be incubators for social enterprises.

5000 dabbawalas make about 4 lakh transactions per day for a cost of \$4 per month per dabba. Certainty and predictability of the operation and simplicity of the design has contributed to the sustainability of the operation. The service delivery model of the dabbawalas is characterized by error free delivery, a unique coding system and transactions that are repetitive. This makes it easy for the team members to cognitively absorb the process (Patel & Vedula, 2006). Those enterprises intent on delivering social value can benefit from a simple design, predictability of the operations and a delivery process that can be easily assimilated by the team.

Proposition 2: The delivery execution model of Mumbai dabbawalas can be emulated by social enterprises where the operations are predictable, operational design is simple and a delivery process can be easily absorbed by the team members.

Business incubation can increase the likelihood that new ventures will survive the early stages of development. Incubator is an entrepreneurial firm that manages the innovation process within emerging organizations helping the latter to acquire resources. (Hackett & Dilts, 2004).As incubators, the Mumbai dabbawalas can provide support to social entrepreneurs in terms of dealing with vulnerabilities in the initial stage. If we trace back their error-free delivery mechanism, it is clear that there is clear accountability and delegation of authority in the Mumbai dabbawalas authority.

As the dabbawalas belong to the same community and share the same language, work ethic, values and religious beliefs, there is greater bonhomie and trust among the dabbawalas leading to very few interpersonal skirmishes. It is clear that the food delivery men do not want to dilute their core competence. ^[2] Strength of the relationship between different actors involved contributes to the success of the service delivery model (Windahl & Lakemond, 2006).

The dabbawalas have steadfastly adhered to their core competence (the service delivery^a excellence) and eschewed the temptation to start a catering service. Delivery is and has always been their forte. They are aware and been

receptive to the use of technology to improve their services. The innovations that they have implemented can add immense value to aspiring social entrepreneurs. Thus, transfer of tacit knowledge of Mumbai dabbawalas can benefit social entrepreneurs.

Proposition 3: The Mumbai dabbawalas can provide value added services to an aspiring social entrepreneur due to their innovative ability, error free delivery model and steadfast adherence to their core competence leading to effective transfer of knowledge.

It is not possible to replicate the success of Mumbai dabbawalas in other metros due to the lack of infrastructural support. Delivery of home cooked food establishes bonds between family and work. The success of the business model is based on the following factors: trust between the dabbawala and the customer; ability of the work group to deliver lunch on time; excellent reputation for reliability and punctuality; and finally on the organisation's ability to interact with the city's cultural fabric. It is important for entrepreneurs to recruit and select people who are like minded (Roncaglia, 2013). Besides the infrastructural support, there are other aspects of the Mumbai dabbawalas' operations system that serve as a perfect learning ground for aspiring social entrepreneurs.

Effective mentoring between the incubator and the start-up is the hallmark of a successful relationship between the two. Incubators can also act as mentors for which an appropriate climate has to be created. Effective mentoring relationship relies on aspects such as experience and empathy, intensity and interest, transparency and development of both individual and society. A structured thinking process is essential to encourage the engagement of contrarian views (Raman & Vijayalakshmi, 2015). With their experience in food delivery service spanning more than a century, and their logistics expertise that has been awarded with a six sigma certification, the authors argue that incubation can be a possible strategy for replicating the dabbawalas' success in Bangalore albeit with certain modifications.

Proposition 4: Incubation can be a possible strategy for replicating the dabbawalas' success in Bangalore.

Incubation helps a start-up in addressing the risks at an earlier stage and helps them to cope with vulnerability. Incubators can share knowledge, provide access to intellectual capital and financial capital and train startups in an innovative approach to deal with scarcity of resources. More importantly, the experience of incubators in strategic management can be invaluable to an aspiring social entrepreneur. This leads us to the next proposition.

Proposition 5: Incubation of a social enterprise leads to its sustainability.

Social innovation benefits from sharing knowledge. Success of an entrepreneur is determined by social capital which helps in knowledge management and in long term sustainability. Social capital has a profound influence on incubation, collaborative relationships and subsequent innovation (Nicolopoulou et al, 2016). Market-based organizations can create positive social change. (Stephan et al, 2015).

Networks with multiple stakeholders who share the social vision are equally important as effective resource deployment (Abhi, Venugopal and Shastri, 2015). Social entrepreneurship networks require an understanding of the interaction between social actions and institutional conditions that support social value creation. The collective impact of social entrepreneurship networks lead to sustainability. These networks co-evolve with the environment over time.

Collective efforts involve tensions that make entrepreneurs knowledgeable about novel network structures to achieve scale (Hausmann, 2015). Increased interactions due to social networks increase the chances of success, sustainability and scalability. Networks can also help social enterprises to maximize their impact (Kumar, 2010; Mair and Marti, 2006). Networks also help in collaborative information sharing (Goldstein, Hazy and Silberstang, 2010). Networks promote greater sharing of knowledge and best practices among the organisations. Enterprises learn from each other instead of reinventing the wheel. This leads to the conceptual model that argues that networks can aid the success and sustainability of social enterprises. This is given in Figure 3 and 4.

As social entrepreneurs themselves, the Mumbai dabbawalas are ideally suited to be incubators for aspiring social entrepreneurs.

Observations, Findings & Recommendations

Based on the literature review and from the propositions stated above, it can be stated that the Mumbai dabbawalas can act as incubators for aspiring social entrepreneurs. The dabbawalas may not be able to provide any sort

of financial support to new start-ups but they can play a crucial role in knowledge transfer in areas such as risk assessment and customer focus. They can act as a lead example for a service delivery model that benefits from organizational flexibility and known for community orientation. Generally it is opined that for social entrepreneurship model to sustain, a for-profit motive is essential. But the Mumbai dabbawalas have disproved the world by sustaining their operations which is driven by mere passion, customer focus and service delivery excellence for several decades. There are two areas of social entrepreneurship where Mumbai dabbawalas' experience namely innovative spirit and service expertise which can prove to be extremely beneficial in the incubation efforts.

Dabbawala service in Bangalore

There are ample differences between Mumbai and Bangalore also known as the Silicon Valley of India. Mumbai boasts of a well-connected suburban railway network while Bangalore has been struggling to create one largely due to lack of political will. The Metro rail network connects the city in parts and serves no major role in reducing transportation bottlenecks. Additionally majority of the population in Bangalore use their own vehicles to reach the work place and some also carry their home-made food to office. The new found prosperity of this city (once called as the pensioner's paradise) is ideal destination for a booming migrant population who work in software companies and business process outsourcing centers. This segment of the dynamic population has created a need for variety of food delivery services. The proliferation of darshinis, fast food junk joints and swanky restaurants in Bangalore are innumerable and large part of the migrant working population who constitute the software community have the ability to splurge money at these eating places. Besides, most companies in Bangalore also provide good quality food to employees through their in-house canteens. One cannot ignore the power of social media through where people can order any food of their choice instantly through an app. The above factors are likely to make the success of a food delivery operation similar to Mumbai dabbawalas a remote possibility. Critics argue that in such a scenario, it is impossible to replicate the Mumbai dabbawalas system in Bangalore. However, there is a hope that it might be a possibility as people are more health conscious in the recent times and well aware of the hygiene issues. Hence there is likelihood that people in Bangalore may embrace the Dabbawala system of food delivery to alter their lifestyle for better.

Bangalore being an IT hub, the job related stress is high. Bangalore is also labeled as the "diabetes" capital of India. Diabetes is a lifestyle disease that results from lack of physical exercise, obesity and consistent consumption of junk food. Consumption of food that is high in calories can exacerbate the health related complications like hypertension and diabetes. The problem of people not having access to healthy and hygienic food prepared at home can be addressed by implementing the Dabbawala system of delivery services in the city. Keeping this in mind, the proposed model looks at replicating the Mumbai Dabbawala service in Bangalore.

A dabbawala operation in Bangalore can work if the areas are demarcated constituency-wise and if the pickup and delivery points are at a reasonable distance and not too far away from each other. For instance, it is possible to carry home cooked food for short distances. For instance, areas like Domlur, Indira nagar, Jeevan Bhima Nagar, HAL, C V Raman Nagar can be serviced by a network of cycle bound dabbawalas preferably from the same community to foster greater team spirit and mutual cohesion in delivering the service immaculately. Those who live in these areas and work in these areas can benefit from having fresh home cooked food. The operation will be eco-friendly and multiple trips can be made on cycles. If this model is successful, it can be easily replicated in other pockets of Bangalore. The target groups need not be only office goers but also small traders, shop keepers, school children and school teachers.

How can the Mumbai dabbawalas help?

The Mumbai dabbawalas can train delivery agents of the startup in Bangalore for delivering food in local areas. The delivery system in Mumbai is a complex one with the involvement of multi modal transportation. The system is simpler in Bangalore with cycle as the main mode of travel. Consciousness about customer needs, delivering the right tiffin to the right place at the right time, incorporating operational flexibility, innovating a coding system are some of the areas where training and incubation can reap rich dividends.

Application of the model in Bangalore

In case of the Mumbai Dabbawala system, food delivery is done over long distances. In case of Bangalore this remains a challenge due to absence of a suburban railway network. Notwithstanding this, the fact remains that creation of

a food delivery system in Bangalore that is similar to the one operated by Mumbai Dabbawalas is not completely impossible. The delivery model will need slight tweaking to adapt itself to the Bangalore eco-system and meets the needs of the different type of customers.

The problem the model proposes to solve

Even though it is a known fact that the Mumbai suburban rail network is the backbone of the Mumbai Dabbawala food delivery system, the author argues that a similar food delivery system can be established in Bangalore. In the absence of a suburban rail network in Bangalore, the food delivery system may need certain modifications.

1. Long distance food delivery is ruled out. Even though the connectivity of Metro rail network has recently been expanded, this is still not enough to cover the proposed food delivery system.
2. The Mumbai dabbawala delivery model can be revamped so that food delivery can be covered for short distances in Bangalore. This means that the model is not scalable but it can still be a reasonably modest attempt in ensuring that at least some sections of the population can enjoy the benefits of consuming home cooked food.

Whatever be the modifications in the model, it has to be clearly understood that affordability of delivery service and the emotional attachment to food cooked at home are two critical success factors that can ensure the success of the Bangalore Dabbawala food delivery system. The food prepared in one's home is cooked with love and affection taking proper care about hygiene and other aspects. So there is no comparison between food cooked outside and food cooked in one's home.

How can this initiative help in incubating business start-ups?

Food apps have mushroomed in Bangalore. However all these apps only provide delivery of food that is cooked in restaurants? There is a great opportunity for an entrepreneur to provide home cooked food through the Bangalore dabbawala system wherein users can register for the services through the app. Additionally, the entrepreneur can also venture into setting up an industrial canteen that provides food that is prepared by home makers who have the spare time at their disposal and who can contribute by preparing food in the industrial canteen and bring in the tastes of home-made food. This can be a good example of social entrepreneurship. The women who help in the cooking can be encouraged to become micro entrepreneurs and support their families. There may be a need for tight control over quality of the food produced. Affordability may not be an issue as people are willing to pay an appropriate price for a reasonably good service.

The above mentioned kind of food delivery start-up cannot be a success until the last mile delivery- needs are completely taken care of by the entrepreneur. This would need the assistance from Mumbai dabbawalas who can act as incubators and help the start-up in training the delivery staff. This start-up can provide two types of services in Bangalore – delivery of home cooked food to customers and delivery of food prepared in industrial canteens to customers. Food of reasonably good quality that is prepared under hygienic conditions and delivered on time has both demand and market in Bangalore city. The areas of training where the Mumbai dabbawalas can get involved are: training the new teams with delivery etiquette; facilitating community bonding between the workers; creating ethical code of conduct; practicing the philosophy of “no customer should go hungry”; guiding the new teams to that they developing virtues like patience and perseverance. The incubation process should imbibe a unique work culture which enables the new members to integrate their work successfully so that they will be able to treat the 'food delivery service to customers' as service rendered to God.

Selection of food delivery boys must be done carefully as these boys are responsible for last mile delivery. Trust, commitment and dedication should be the natural qualities of the new hire. It is important to exclude those individuals from the selection process who are qualified and are known to frequently switch jobs. The new recruits may constitute school drop-outs, migrants from nearby villages and less educated unemployed urbanites who are eager to do a job that will give them immense satisfaction. As the food delivery start-up in Bangalore gains momentum, the IT and other industries can be approached for sponsorship and financial assistance to support the venture. The cycles or related mode of transport needed for the service delivery by the Bangalore dabbawalas can be sponsored by the corporate companies.

Conclusion

Social entrepreneurship in India is still in its nascent stage. The reasons for the success of a particular entrepreneur may be ascribed to better strategic management. However this needs greater introspection to appreciate and understand the driving forces behind successful entrepreneurship efforts. Success of social enterprises may need more than a robust strategy. Incubation can play a crucial role in nurturing and developing social enterprises. The initial stages in the formation of a social enterprise are crucial as it is in these stages that the startup is exposed to a higher degree of vulnerability from external market and economic forces. Incubators for aspiring social entrepreneurs need to be firms who have experience in delivering social value on a sustainable basis. Incubators who have an enduring business model are ideally suited to train aspiring social entrepreneurs.

The Mumbai Dabbawala operation model defies all conventional logic and is therefore counter intuitive. These simple food delivery men have achieved so many feats without a basic formal education. They have been purely guided by their instincts and inherent skill and competency. Their service delivery excellence has put them in the global spotlight. Their delivery model boasts of operational flexibility. The delivery operation meets the exacting standards of Six Sigma. Community bonding and team cohesion result in very few interpersonal skirmishes among the dabbawalas. The Mumbai dabbawalas truly exemplify the saying – Work is Worship.

This paper has provided evidence from literature that the Mumbai Dabbawalas are ideally suited to act as incubators for food start-ups in Bangalore who aspire to replicate a similar model. The Dabbawalas can also train start-ups who wish to enter the waste management space in Bangalore using their service delivery model. Social incubation can aid the strategies for an aspiring social entrepreneur. Such incubation efforts need a mentoring relationship between the incubator and the social entrepreneur. The Dabbawalas can be great mentors considering the visibility that they have attained globally during the last few years due to their experience in food delivery handling and logistics expertise. They may not be able to provide financial capital but they can excel in transfer of knowledge. This is because they have developed the knack of converting a complex business operation into a simple one purely guided by the experience that they have gained over the years. Their ability to indulge in Jugaad innovation and their never-say-die spirit makes them strong contenders to act as incubators for aspiring social entrepreneurs.

References

1. Abhi, S. Venugopal, V. & Shastri, S (2015) "Social Entrepreneurship—Building Sustainability through Business Models and Measurement of Social Impact. In *Entrepreneurial Ecosystem*", (pp. 295-323) Springer India.
2. Ackoff, R. L. (1972). "A note on systems science", *Interfaces*, 2(4), 40-41.
3. Al-Mubarakí, H. M., Muhammad, A. H., & Busler, M. (2015), "Categories of incubator success: a case study of three New York incubator programmes", *World Journal of Science, Technology and Sustainable Development*, 12(1), 2-12.
4. Balakrishnan, N., & Teo, C. P. (2008), "Mumbai Tiffin (Dabba) Express in Supply Chain Analysis", (pp. 271-278). Springer US.
5. Baidur, D., & Macário, R. M. (2013), "Mumbai lunch box delivery system: A transferable benchmark in urban logistics?. *Research in transportation economics*", 38(1), 110-121.
6. Baron, R. A., Mueller, B. A., & Wolfe, M. T. (2016), "Self-efficacy and entrepreneurs' adoption of unattainable goals: The restraining effects of self-control", *Journal of Business Venturing*, 31(1), 55-71.
7. Bates, H., & Slack, N. (1998), "What happens when the supply chain manages you? A knowledge-based response", *European Journal of Purchasing & Supply Management*, 4(1), 63-72.
8. Ben Letaifa, S., & Reynoso, J. (2015), "Toward a service ecosystem perspective at the base of the pyramid", *Journal of Service Management*, 26(5), 684-705.
9. Bondre, S. (2013), "MUMBAI'S DABBAWALA: The Uncommon Story of the Common Man", Westland.

10. Bornstein, D. (2007), "How to change the world: Social entrepreneurs and the power of new ideas", Oxford University Press.
11. Busenitz, L. W., Sharfman, M. P., Townsend, D. M., & Harkins, J. A. (2015), "The Emergence of Dual-Identity Social Entrepreneurship: Its Boundaries and Limitations", *Journal of Social Entrepreneurship*, (ahead-of-print), 1-24.
12. Chakraborty, A., & Hargude, A. N. (Aug 2015), "Dabbawala: Introducing Technology to the Dabbawalas of Mumbai", In *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct* (pp. 660-667).ACM.
13. Chopra, R., & Sharma, H. (2012), "Corporate to Cooperative Entrepreneurial Leadership in Emerging Economy-Lessons from Indian Enterprises", *Journal of Organisation and Human Behaviour*, 1(4), 12.
14. Csigás, G. N. (2015), "Non-Conventional Organizations–The Messengers of the Future in the World of Organizations and Management", *Global Journal of Management and Business Research*, 15(3).
15. Daskalaki, M., Hjorth, D., & Mair, J. (2015), "Are entrepreneurship, communities, and social transformation related?" *Journal of Management Inquiry*, 1056492615579012.
16. Day, G. S. (1999), "Misconceptions about market orientation", *Journal of market-focused management*, 4(1), 5-16.
17. Estrin, S., Mickiewicz, T. M., & Stephan, U. (Jan 2015), "Human Capital, Social and Commercial Entrepreneurship: The Role of Gender and Institutions", In *Academy of Management Proceedings* (Vol. 2015, No. 1, p. 14493).Academy of Management.
18. Germak, A. J. (Jan 2015), "For Love or Money? Achievement Orientation, Non-Monetary Focus and the Nascent Social Entrepreneur", In *Society for Social Work and Research 19th Annual Conference: The Social and Behavioral Importance of Increased Longevity*. Sswr.
19. Giddens, A. (1984), "The constitution of society: Outline of the theory of structuration", University of California Press.
20. Gray, C. (2002), "Entrepreneurship, Resistance to Change and Growth in Small Firms", *Journal of Small Business and Enterprise Development*, 9(1), 61-72.
21. Goldstein, J., Hazy, J. K., & Silberstang, J. (2010), "A complexity science model of social innovation in social enterprise", *Journal of Social Entrepreneurship*, 1(1), 101-125.
22. Hackett, S. M., & Dilts, D. M. (2004), "A real options-driven theory of business incubation", *The Journal of Technology Transfer*, 29(1), 41-54.
23. Hausmann, R. C. (2015), "Organizing Ecosystems for Social Innovation: The Relationality of Contexts and Mechanisms in a Social Entrepreneurship Network "(Doctoral dissertation, The George Washington University).
24. Hayward, M. L., Shepherd, D. A., & Griffin, D. (2006),"A hubris theory of entrepreneurship", *Management Science*, 52(2), 160-172.
25. Hmieleski, K. M., & Baron, R. A. (2009), "Entrepreneurs' optimism and new venture performance: A social cognitive perspective", *Academy of management Journal*, 52(3), 473-488.
26. Ishak, S., Omar, A. R. C., & Moen, J. A. (2015), "World-view, locus of control and entrepreneurial orientation in social entrepreneurship endeavor", *Mediterranean Journal of Social Sciences*, 6(3 S1), 592.
27. Kamath, S. J., Lee, Y. J., & Zhang, X. T. (2013), "Social enterprise models: creating the fortune at the base of the pyramid", *International Journal of Social Entrepreneurship and Innovation*, 2(3), 269-292.
28. Krishnan, U. S. (2014), "A Cross Cultural Study of the Literacy Practices of the Dabbawalas", *Towards a New Understanding of Nonmainstream Literacy and its Impact on Successful Business Practices* (Doctoral dissertation, Kent State University).
29. Kulkarni, S. V. (2015), "Make in your respective Rural markets'-A suggested innovation for Emerging Markets", *IOSRD International Journal of Business*, 1(1), 14-16.

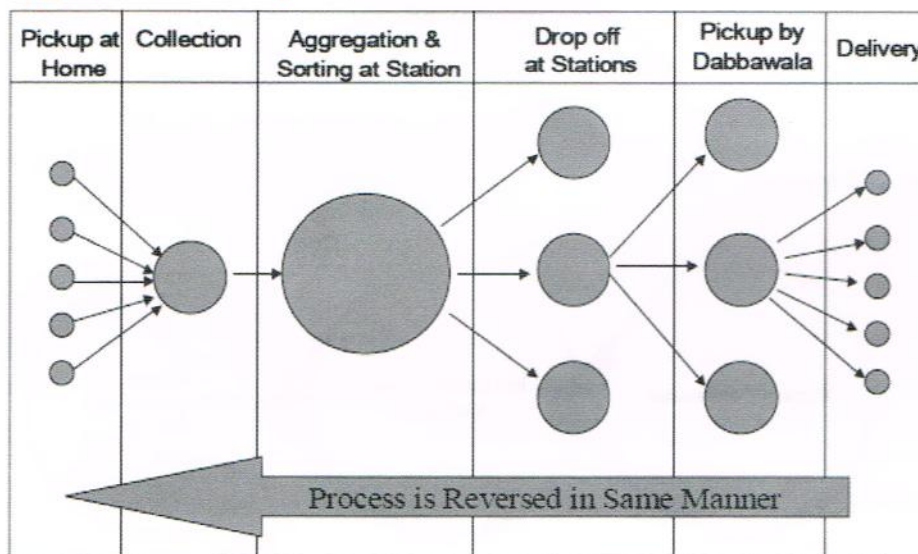
30. Kumar, R. (2010), "Social enterprise: It takes a network What Matters", McKinsey Digital Report.
31. Mair, J., & Marti, I. (2006), "Social entrepreneurship research: A source of explanation, prediction, and delight", *Journal of world business*, 41(1), 36-44.
32. Marmer, M., Herrmann, B. L., Dogrultan, E., Berman, R., Eesley, C., & Blank, S. (2011), "Startup Genome Report Extra: Premature Scaling", *Startup Genome*, 10.
33. Manimala, M. J., Thomas, P., & Thomas, P. K. (2015), "Perception of Entrepreneurial Ecosystem in India: Influence of Industrial Versus Personal Context of Entrepreneurs", In *Entrepreneurship in BRICS* (pp. 105-123). Springer International Publishing.
34. Manimala, M. J., & Wasdani, K. P. (2015), "Emerging Economies: Muddling Through to Development in Entrepreneurial Ecosystem", (pp. 3-53). Springer India.
35. Menon, S., & Raithatha, M. (2012), "Occupational Stress: An Analytical Study of Stress among Dabbawalas of Mumbai Tiffin Suppliers Association", *Prabhandan: Indian Journal of Management*, 5(1), 47-54.
36. Mort, G. S., Weerawardena, J., Sargeant, A., & Bennett, R. (2015), "Social Entrepreneurship and Value Creation in Not-For-Profit Organizations in Marketing in Transition: Scarcity, Globalism, & Sustainability", (pp. 372-376). Springer International Publishing.
37. Nandan, M., London, M., & Bent-Goodley, T. (2015), "Social Workers as Social Change Agents: Social Innovation, Social Intrapreneurship, and Social Entrepreneurship", *Human Service Organizations: Management, Leadership & Governance*, 39(1), 38-56.
38. Nicolopoulou, K., Karataş Özkan, M., Vas, C., & Nouman, M. (2016), "An incubation perspective on social innovation: the London Hub—a social incubator", *R&D Management*.
39. Nirali, P., & Vijaylaxmi, C. (2014), "Small Innovations: The Big Drivers of Indian Economic Development", *Advances in Management*, 7(1), 20.
40. Patel, N., & Vedula, N. (2006), "Dabbawalas of Mumbai", White Paper Kenan-Flagler Business School.
41. Pirson, M. (2015), "Why Study Social Entrepreneurship?" Available at SSRN 2558208.
42. Prayukvong, W., & Hoopes, J. (2015), "Chao Guo and Wolfgang Bielefeld: Social entrepreneurship: an evidence-based approach to creating social value", *International Entrepreneurship and Management Journal*, 1-3.
43. Raman, S. R., & Vijayalakshmi, C. (2015), "Mentoring social entrepreneurs in India: attributes and functions", *International Journal of Indian Culture and Business Management*, 11(2), 137-154.
44. Ravichandran, N. (2005), "World Class Logistics Operations: The Case of Bombay Dabbawalas", W.P. No. 2005-09-01
45. Roncaglia, S. (2013), "Feeding the City: Work and Food Culture of the Mumbai Dabbawalas", Open Book Publishers.
46. Roy, R., & Tripathi, V. (2015), "Social Entrepreneurship for Sustainable Economic Development: A Need to Increase Workforce Participation", *Global Journal of Enterprise Information System*, 7(2), 106-109.
47. Salancik, G. R., & Burt, R. S. (1995), "Wanted: A good network theory of organization", *Administrative Science Quarterly*, 40(2), 345-349. <http://doi.org/10.2307/2393642>
48. Salancik, G. R. (1995), "Wanted: A Good Network Theory of Organization [Review of Structural Holes: The Social Structure of Competition]", *Administrative Science Quarterly*, 40(2), 345-349. <http://doi.org/10.2307/2393642>
49. Schultz, T. W. (1975), "The value of the ability to deal with disequilibria", *Journal of economic literature*, 13(3), 827-846.
50. Schumpeter, J. A. (1934), "The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle", (Vol. 55), Transaction publishers.

51. Sharda, A., Patel, G., Jain, A., Kumar, A., & Gandhi, S. (2012), "A Framework for Imbibing Sustainability in Supply Chains: Learning's from Cases of India Inc. Pioneering Supply Chain Design: A Comprehensive Insight into Emerging Trends", *Technologies and Applications*, 10, 283.
52. Smith, B. (July 2015), "Social entrepreneurship deserves better research. *Entrepreneurship & Innovation Exchange*", Retrieved December 26, 2015, from <https://eiexchange.com/content/74-social-entrepreneurship-deserves-better-research>
53. Stephan, U., Patterson, M., & Kelly, C. M. (Jan 2015), "Organizations Driving Positive Social Change: A Review of Mechanisms and an Integrative Framework", In *Academy of Management Proceedings* (Vol. 2015, No. 1, p. 14391), Academy of Management.
54. Sunitha Panicker, Mathew J. Manimala, (2015) "Successful turnarounds: the role of appropriate entrepreneurial strategies", *Journal of Strategy and Management*, Vol. 8 Issue: 1, pp.21 - 40
55. Swanson, L. A., & Zhang, D. D. (2011), "Complexity theory and the social entrepreneurship zone", *Emergence: Complexity and Organization*, 13(3), 39.
56. Tang, Y., Li, J., & Liu, Y. (2015), "Does Founder CEO Status Affect Firm Risk Taking?" *Journal of Leadership & Organizational Studies*, 1548051815623736.
57. Vandor, P., Hansen, H., Millner, R., & Asyamova, A. (2015), "What Does it Take to Support a Change Maker?—The Effects of Organizational Maturity, Business Model and Mission Orientation on the Support Needs of Social Entrepreneurs", Working Paper.
58. Windahl, C., & Lakemond, N. (2006), "Developing integrated solutions: The importance of relationships within the network", *Industrial Marketing Management*, 35(7), 806-818.
59. Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009), "A typology of social entrepreneurs: Motives, search processes and ethical challenges", *Journal of business venturing*, 24(5), 519-532.

Internet References

1. http://articles.economicstimes.indiatimes.com/2014-08-22/news/53112455_1_mumbai-case-study-stefan-thomke
2. <http://social.yourstory.com/2013/09/social-business-incubators-helping-startups/>

Fig.1. The Delivery Model of Mumbai Dabbawalas



Source : Patel, N., & Vedula, N (2006)

Fig. 2: Unique Features of the Dabbawalas Business Model

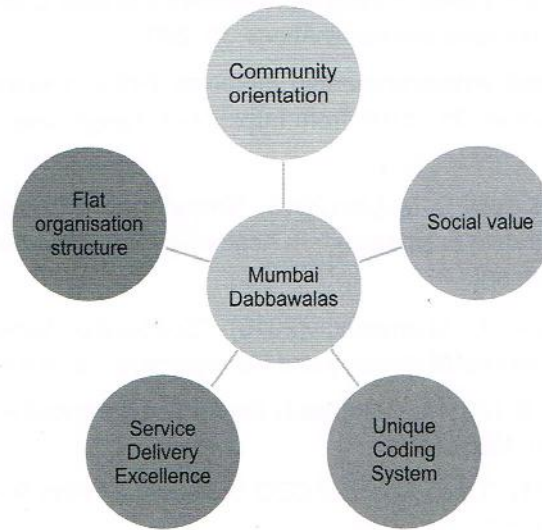


Figure 3: Factors Leading to Sustainability of Social Enterprise

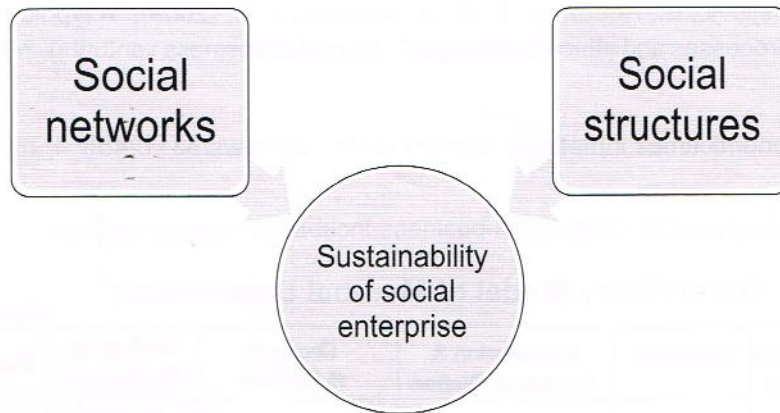
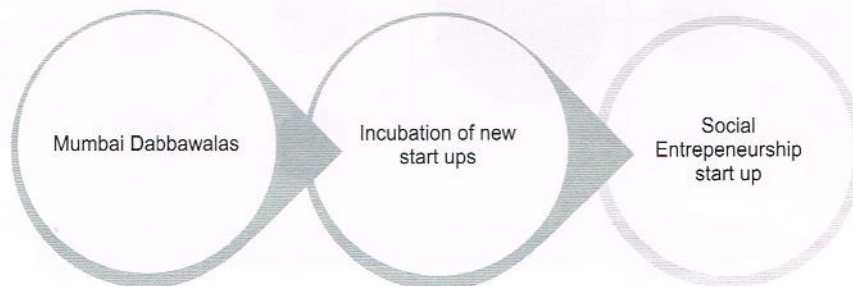


Figure 4: Conceptual Model



Challenges & Opportunities of Digital Marketing in Rural India

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Abstract

With the buzz in globalization, the world is witnessing a greater challenge in the diverse facets of business. One of the most important parameter of business growth being its stake holders are mainly attracted by the advertising strategies. Digital marketing on the other hand can be defined as an umbrella term for the marketing of products or services using digital technologies, mainly on the Internet, but also including mobile phones, display advertising, and any other digital medium. The concept of digital marketing has become a fashion in the companies to promote their products and services. While marketers with positive experiences would tend to believe that digital marketing works and some would disagree in rural India, but one would be sure that magnitude of its impact is increasing in rural market, when compared to urban and other markets.

This paper studies and establishes the impact of digital marketing. The study also probes into the learning of impact of digital marketing on rural markets and rural employment. Through research and analysis, the paper emerges some points which can be used as a blue print criterion for grabbing rural market. As the paper is the foundation brick of the impact of digital marketing on rural India, the paper also ends with few insights on impact of digital marketing to be considered for rural markets.

Key words: Digital marketing, Globalization, Technology, Customers & India.

Introduction

Digital marketing can be defined as an umbrella term for the marketing of products or services using digital technologies, mainly on the Internet, but also including mobile phones, display advertising, and any other digital medium. The concept of digital marketing has become a fashion in the companies to promote their products and services. Digital marketing is the promotion of products or brands via one or more forms of electronic media and differs from traditional marketing in that it involves the use of channels and methods that enable an organization to analyze marketing campaigns and understand what is working and what isn't – typically in real time. Digital marketers monitor things like what is being viewed, how often and for how long, sales conversions, what content works and doesn't work, etc. While the Internet is, perhaps, the channel most closely associated with digital marketing, others include wireless text messaging, mobile instant messaging, mobile apps, podcasts, electronic billboards, digital television and radio channels, etc.

Importance of Digital Marketing

Digital media is so pervasive that consumers have access to information any time and any place they want it. Gone are the days when the messages people got about your products or services came from you and consisted of only what you wanted them to know. Digital media is an ever-growing source of entertainment, news, shopping and social interaction, and consumers are now exposed not just to what your company says about your brand, but what the media, friends, relatives, peers, etc., are saying as well. And they are more likely to believe them than you. People want brands they can trust, companies that know them, communications that are personalized and relevant, and offers tailored to their needs and preferences. Digital marketing and its associated channels are important – but not to the exclusion of all else. It's not enough to just know your customers; you must know them better than anybody else so you can communicate with

them where, when and how they are most receptive to your message. To do that, we need a consolidated view of customer preferences and expectations across all channels – Web, social media, mobile, direct mail, point of sale, etc. Marketers can use this information to create and anticipate consistent, coordinated customer experiences that will move customers along in the buying cycle. The deeper your insight into customer behaviour and preferences, the more likely you are to engage them in lucrative interactions. Digital marketing is catapulting past analogue. People are consuming more digital content daily – using their smart phones, desktops computers, laptops, tablets, and more. The thing is, companies need to recognize that they need to alter their marketing strategies to adapt to this. Digital marketing is also more eco-friendly than more traditional forms of marketing. There is no need for any materials to be consumed which means that there is less harm done to the environment to get the name of your business out there. Your business is immediately responsible for sustainability. Today, your digital footprint is much more important than the physical footprint of your business.

The Importance of Digital Marketing in the current scenario

Whether it is product or a service, we just can't underestimate the power of digital marketing. The current age where we live, it is fully dedicated to digital media and so when you are marketing or advertising then you must not forget that there has to be online marketing too.

What makes a difference? Almost everyone would use the online and social media these days. Also, there have been many people who would just like surfing and checking what's on the web. Thus, you can see that almost everyone would come online once a day at least. In fact, some people stay online whole day. Keeping these facts in mind, you just can't leave digital marketing alone when it comes to marketing the product or service.

Why Digital Marketing is Important for Business

The world is quickly becoming digital. People are consuming digital content on a daily basis. Companies and the business world in general are starting to recognize the importance of getting digital and it is essential that marketing departments adapt quickly to the new circumstances and actively hire professionals in the field of digital marketing. Digital marketing is extremely important, not only because of its rapid growth but also because it is essentially the future of marketing. Soon all other traditional marketing forms will disappear as digital marketing will replace them altogether. While some generations will no doubt lament the loss of paper newspapers, books and old fashioned communication methods, new generations who have grown up with internet and mobile phones are already embracing the brave new world of digital consumption. Digital marketing methods are faster, more practical and versatile than the old traditional ones. Technology has put business in the digital age. Some of the most common forms of digital marketing are:

1. Website (SEO content)
2. Blogs
3. Internet banner ads
4. Online video content
5. Pay-per-click advertising
6. Email marketing
7. Social media marketing (Facebook, LinkedIn, Twitter, etc.)
8. Mobile marketing (SMS, MMS, etc.)

Now let's highlight some of the key reasons of using digital marketing:

1. **More affordable than traditional marketing:** An e-mail or a social media campaign can transmit the same message to customers for less money than a TV-Ad or a newspaper one. Moreover social media campaigns can reach a wider audience in any part of the world.
2. **Easier to track results:** With a wide range of analytics and data we are able to analyse our own marketing campaigns and find out how the campaign performed and how it can be improved. Of course you can get this data for traditional marketing campaigns but a digital campaign will allow you to measure the success in real time, giving you the advantage of planning more effectively and making changes almost instantly.

- 3. The number of consumers:** Traditional marketing has lost a huge amount of consumers. Most people read their newspapers on their iPad or some type of tablet. You need to develop your marketing and embrace the digital age.

Advantages & Disadvantages of Digital Marketing

Advantages:

1. Advertisement on the internet is cheaper than (Low cost) the print advertisement. It is a two way communication between sales person and the potential customer which takes people to the company website. It has a much wider reach.
2. It helps in spreading the business worldwide, with no geographical barriers, making it accessible from one country to another via Internet.
3. It is a 24X7 (365 days) open store where people are welcome to shop anytime from anywhere. This further directs the potential customer towards the company website.
4. Internet makes the product reach much more easy; while researching or getting accurate information on a product. It also adds value by adding a point of reference and a touch of individualized customer service.
5. It also helps in creating credibility and gain trust and confidence of the customers. Many people use internet for the pre-purchase research so that they can find themselves a particular product which meets up to their requirements.
6. It also helps in updating the subscribers through a fast mode of e-mails. Visitors get up-to-date information on each visit.
7. In case of information sensitive business such as a law firm, newspaper or online magazine, or a newsletter, you can deliver the products directly to the customers online.
8. Increased ability to measure and collect data.

Disadvantages of Online Marketing

1. Easier to have out dated information on internet, update timing is a critical issue here.
2. Many web visitors expect something for free. Do you have something to offer free?
3. There is a lot of competition in the market and by the time visitor reaches the product they have already gone through many links and got the required product. Unless they find what they are looking for quickly.
4. There are many pros and cons of internet marketing. It's important to consider each when creating internet marketing strategy.

Digital marketing: Boon or Bane to real India!!!

The Rural India is the home of the country's most abundant natural resource. Rural India known as Real India is being highly ignored with respect to several parameters of development. The areas to be focussed for development are the basic amenities like illiteracy, Poverty, High Inflation rates, Power supply, Hygiene Sanitation, child labour and many more. With its amazing diversity and variety, real India is also a commercial hotspot and is inviting several companies and travellers from all across the world. Taking advantage of this "the growth and potential" Rural India has really made its presence felt recently. Considering these several aspects this paper explores the challenges and opportunities of digital marketing in rural India. (Through descriptive research)

Challenges of Digital Marketing in Rural India

1. **Standard of living:** The number of people below the poverty line is more in rural markets. Thus the people in rural India are still yet to purchase smart phones or computers with internet access. Accordingly digital marketing is also weak and marketing strategies have to be different from those used with e-technology.
2. **Communication Problems:** Facilities such as internet, telephone, fax and telegram are rather poor in rural areas. Quick communication is the need of the hour for smooth conduct of business, but it continues to be a far cry in rural areas due to lack of communication facilities like telecommunication and internet systems etc. The literacy rate in

the rural areas is rather low and consumer's behaviour in these areas is traditional, which may be a problem for effective communication.

3. **Low Literacy Levels:** The low literacy levels in rural areas leads to a problem of communication. E-advertising media has less utility compared to the other media of advertisements.
4. **Traditional Life:** Life in rural areas is still governed by customs and traditions and people do not easily adapt new practices. For example, even rich and educated class of farmers do not use smart phones or have Wi-Fi connections.
5. **Buying Decisions:** Rural consumers are cautious in buying and decisions are slow and delayed. They like to give a trial and only after being personally satisfied, do they buy the product, and sometimes they wait for other people to use the new product which are launched by the company, if the product has good feedback from those people who has used it then only most of the people like to go and buy that product and get satisfied.
6. **Social and Cultural Challenges:** The cyber café model has not worked in many parts of rural India due to socio-cultural issues.
7. **Cultural Factors:** Culture is a system of shared values, beliefs and perceptions that influence the behaviour of consumers. There are different groups based on religion, caste, occupation, income, age, education and politics and each group exerts influence on the behaviour of people in villages through which people are not savvy with technology.
8. **Many Languages and Diversity in Culture:** Factors like cultural congruence (similarity), different behaviour and language of the respective areas make it difficult to handle the customers. Traits among the sales force are required to match the various requirements of these specific areas. This factor is strongly not assisting digital marketing in rural India.
9. **Distribution and Logistics:** Infrastructure continues to be a challenge in rural India. Moreover, the lack of an efficient distribution network prevents penetration of products/services into rural India. The distribution chain is not very well organized and requires a large number of intermediaries, which in turn increases the cost and creates administrative problems. Due to lack of proper infrastructure, manufacturers are reluctant (unwilling) to open outlets in these areas. They are mainly dependent on dealers, who are not easily available for rural areas. This is a challenge to the marketers.
10. **Seasonal Demand:** Demand for goods in rural markets depends upon agricultural situation, as agriculture is the main source of income. Agriculture to a large extent depends upon monsoon and, therefore, the demand or buying capacity is not stable or regular.
11. **Transportation:** Many rural areas are not connected by rail transport. Bumpy and patchy roads become unserviceable during the monsoon and interior villages get isolated. Transportation is one of the biggest challenges in rural markets. As far as road transportation is concerned, about 50% of Indian villages are connected by roads. However, the rest of the rural markets do not even have a proper road linkage which makes physical distribution a tough task. Many villages are located in hilly terrains that make it difficult to connect them through roads. Most marketers use tractors or bullock carts in rural areas to distribute their products. Warehousing is another major problem in rural areas, as there is hardly any organized agency to look after the storage issue. The services rendered by central warehousing corporation and state warehousing corporations are limited only to urban and suburban areas.

Opportunities of Digital Marketing in Rural India

1. **Large Population:** The rural population is large and its growth rate is also high. Despite the rural urban migration in 50 years only, 40% villages have been connected by road, in next 10 years another 30% would be connected. More than 90% villages are electrified, though only 44% rural homes have electric connections.
2. **Rural Telephone Density:** It has gone up by 300% in the last 10 years; every 1000+ pop is connected by STD. Rural literacy, the rural areas continue to be the place of living majority of Indians.

3. **Evaluate before Buying:** Rural consumers think hundred times before buying any product or service. They check out all the features of the product and also the price of the product. And they always ask their effectiveness or feedback of the product. After doing all this they again think to buy.
4. **Increasing Income:** There has been increase in the income of farmers because of the usage of scientific farming equipment's and usage of advanced fertilizers because of which there has been good results got by the farmers from their respective fields , result of which farmers are making good income from their respective fields.
5. **More Loyal Consumers than Urban Consumer:** Rural Consumer many times to buy a single product , but once the rural consumer feels that they are getting more benefits from the product than the price paid by them , rural consumer will always remain loyal to that product and it will be very difficult for the competitors to break that loyalty.

Conclusion

Indian rural market is undoubtedly complex but there are some simple truths that we need to accept. The rural consumers are very value-conscious. They may or may not have purchasing power, but they can make a difference to the company's growth if concentrated. Gone were the days when a rural consumer had to go to a nearby town or city to buy a branded product. The growing power of the rural consumer is an opportunity for the companies to flock to the rural markets. Gandhiji believed that India's future lay in her villages and rural markets will have a significant part in India's economy.

Thus, looking at the challenges and the opportunities, which rural markets offer to the marketers, it can be said that the future is very promising for those who can understand the dynamics of rural markets and exploit them to their best advantage. A radical change in attitudes of marketers towards the vibrant and burgeoning (growing) rural markets is called for, so they can successfully impress on the 230 million rural consumers spread over approximately six hundred thousand villages in rural India.

Any starting venture in rural Indian market must have to look into these aspects and after that, schedule their next steps, because one-step wrong from their side can ruin their whole brand image in other parts of the country also.

References

1. Ian Dodson, (2016) "The Art of Digital Marketing", Wiley Publications
2. Krishnamurthy, J (2000), "Rural Development: Challenges & Opportunities", Rawat Publications.
3. Mathur U C, (2010) "Retail Marketing, Text & Cases", I K International Publishing House Pvt. Ltd.
4. Matt Bailey, (2011) "Internet marketing: An hour a day", Wiley Publishing, Inc.
5. Philip Kotler, et al, (2016) "Marketing 4.0: Moving from Traditional to Digital", Wiley Publications.
6. Pradeep Kashyap & Siddhartha (2009) "The Rural marketing Book", biztantra.
7. Ramkishan Y, (2005) "New perspectives on Rural & Agricultural Marketing: Includes Cases", Jaico.

Internet References

1. www.iimk.ac.in
2. www.opapers.com
3. www.ruralrelations.com
4. www.thehindubusinessline.com

A Study on Use of the Traditional Library and Digital Library as Sources of Information by Students of Hubli City

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Abstract

The development of computerized innovation is a procedure of capacity, recovery and scattering of data has made the conventional libraries to go digital. Libraries all around the globe have responded to diverse difficulties postured by preservation of digital information and have encountered the technical, organizational, resource and legal issues associated with it. This study was led to look at Internet use and library use among the students. It depended on the assumption that students utilize the Internet more than the library. Literature on library and the Internet were surveyed. The researcher adopted simple random sampling technique to select the sample for the study. Data was collected using questionnaires and data was analyzed. The findings of the review demonstrate that students don't sidestep the library in fulfilling their data needs. They utilize both the library and the Internet, in spite of the fact that the Internet is utilized more than the library and it is likewise the most favored wellspring of data. It was recommended that the library should be upgraded to meet recent advancement in research.

Key Words: Library, Digital, Internet, Service Delivery.

Introduction

The Internet is one of the characterizing innovations of the advanced age and it is a worldwide framework which is interconnected to PCs and it gives many advantages to its clients, including access to data from far off archives and databases that can be perused and considered to demonstrate learning. With the web, students can enhance their learning by accessing data and materials accessible on line can be perused on line or download and print to peruse later. The web is additionally not only an inactive medium that students may investigate to acquire data all alone. It is progressively additionally being utilized by instructive foundations and scientists as an adaptable medium for conveying on the web training to the students. It is extremely basic that the students put forth a concentrated effort to present day Information and Communication Technologies particularly the Internet. Research has built up the way that the most obvious clients of the Internet are students They are relied upon to peruse promote after class directions to assemble data for class work, assignments, workshops, research projects and venture and this data could be recovered from the assets in the library. Today PC innovation is coordinated into practically every part of learning in education.

Objectives

1. To decide the impact of internet use on reading habits among students
2. To determine to what extent students remain on web.
3. To know the purpose behind Internet use by students.
4. To decide the extent to which students utilize the Internet more than the library.
5. To know what kind of need impact the determination of one data source over the other.

Need for the study

This review brought to tolerate the administrations found in the library and the services available on the Internet. It is trusted that the result of the study will enhance service delivery to students in library in Hubli city. Moreover, the review adds to existing literature on students' information behavior patterns and information needs.

Literature Review

Reding (2005) indicates that from a social, cultural and monetary perspective libraries assume a major part in our general public. They are the gatherers and stewards of our legacy; they are coordinators of the learning in the books they gather – including an incentive by recording, grouping and portraying them; and, as open foundations, they guarantee equity of access for all subjects. They take the information of the over a significant time span, and lay it down for what's to come.

A research conducted by Niels (2006) found that students don't sidestep the physical libraries and it is likewise apparent that the utilization of physical libraries and computerized assets complement each other. The place of Google in the students' data is noticeable and decidedly associated to utilization of traditional library resources.

Reading is a key to a wealth of experience that links people in a way far beyond distance or time. According to Noor, et al (2010), reading provides experience through to the individual so that he may expand his horizons, identify, extend and intensify his interest and gain deeper understanding of himself and other human being and of the world. Reading is important for students in general in order to cope with new knowledge in a changing world – that of the technological age.

Cull (2011) opined that while the Internet is a text– immersed world, perusing on the web screens has a tendency to be fundamentally not quite the same as perusing printed content. In his review, he looked into writing from a variety of orders on the innovative, social, behavioral, and neuro-logical effects that the Internet is having on the practice of reading.

The Digital Library Federation defines digital libraries as “Organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily available for use by a defined community or set of communities” (Shiri 2003).

Methodology

The descriptive survey research design was adopted for this study and the target population consisted of UG and PG students from different colleges in Vidyannagar, Hubli. Simple random sampling technique was employed to select 162 students. Questionnaire was the major instrument used for the data collection. Data collected was analyzed using descriptive statistics such as tables, frequencies and percentages.

Result and Discussion

Table 1: Demographic Information of Respondents

SI.No	DEMOGRAPHY	FREQUENCY				
1	GENDER		Frequency	Percent	Valid Percent	Cumulative Percent
		Male	115	71	71	71
		Female	47	29	29	100
		Total	162	100	100	
2	AGE		Frequency	Percent	Valid Percent	Cumulative Percent
		18-21	67	41.4	41.4	41.4
		22-25	74	45.7	45.7	87
		Above 25	21	13	13	100
		Total	162	100	100	

From the Table 1 it is found that the gender distribution of respondents it is understood that 115 respondents indicating 71% are male while 47 respondents indicating 29% are female.

And the highest age of the respondents falls in the age range between 22-25 years 74(45.7%) whereas least age of the respondents that is 21 indicating 13% are above 25 years.

Table 2: How Comfortable are You in Using Internet ?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Highly comfortable	39	24.1	24.1	24.1
Comfortable	101	62.3	62.3	86.4
Cannot Say	7	4.3	4.3	90.7
Uncomfortable	12	7.4	7.4	98.1
Highly uncomfortable	3	1.9	1.9	100.0
Total	162	100.0	100.0	

From the above Table 2 it is understood that 101 respondents indicating 62.3% are comfortable with the usage of internet whereas 3 respondents indicating 1.9% are highly uncomfortable with the usage of internet.

Table 3: How Many Hours do You Spend in Library ?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid do not visit daily	40	24.7	24.7	24.7
Less than1 hour	45	27.8	27.8	52.5
1-2 hours	25	19.4	15.4	67.9
2-4 hours	12	7.4	7.4	75.3
more than 4 hours	40	20.7	24.7	100.0
Total	162	100.0	100.0	

From the Table 3 it is found that 45 respondents indicating 27.8% spend less than an hour in library whereas 12 respondents indicating 7.4% spend more than 4 hours in library.

Table 4: Daily How Many Hours do You Access Internet ?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid do not use	25	15.4	15.4	15.4
Less than1 hour	43	26.5	26.5	42.0
1-2 hours	42	25.9	25.9	67.9
2-4 hours	21	13.0	13.0	80.9
more than 4 hours	31	19.1	19.1	100.0
Total	162	100.0	100.0	

From the Table 4 it is found that 43 respondents indicating 26.5% access internet for less than an hour 21 respondents indicating 13% access internet for 2-4 hours.

Table 5: Which Source do You Prefer to Collect Information?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Library	20	12.3	12.3	12.3
Internet	47	29.0	29.0	41.4
Both	91	56.2	56.2	97.5
Others	4	2.5	2.5	100.0
Total	162	100.0	100.0	

From the above Table 5 it is found that 91 respondents indicating 56.2% prefer both the source that is library and internet for the collection of information whereas 4 respondents indicating 2.5% prefer other sources for the collection of information.

Table 6: How Important is the Library in Education ?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Important	103	63.6	63.6	63.6
Important	43	26.5	26.5	90.1
Neutral	12	7.4	7.4	97.5
Somewhat Important	3	1.9	1.9	99.4
Not Important	1	.6	.6	100.0
Total	162	100.0	100.0	

From the Table 6 it is understood that 103 respondents indicating 63.6% says library is very important in education whereas 1 respondent indicating 0.6% says library is not important in education.

Table 7: Reasons for Going to Library (select whichever applicable) :

age	assignment	project	chatting	fiction book	magazines	journal	newspaper
18-21 yrs	39	29	10	29	44	26	60
22-25 yrs	48	46	9	35	55	36	65
Above 25yrs	8	5	1	8	20	14	18

From the above Table 7 it is found that:

- Age between 18-22 years: Maximum respondents (60) go to library to read newspaper
- Age between 22-25 years: Maximum respondents (65) go to library to read newspaper
- Above 25 years: Maximum respondents (20) go to library to read magazines.

Table 8: When Given Assignment/home-work, You Search for Data From :

age	internet	books	friends	faculty
18-21yrs	58	52	39	23
22-25yrs	66	66	44	35
Above 25yrs	18	18	11	8

From the above Table 8 it is understood that:

- Age between 18-22 years: Maximum respondents (58) search data from internet for their homework and assignments.
- Age between 22-25 years: Maximum respondents (66) search data from internet and refer books for their homework and assignments.
- Above 25 years: Maximum respondents (18) search data from internet and refer books for their homework and assignments.

Table 9: Which Kind of Library Would You Like to go for ?

	Frequency	Percent	Valid Percent
Valid Traditional Library	45	27.8	27.8
Digital Library	117	72.2	72.2
Total	162	100.0	100.0

From the above Table 9 it is found that 117 respondents indicating 72.2% would like to go for digital library whereas 45 respondents indicating 27.8% would like to go for traditional library.

Table 10: Are You Aware of the Concept of Digital Library?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	107	66.0	66.0	66.0
No	55	34.0	34.0	100.0
Total	162	100.0	100.0	

From the Table 10 it is found that 107 respondents indicating 66% are aware about the concept of digital library whereas 55 respondents indicating 34% does not know about the concept of digital library.

Table 11: You Would Use Digital Library Because :

Age	Unlimited storage space	No physical boundary	Multiple access	Enhanced information retrieval	Preservation for some print material	Round the clock availability
18-21yrs	46	26	49	18	26	20
22-25yrs	27	15	20	27	42	36
Above 25yrs	16	8	17	12	11	12

From the above Table 11 it is understood that:

- Age between 18-22 years: Maximum respondents (49) use digital library because of multiple access
- Age between 22-25 years: Maximum respondents (42) use digital library because of preservation of some print material
- Above 25 years: Maximum respondents (17) use digital library because of multiple access

Table 12: Would Your Duration in the Library Increase Because of Digital Library?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	133	82.1	82.1	82.1
No	29	17.9	17.9	100.0
Total	162	100.0	100.0	

From the Table 12 it is found that 133 respondents indicating 82.1% says that their duration in the library increases because of digital library whereas 29 respondents indicating 17.9% says digital library will not increase the duration in library.

Table 13: If Given a Choice, Would You also Access College Digital Library Apart from College Premises?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	149	92.0	92.0	92.0
No	13	8.0	8.0	100.0
Total	162	100.0	100.0	

From the Table 13 it is found that 149 respondents indicating 92% says that if given a choice they would also access college digital library apart from college premises whereas 13 respondents indicating 8% would not agree with the above choice.

Findings

1. As 29% of the respondents say that they prefer internet for information collection and 56% are dependent on both the sources i.e. internet and Digital Library. So, it is an opportunity for setting up of digital library as 85.2% are dependent on internet for information.
2. Respondents of the age 18-25 are dependent on internet for information whereas only 18 respondents are dependent on internet for assignments. So, the target for digital library will be people of age group 18-25.
3. 72.2% of the respondents feel that they would like to visit digital library against 27.8% of traditional library. So, this is a very positive sign for setting up of digital library.
4. 34% of the respondents are not aware of the concept of digital library. So, it is the responsibility of those who want to set up digital library to create awareness about digital library as 34% is a huge no. who are not aware of digital library.
5. 82.1% of respondents say that they would like to spend more time in digital library. So, considering this data, the people who want to set up digital library has to make necessary arrangements because the number of hours to be spend in digital library would be much more than people spending time in traditional library.
6. 92% of the respondents say that they would like to access college digital library which is a good sign for setting up of digital library.

Discussion & Conclusion

This study was conducted to compare students Internet use and library use. It depended on the presumption that students utilized the Internet more than the library. The findings of the review demonstrate that students don't sidestep the library in fulfilling their data needs. They utilize both the library and the Internet, in spite of the fact that the Internet is utilized more than the library and it is likewise the most favored wellspring of data. Students likewise make utilization of sources, for example, the media, address notes and communication with their faculties. There has been huge headway in innovation since this review was lead, particularly in the range of access to the Internet. With Internet get to as of now accessible on cell phones possessed by practically every students in Hubli, it is suggested that a comparative review is led concentrating on how students use current advancement in technology available to fulfill their information needs.

References

1. Ali Shiri, (2003), "Digital library research: current developments and trends", *Library Review*, Vol. 52 Issue: 5, pp.198-202
2. B. J. Bamgbade, B. A. Akintola, D. O. Agbenu, C. O. Ayeni, O. O. Fagbami & H. O. Abubakar (2015), "Comparative analysis and benefits of digital library over traditional library", *WSN 24* (2015) 1-7 EISSN 2392-2192
3. Cull, Barry (June 2011), "Reading revolution: Online digital texts and implications for reading in academics", *First Monday Peer reviewed Journal on the Internet* volume 16 Number 6-6.
4. *The International Information and Library Review*, (Dec 2006), Vol 38.4215-224 Retrieved 18/2/2013
5. Geeta Kitturand and Kavita Biradar (2017), "Digital Library Initiatives: A Boon for Preservation of Information Resources in India", *ISSN (Online): 2319-7064*, Volume 6 Issue 1.
6. Hagood, M.C. (2003), "New media and online literacies: No age left behind", *Reading Research Quarterly*, 38(3), 387-391.
7. Kern, R. (2006), "Perspectives on technology in learning and teaching languages", *TESOL Quarterly*, 40(1), 183-210
8. Kumah, Cynthia H (2015), "A Comparative Study of use of the Library and the Internet as Sources of Information by Graduate Students in the University Of Ghana", *Library Philosophy and Practice (e-journal)*. Paper 1298.
9. Mittal, R. & Mahesh, G. (2008), "Digital Libraries and Repositories in India: An Evaluative Study". *Program: Electronic Library and Information Systems*, 42(3), 286-302
10. Niels Ole Pors, (2006), "The Public Library and Students' Information Needs, *New Library World*", Vol. 107 Issue: 7/8, pp.275-285.
11. Noor, N. M, Maasum, Tg. N. R. M and Fatema, K. (2010), "Reading Habit Preferences of EFL Post Graduates: a case study; School of Language Studies & Linguistics", *Universiti Kebangsaan Malaysia*. Available at: http://aresearch.upi.edu/operator/upload/pro_2010_conaplin_noorizah_mohd._noor_.et.al.pdf
12. Ofodu Graceful Onovughe (2012), "Internet Use and Reading Habits of Higher Institution Students", *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 3 (1): 11-15© Scholarlink Research Institute Journals, pp 11-15
13. Purnima Chauhan, and Dr. Payare Lal (2012), "Impact of information technology on reading habits of college students", *IJRREST*, Volume-1 Issue-1, pp 101-106.
14. Quadri, Ganiyu Oluwaseyi and Abomoge, Solomon Oluwatise (2013), "A Survey of Reading and Internet Use Habits among Undergraduate Students in Selected University Libraries in Nigeria", Vol.3, No.11, 2013, pp 38-46
15. Raeyaekers, K. (2002), "Research Note: Young People and Patterns of Time consumption in relation to Print Media", *Journal of communication* 17, (3) 369-383.
16. Reding, V. (2005), "The role of libraries in the information society", *CENL Conference Luxembourg*.

Foreign Direct Investment (FDI): Trend Analysis of FDI Inflow in India

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Abstract

Foreign Direct investment plays a very important role in the development of the nation. Sometimes domestically available capital is inadequate for the purpose of overall development of the country. Foreign capital is seen as a way of filling in gaps between domestic savings and investment. India can attract much larger foreign investments than it has done in the past. The present study has focused on the trends of FDI Flow in India during 2000-01 to 2016-17. The study highlights country wise approvals of FDI inflows to India. The study based on Secondary data which have been collected through reports of the Ministry of Commerce and Industry, Department of Industrial Promotion and Policy, Reserve Bank of India, and World Investment Report. The study concludes that Mauritius emerged as the most dominant source of FDI contributing. It is because the India has Double Taxation Avoidance Agreement (DTAA) with Mauritius.

Key Words: FDI, Domestic Savings, Development, Taxation.

Introduction

Foreign Direct Investment (FDI) is a type of investment in to an enterprises in a country by another enterprises located in another country by buying a company in the target country or by expanding operations of an existing business in that country. In the era of globalization FDI takes vital part in the development of both developing and developed countries, and is considered as an engine of economic growth. Foreign investment was normally permitted only in high technology industries in priority areas and in export oriented areas. So the inflow of FDI before 1990's was very low. To fully utilize the country's immense economic potential, the government launched Economic reforms in 1991. The new government policies are simple, transparent and promote domestic and foreign investment. India's abundant and diversified natural resources, its sound economic policy, good market condition and high skilled human resources make it a proper destination for FDI. After long years of journey FDI was also introduced in various sectors and states in India. The world has been globalizing and all the countries are liberalizing their policies for welcoming investment from countries which are abundant in capital resources. The countries which are developed are focusing on new markets where there is availability of abundant labours, scope for products, and high profits are achieved. Therefore Foreign Direct Investment (FDI) has become a battle ground in the emerging markets.

Foreign Direct and Indirect Investment

FDI stands for Foreign Direct Investment, a component of a country's national financial accounts. Foreign direct investment is investment of foreign assets into domestic structures, equipment, and organizations. The FDI can take any route or form to enter into any nation. The three principal forms of FDI in India are joint ventures, acquisition of assets in a country and Greenfield ventures. Foreign indirect investment as portfolio investment, Portfolio investment does not seek management control, but is motivated by profit. Portfolio investment occurs when individual investors invest, mostly through stockbrokers in stocks of foreign companies in foreign land in search of profit opportunities. Rather than attracting as much FDI as possible host country governments would be well advised to focus their efforts in inviting the "right" kind of FDI. Foreign indirect investment (FIIs) the Inflow of Foreign Investment Comes through Various Routes viz:

1. Equity (Government, RBI, NRI, Acquisition, shares, Equity capital of unincorporated bodies); Reinvested earning; other capital.
2. Portfolio investment (GDR/ADR, FIIs, OFF shore funds and others)

Exhibit 1 : MAJOR Features of Indian FDI during four phases

1.	Phase 1 (1950-1967) Receptive Attitude and cautious welcome	<ul style="list-style-type: none"> • Non-discriminatory Treatment to FDI • No restriction on dividend remittance profits • Ownership & control with Indians
2.	Phase 2 (1968-1980) Restrictive Attitude	<ul style="list-style-type: none"> • Restriction FDI without technology • Above 40% stake was not allowed, if allowed only in priority area • FDI controlled by FERA
3.	Phase 2 (1981-1990) Gradual Liberalization	<ul style="list-style-type: none"> • Higher foreign equity in export oriented units allowed • Procedures for remittance of royalty and technical fees Liberalized
4.	Phase 4 (1991 Onwards)	<ul style="list-style-type: none"> • Fast channels for FDI clearance • Liberal policies relating to technology collaboration, foreign trade & foreign exchange • Encouraging FDI in core and infrastructure Industries • FERA replaced FEMA • Transparent Procedures FDI through M&A FDI in services and financial Sectors

Exhibit 1 : Furnishes the information on the major features of Indian FDI during four phases.

FDI Inflow Routes:

An Indian Company may receive Foreign Direct Investment under the two routes as given under:

1. **Automatic Route:** FDI in sectors /activities to the extent permitted under the automatic route does not require any prior approval either of the Government or the Reserve Bank of India.
2. **Government Route:** FDI in activities not covered under the automatic route requires prior approval of the Government which are considered by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, and Ministry of Finance.

Determinants of FDI

The investors consider and evaluate various aspects of a country before investing in it. The relative importance of these determinants of FDI varies not only between countries but also between different types of FDI. In specific the determinants of FDI in India are:

1. **Unexplored markets:** The developing countries possess substantial markets where the consumers demand for certain goods far exceed the available supplies. In India there is large scope for the investors because there is an enormous potential customer market with large middle class income group who would be target group for new markets. Example: BPO was one sector where the investors had large scope exploring the markets where the service was provided, with utmost customer satisfaction.
2. **Political Stability:** In many countries, the institutions of government are still evolving and there are unsettled political questions. India's stable economic and socio policies have attracted investors across border. Investors prefer countries with stable economic policies. The business requires a lot of funds to be deployed, and any change in policy against the investor will have a negative effect.

3. **Macro-Economic Factors:** Different economic factors encourage inward FDI. These include interest loans, tax breaks, grants, subsidies and the removal of restrictions and limitation. The government of India has given many tax exemption and subsidies to the foreign investors who would help in developing the economy.
4. **Basic infrastructure:** India though is a developing country, it has developed special economic zone where there have focused to build required infrastructure such as roads, effective transportation and registered carrier departure worldwide, Information and communication network/technology, powers, financial institutions, and legal system and other basic amenities which are must for the success of the business.
5. **Access to Manpower:** There is abundant labour available in India in terms of skilled and unskilled human resources. Foreign investors will to take advantage of the difference in the cost of labour as we have cheap and skilled labours. Example: Foreign firms have invested in BPO's in India which require skilled labour and we have been providing the same.

Table 1 & Group 1 Furnishes details of FDI equity inflows from 2000-17

Need For FDI in India

FDI plays a major role in developing countries like India. The investors also bring along best global practices of management. FDI helps in promoting international trade. This investment is a non-debt, non-volatile investment and returns received on these are generally spent on the host country itself thus helping in the development of the country.

- 1) **Sustaining a high level of investment:** As all the under-developed and the developing countries want to industrialize and develop themselves, therefore it becomes necessary to raise the level to investment substantially due to poverty and low GDP. Therefore there is a need to fill the gap between income and savings through foreign direct investments.
- 2) **Technological gap:** In Indian scenario we need technical assistance from foreign source for provision of expert services, training of Indian personnel and educational, research and training institutions in the industry. It only comes through private foreign investment or foreign collaborations.
- 3) **Exploitation of natural resources:** In India we have abundant natural resources such as coal, iron and steel but to extract the resources we require foreign collaboration.
- 4) **Understanding the initial risk:** In developing countries as capital is a scarce resource, the risk of investments in new ventures or projects for industrialization is high. Therefore foreign capital helps in these investments which require high risk.
- 5) **Development of basic economic infrastructure:** In the recent years foreign financial institutions and government of advanced countries have made substantial capital available to the under developed countries. FDI will help in developing the infrastructure by establishing firm's different parts of the country. There are special economic zones which have been developed by government for improvising the industrial growth.
- 6) **Improvement in the balance of payments position:** The inflow FDI will help in improving the balance of payment. Firms which feel that the goods produced in India will have a low cost, will produce the goods and export the same to other country. This helps in increasing the exports.
- 7) **Foreign firm's helps in increasing the competition:** Foreign firms have always come up with better technology, process, and innovations comparing with the domestic firms. They develop a competition in which the domestic firms will perform better it survive in the market.

Attracting Larger FDI Inflows in India- Problems and Challenges

Both India and China are competing to get a larger share in world trade and investment. Although China continues to be India's major competitor, many new economies like Indonesia, Vietnam and Philippines have emerged as strong competitors. No doubt Indian government has implemented several reform measures in order to attract greater FDI but there are several studies which have highlighted India's weak spots. One such report is "Doing Business 2017", an annual report co-published by the World Bank and International Finance Corporation that brings out the differences in business regulations and their implementation across economies.

Exhibit 2 : Doing Business in India.

Doing Business in India	Rank
Starting a Business	155
Dealing with Construction Permits	185
Getting Electricity	26
Registering Property	138
Getting Credit	44
Protecting Minority Investors	13
Paying Taxes	172
Trading across Borders	143
Enforcing Contracts	172
Resolving Insolvency	136

Source: Doing Business Data for India, Published by the World Bank Group

The Exhibit above indicates that India is performing well only on two indicators, namely, getting credit and protecting investors. India's performance on three indicators, namely, starting a business, dealing with construction permits and enforcing contracts shows a dismal picture of the investment climate in India. Another report "Global Competitiveness Report" published annually by "World Economic Forum" ranks 148 economies on their competitiveness with respect to indicators like infrastructure, institutions, macro-economic stability, innovation etc. India's overall rank for 2013-14 on the Global Competitiveness Index was 60. The most problematic factors for doing business identified in the report are inadequate supply of infrastructure, corruption, inefficient government bureaucracy, policy instability, tax regulation and restrictive labour regulations. Table 2 and Graph 2 furnishes details of FDI show of top investing Countries.

Major Impediments

The major deterrents to larger flows of FDI to India are listed below:

- 1) **Weak infrastructure:** Infrastructural bottlenecks continue to be a major cause of concern in India. When it comes to competition, India doesn't stand against other emerging markets in terms of ports, roads, skills sets, education etc. A study conducted by the Federation of Indian Chambers of Commerce and Industry in 2015, revealed that each day Indian companies are losing up to Rs. 40,000 because of power shortages; and due to power cuts, 61% companies suffer more than 10% loss in production. Warehousing and cold storage facilities are also in short supply, because of which 40% of the fruits, vegetables and other perishable products get destroyed before reaching the markets. In the World Competitiveness Index for 2015-16, India ranked 85 out of 148 countries for its infrastructure, much behind China which ranked 48.
- 2) **Complicated tax structure:** Stability and transparency in tax regime along with clarity in tax laws can have far reaching impact on investments in any country. The taxation policies in India remain inherently complex despite the fact that government has taken several steps to simplify and redesign it. In the recent years, India has witnessed several tax disputes with respect to cross border transactions involving big MNCs. India has implemented Goods and Services Tax (GST) effective from 1st July 2017. The implementation of GST is expected to bring in the much-needed boost to the nation's economy. Market experts believe that the implementation of the new tax structure will attract more Foreign Direct Investment (FDI) and increase tax compliance.
- 3) **Restrictive labour laws:** India is known worldwide for its stringent and rigid labour laws and over-regulated labour market. Over the years, Indian government has enacted a large number of legislations to protect the interests of labour covering different aspects namely fixation and revision of wages, worker's health and safety,

mode of payment of wages, payment of compensation in the event of industrial accident, provision of social security such as provident fund, gratuity, insurance and so on. Indian economy has turned highly inflexible due to these laws. These laws contain strict rules regarding overtime and imposes financial obligation on the employer upon worker retrenchment.

- 4) **Bureaucracy, regulations and corruption:** Yet another handicap that India suffers from is bureaucracy, red-tapism and corruption. It takes months to obtain licenses, approvals and permits. As per the doing business report, it takes 67 days for a company to obtain electricity connection, 16 days to obtain clearances and export goods from India, 182 days for dealing with construction permits and 1420 days for enforcing contracts. It takes 4 to 8 weeks for a new company to get itself registered in India as compared to few days in most developed and developing markets. Many a times, the FDI approvals are kept pending for months that prompts the investor to drop out. With respect to FDI policies, even though several liberalization measures have been undertaken by the government but FDI regulations continue to remain restrictive as compared to many other nations. India has been selective in opening sectors for FDI and FDI in India is subject to sectoral caps ranging from 20 to 100%.

Road Ahead for Increased Flow of FDI into the Country

1. **Flexible labour laws needed:** China gets maximum FDI in the manufacturing sector, which has helped the country become the manufacturing hub of the world. In India the manufacturing sector can grow if infrastructure facilities are improved and labour reforms take place. The country should take initiatives to adopt more flexible labour laws.
2. **Re look at sectoral caps:** Though the Government has hiked the sectoral cap for FDI over the years, it is time to revisit issues pertaining to limits in such sectors as coal mining, insurance, real estate, and retail trade, apart from the small-scale sector. Government should allow more investment into the country under automatic route. Reforms like bringing more sectors under the automatic route, increasing the FDI cap and simplifying the procedural delays has to be initiated.
3. **Geographical disparities of FDI should be removed:** The issues of geographical disparities of FDI in India need to be addresses on priority. Many states are making serious efforts to simplify regulations for setting up and operating the industrial units. However, efforts by many state governments are still not encouraging. Even the state like West Bengal which was once called Manchester of India attracts only 1% of FDI inflow in the country. West Bengal, Bihar, Jharkhand, Chhattisgarh are endowed with rich minerals but due to lack of proper initiatives by governments of these states, they fail to attract FDI.
4. **Promote Greenfield projects:** Greenfield investment is investment in new plants. It is establishing new production capacity by an investor or company. On the other, Brown field investment is an investor investing in an existing plant. Brownfield investment is mainly made through merger and acquisitions. India's volume of FDI has increased largely due to Merger and Acquisitions (M&As) rather than large Green fields projects. M&A's not necessarily imply infusion of new capital into a country if it is through reinvested earnings and intra company loans. Business friendly environment must be created on priority to attract large Green fields projects.
5. **Develop debt market:** India has a well-developed equity market but does not have a well-developed debt market. Steps should be taken to improve the depth and liquidity of debt market as many companies may prefer leveraged investment rather than investing their own cash. Therefore it is said that countries with well-developed financial markets tend to benefits significantly from FDI inflows.
6. **Strengthen research and development in the country:** India should consciously work towards attracting greater FDI into R&D as a means of strengthening the country's technological prowess and competitiveness.

Interpretation

Table 1 furnishes the details of FDI equity inflows, year-wise. The cumulative total equity inflows from the year 2000-2017 is Rs 1,787,555 crores. Table 2 furnishes the details of Share of Top Investing Countries FDI Equity Inflows

(Financial Years) Amount Rupees in Crores. The inflows from U.S.A are routed through Mauritius due to tax advantage. The tax advantage emanates from the double tax avoidance agreement that India has with that country USA. This agreement means that any foreign investor has the option of paying tax either in India or in Mauritius. The tax rates in Mauritius are amongst the lowest in the world. While investors get higher returns on their money in India, those from Mauritius get even higher returns on their capital on the grounds of double taxation avoidance treaty (DTAT) prevalent there.

Graph 1 provides information on Financial Year-Wise FDI Equity Inflows. The Graph 1 shows the total inflow of FDI in India during the last 17 years i.e. 2000 to 2017. The FDI inflow has been escalating from 10,733 Crores in 2000-2001 to 291,696 Crore Rupees in 2016-2017. Hence it is evident that FDI in India is on the upward trend and has ushered a prosperous phase in business scenario. The Graph 2 indicates that the largest inflows of FDI's over the period of April 2000 to June 2017 has been received from Mauritius accounting to as high as 34%. Singapore is second with a share of 16%. The other major sources of foreign direct investment are from UK, Japan, Netherlands, U.S.A., Cyprus, Germany, France, and their respective share of inflow of FDI are 7%, 8%, 6%, 6%, 3%, 3%, 2%.

Discussion & Conclusion

There is a global race for attracting FDI in all developed and developing countries of the world. Although, the developing countries need to modify the level of educational, technological and infrastructure background to promote the FDI, however, India has observed a remarkable growth in the flow of FDI over the last one decade may be because of large market size in terms of GDP and GNI, tax incentives and availability of high quality multilingual work force. In India some of the sectors such as Service sector, Telecommunication sectors are most preferred in terms of Foreign investment and Mauritius and Singapore are such countries which revealed full confidence in India concerning to FDI inflow. India's GDP has grown about 35%-36% in the first half year of 2017, though world FDI has decreased by 5%. However, India receives comparatively much lesser FDI than China and other smaller economies in Asia. To achieve the highest foreign investment India need to develop such an attractive investment avenues and need to frame liberal economic policies and required to develop the level of Infrastructure in India.

References

1. Department of Industrial Policy and Promotion, (April 2000 to June 2017) Annual Report
2. <http://dipp.nic.in/>
3. <http://www.doingbusiness.org/data/exploreeconomies/india>
4. <http://www.ibef.org/economy/indian-economy-overview>
5. http://www3.weforum.org/docs/GCR20162017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf
6. <https://www.rbi.org.in/#>
7. Reserve Bank of India (2017), Monthly Bulletin.

Table No.1: Financial Year-Wise FDI Equity Inflows

Sl. No	Financial Year	Rupees In Crores	Percentage Growth over years
1	2000-01	10,733	
2	2001-02	18,654	(+) 65 %
3	2002-03	12,871	(-) 33 %
4	2003-04	10,064	(-) 19 %
5	2004-05	14,653	(+) 47 %
6	2005-06	24,584	(+) 72 %
7	2006-07	56,390	(+) 125 %
8	2007-08	98,642	(+) 97 %
9	2008-09	142,829	(+) 28 %
10	2009-10	123,120	(-) 18 %
11	2010-11	97,320	(-) 17 %
12	2011-12	165,146	(+) 64 %
13	2012-13	121,907	(-) 36 %
14	2013-14	147,518	(+) 8%
15	2014-15	189,107	(+) 27%
16	2015-16	262,322	(+) 29%
17	2016-17	291,696	(+) 9%
CUMULATIVE TOTAL (from April, 2000 to March, 2017)		1,787,555	

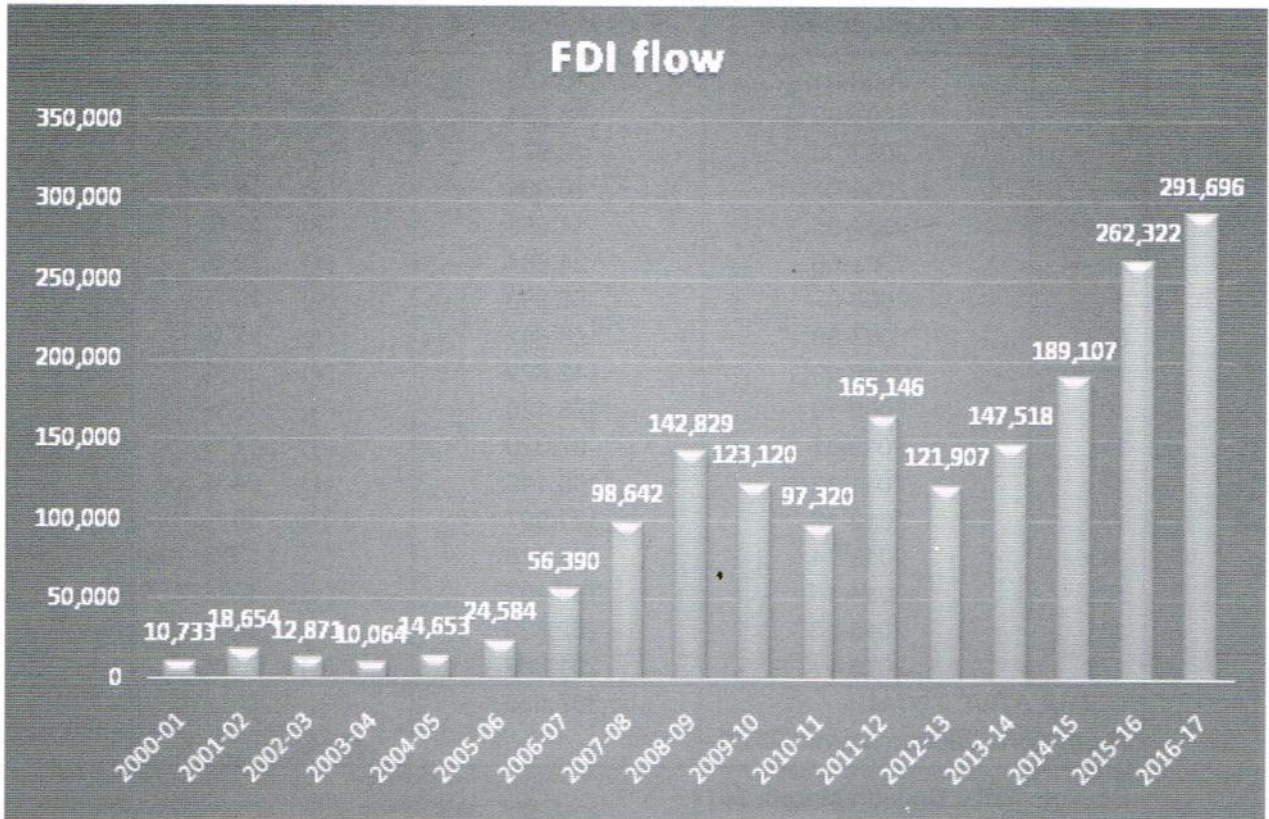
Source: RBI's Bulletin March, 2017

Table No.2: Share of Top Investing Countries FDI Equity Inflows (Financial Years) Amount Rupees in Crores

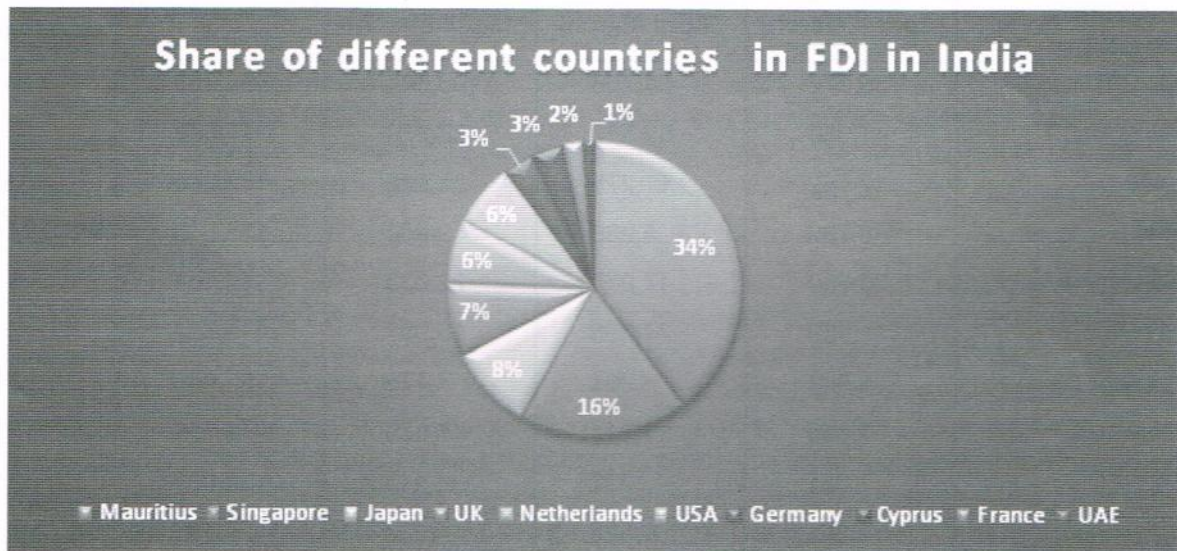
Rank	Country	2014-15 (April – March)	2015-16 (April March)	2016-17 (April March)	Cumulative Inflows (April, 00 - March, 17)	%age to total Inflows
1	MAURITIUS	55,172	54,706	105,587	585,950	34%
2	SINGAPORE	41,350	89,510	58,376	315,042	16 %
3	JAPAN	12,752	17,275	31,588	142,260	8%
4	U.K.	8,769	5,938	9,953	125,545	7 %
5	NETHERLANDS	20,960	17,275	22,633	117,167	6 %
6	U.S.A.	11,150	27,695	15,957	110,532	6 %
7	GERMANY	6,904	6,361	7,175	52,045	3 %
8	CYPRUS	3,634	3,317	4,050	46,731	3 %
9	FRANCE	3,881	3,937	4,112	30,637	2 %
10	UAE	2,251	6,528	4,539	26,187	1 %
TOTAL FDI INFLOWS FROM ALL COUNTRIES *		189,107	262,322	291,696	1,787,555	

Source: FDI Statistics, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India, 2017

Graph 1: Financial Year-Wise FDI Equity Inflows



Graph 2 : Share of Top Investing Countries FDI Equity Inflows



Empirical Evaluation of Customer Perceived Risk and Customer Attitude towards Internet Banking in North Karnataka

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Abstract

Purpose: *The purpose of this paper is to study the customer's perceived risk in using the internet banking and the role of e-banking attributes on attitude development of the customers. It also analyses the impact of customer's perceived risk on attitude development.*

Design of the study: *The causal research type is undertaken to study the stated purpose. The study uses the structured questionnaire which is valid and tested for reliability. Descriptive and correlation analyses have been used in the paper. Descriptive statistics for risk perception analysis and attitude analysis is undertaken using Fishbein's Multiattribute Attitude model. Correlation analysis is done to know the relation between risk perceptions on the attitude of customers towards e banking.*

Findings: *The research finds out that performance risk and security risk are highly perceived risk factors among the customers. Simplicity and confidentiality attributes contribute more towards attitude development. It is discovered that there is a relation between for almost all dimensions of risk perceptions with the customer attitude.*

Key words: e-banking, Customer attitude, Risk perceptions, attributes of e banking, attitude model.

Introduction

The effective banking system is essential for an economy. Banks need to function efficiently to support the increasing demand from the society. Today's banking has to be competent to meet the new challenges in customer service. The role of e-banking gives an edge to banks to perform operations competitively and in customer service. It is considered to enhance customer satisfaction through faster, easier and more reliable services through an online platform (Al-Somali et. al., 2009; Pikkarainen et al. 2004).

For a developing economy the e services of the banks are not very attractive to customers due to lack of basic infrastructures and cost associated with it. Banks are providing various services like fund transfer to bill payments to investment services etc., through e- channels but the adoption rate and usage level is not as expected. The penetration of e- services of banks is increasing in India year on year, In 2014 the penetration was 18% as per McKinsey survey report.

India's internet user base grew over 17% in the first six months of the year 2015 to 354 million, according to the Internet and Mobile Association of India. The penetration of e banking is also growing.

Customers perceive risk in using e banking which inhibits them of availing e services. Cunningham et.al research on e –banking reveals that customer perceive financial risk in e- banking compared to traditional banking throughout the banking process. The research also identified that financial risk drives the risk premium while psychological, physical and time risk play ancillary role.

Customer develop attitudes based on their previous experiences with the product or service, their feeling towards the service and their action to continue to use the product or service depends on the attitude that they develop. It is important to study the customer attitudes and the factors that contribute to attitude development towards e- banking for bank's e-services marketing.

This paper analyses the customer perceived risk and the attitude of customers. It also tries to know the impact of risk on attitude development.

Literature Review

Ankit Kesharwani and Shailendra Singh Bisht(2011), in their research work on “ The impact of trust and perceived risk on internet banking adoption in India-An extension of technology acceptance model” studied IBS adoption in India. They have extended technology acceptance model (TAM) in IBS adoption in India under security & privacy risk. Using TAM model as base the study has developed & tested integrated model incorporating various factors affecting acceptance and usage of internet banking in India. 'Perceived risk' as the new dimension is added to the TAM model. Perceived risk is considered as important element in literature and diffusion of innovation.

Dimitrios Maditinos et.al (2013), the authors focused on examining the factors which affects internet banking adoption. The authors were of the opinion that the earlier researches considered perceived risk as single construct thus failing in measuring the real characteristics of perceived risk, the real inhibits towards usage of online banking. The paper explored the relationship of Technology acceptance model constructs with perceived risk factors like performance risk, social risk, time risk, financial risk, security risk on the consumer's intention to use internet banking. The online survey was conducted with a structured questionnaire and analysis was done with factor analysis. The results underlined the impact of perceived usefulness, security risk, performance risk on the intention to use internet banking.

Xin Luo a, Han Li , Jie Zhang , J.P. Shim (2010), investigated the adoption or rejection of mobile banking in light of consumers perceived risk and trust determinants. The study is to know the impact of consumers perceived risk factors and trust, self-efficacy, and performance expectancy on adoption of a wireless technology use. They found that the perceived risk factors such as performance risk, time, security, Psychological, social, privacy, physical and overall risk a salient antecedent to innovative technology acceptance. Among these the social and physical risk is seen insignificant.

Shwu-Ing Wu in his study “The relationship between consumer characteristics and attitude toward online shopping”, published in Marketing Intelligence and planning, studied the concerns and perceptions of consumers regarding online shopping. The attitudes toward online shopping are measured by using Fishbein's behavioural model. Consumers' decision making is influenced by internal and external factors. The author considered four factors that influence consumer attitudes. They are consumer demographics, Consumer purchase preference, and consumer benefit perception and consumer lifestyle. The researcher investigated the relationship between the attitude and the influence factors. It was found out that the four factors significantly influence consumer attitudes. The researcher demonstrated that Fishbein's model is effective tool in measuring consumer attitude.

Karjaluoto et al. (2002) studied the customer attitude in Finland. The research was conducted using Fischbein model which measured customer attitude with belief and evaluation statements and found that attitude towards online banking and actual behaviour were both influenced by prior experience of computers and technology as well as attitudes towards computers.

There is a clear need to study the factors that influence customers' attitude towards e banking so that banks can better formulate their marketing strategies to increase IB usage in the future. This study aims to investigate the

risk perception of customers to use IB services in the first section and customer attitude in the second section. The third section focuses on to find out the relation between customer risk perceptions towards E- banking and customer attitude.

The Hypothesis developed for the study is: The customer perceived risk has significant relationship with the customer attitude.

Research Questions for the Study are:

- 1) What are the customers perceived risk while using internet banking?
- 2) What are the factors which shape the customers' attitude towards internet banking?
- 3) Is there a relationship between customer perceived risk and customer attitude towards e banking?

Research Methodology

The descriptive and causal research is undertaken to study the research questions. The primary data is collected through the survey method. The questionnaire was used to collect the required data. The area of study was restricted to surveying the customers of e- banking in north Karnataka. The districts covered under the survey are Belagavi, Vijayapur, Bagalkot, Dharwad, Haveri, Uttara Kannada & Gadag. The purposive sampling technique is employed to collect the data. The sample size of the study is 1000. The samples were collected from the various offices of Govt, private and educational institutes, shops etc.

Analyzing the customer risk perception towards e- banking

To measure the reliability or internal consistency of a test items Cronbach alpha is used. Cronbach alpha measures of any given instruments consistency that is the extent to which it is consistent to measure the concept. Eleven risk statements were used to measure the customer perceived risk.

Analysing Customer Attitude towards E- banking

Scale reliability analysis is being carried out to validate the measurement scale used for the various statements which measure the customer attitude, towards e-banking highlighted in the questionnaire.

Attitude toward e banking has significant relationship with risk perceptions of customers

The attitude is formed based on various cognitive, affective and conative factors. The risk perceptions of E-banking are important constructs in the study of E banking attitude of customers

The purpose of our study is to find out the relation of customers' risk perceptions towards E- banking on customer attitude. The Hypothesis developed for the study is:

Hypothesis: The overall customer's attitude towards e-banking has significant relationship with various dimensions of risk perceptions.

The variables considered for the study are performance risk, security risk, financial risk, privacy risk, time risk, psychological risk and social risk with overall customers' attitude.

Hypothesis 1 : The performance risk perception has positive and significant impact on customer attitude toward internet banking.

Correlations

		Overall Attitude	E banking websites have technical problems
Overall Attitude	Pearson Correlation	1	-.193**
	Sig. (2-tailed)		.000
	N	993	993
E banking websites have technical problems	Pearson Correlation	-.193**	1
	Sig. (2-tailed)	.000	
	N	993	993

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation between the performance of E banking and customers' overall attitude is negative. This implies that lower the risk perception of the customers; higher will be their attitude towards e-banking. Here we observe that the correlation is significant at 1% level of significance performance dimensions of risk perceptions.

Hypothesis 2 : The security risk perception has positive and significant impact on customer attitude toward internet banking.

Correlations

		Overall Attitude	There is a risk that my account can be hacked
Overall Attitude	Pearson Correlation	1	-.056
	Sig. (2-tailed)		.078
	N	989	989
E banking websites have technical problems	Pearson Correlation	-.056	1
	Sig. (2-tailed)	.078	
	N	989	989

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation between the security of E banking and customers' overall attitude is closer to zero. This implies that lower the risk perception of the customers; higher will be their attitude towards e-banking. Here we observe that the correlation is not significant at 1% level of significance security dimensions of risk perceptions.

Hypothesis 3 : The financial risk perception has positive and significant impact on customer attitude toward internet banking

Correlations

		Overall Attitude	I may lose money in internet banking
Overall Attitude	Pearson Correlation	1	-.128**
	Sig. (2-tailed)		.000
	N	978	978
E banking websites have technical problems	Pearson Correlation	-.128**	1
	Sig. (2-tailed)	.000	
	N	978	978

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation between the financial risk of E banking and customers' overall attitude is negative. This implies that lower the risk perception of the customers; higher will be their attitude towards e-banking. Here we observe that the correlation is significant at 1% level of significance financial risk dimension of risk perceptions.

Hypothesis 4 : The privacy risk perception has positive and significant impact on customer attitude toward internet banking

Correlations

		Overall Attitude	Others can get my information online
Overall Attitude	Pearson Correlation	1	-.135**
	Sig. (2-tailed)		.000
	N	960	960
E banking websites have technical problems	Pearson Correlation	-.135**	1
	Sig. (2-tailed)	.000	
	N	960	960

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation between the privacy risk of E banking and customers overall attitude is negative. This implies that lower the risk perception of the customers; higher will be their attitude towards e-banking. Here we observe that the correlation is significant at 1% level of significance privacy risk dimension of risk perceptions.

Hypothesis 5 : The Time risk related perception has positive and significant impact on customer attitude toward internet banking.

Correlations

		Overall Attitude	Risk of spending extra time
Overall Attitude	Pearson Correlation	1	-.147**
	Sig. (2-tailed)		.000
	N	981	981
E banking websites have technical problems	Pearson Correlation	-.147**	1
	Sig. (2-tailed)	.000	
	N	981	981

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation is significant at 1% level of significance. The correlation between the Time risk of E banking and customer's overall attitude is negative. This implies that lower the risk perception of the customers; higher will be their attitude towards e-banking.

Hypothesis 6 : The psychological risk perception has positive and significant impact on customer attitude toward internet banking

Correlations

		Overall Attitude	I will be nervous while operating net banking
Overall Attitude	Pearson Correlation	1	-.133**
	Sig. (2-tailed)		.000
	N	977	977
E banking websites have technical problems	Pearson Correlation	-.313**	1
	Sig. (2-tailed)	.000	
	N	977	977

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation is significant at 1% level of significance. The correlation between the psychological risk of E banking and customers' overall attitude is negative. This implies that lower the psychological risk perception of the customers; higher will be their attitude towards e-banking.

Hypothesis 7 : The social risk perceptions has positive and significant impact on customers attitude toward internet banking.

Correlations

		Overall Attitude	I will look foolish to others in case of any problems arise during net banking
Overall Attitude	Pearson Correlation	1	-.135**
	Sig. (2-tailed)		.000
	N	979	979
E banking websites have technical problems	Pearson Correlation	-.135**	1
	Sig. (2-tailed)	.000	
	N	979	979

**Correlation is significant at the 0.01 level (2-tailed).

From the above table it is seen that the correlation is significant at 1% level of significance. The correlation between the Social risk of E banking and customers' overall attitude is negative. This implies that lower the social risk perception of the customers; higher will be their attitude towards e-banking.

Interpretation

From all the above tables we observe that the overall customer's attitude towards e-banking has significant relationship with various dimensions of risk perceptions. The correlation in all the cases is negative implies that lower the risk perception of the customers; higher will be their attitude towards e-banking. Here we observe that the correlation is significant at 1% level of significance for almost all dimensions of risk perceptions i.e. performance risk, financial risk, privacy risk, time risk, psychological risk and social risk except for security risk dimension.

Based on the Table 1, Table 2, Table 3 and table 4, we find that the simplicity attribute contributes more towards attitude of E banking. Confidentiality is in second place followed by safety are the most important attributes which help in forming the positive attitude towards the internet banking. Promptness attribute is the fourth attribute followed by Trustworthiness and website updating attributes that contribute towards forming attitude. Speed of transaction attribute is in seventh place followed by Easy navigation, Financial product information, website aesthetics attributes in the following order of attitude formation. Responsiveness attribute is in the last place among all the attributes that contribute towards the formation positive customer attitude.

Discussion & Conclusion

From the above analysis it is clear that the customer perceive risk in usage of e- banking. Among all the risk factors analysed they perceive Performance risk and security risk higher than any other risk. Social risk and Psychological risk are the least perceived risk factors. Proper guidelines and safety measure awareness or information from banks have to be given to consumers at regular interval of times to boost the confidence of customers in net banking.

Attitude development based on the customer beliefs and evaluations of e- banking attributes were studied and it is noted that the customer overall attitude is positive towards e- banking. They have very high attitude towards simplicity followed by confidentiality and safety attributes of e- banking. Responsiveness attribute contribution towards attitude development is the least compared to all other attributes of e banking. Therefore, the banks have to concentrate on developing employees responsiveness towards e banking problems or queries of customers in time.

Practical Implications

Banks should focus on reducing high risks perceived by the customers noted in the research in order to develop positive attitudes. This will help in retaining existing customers as well as attracting new customers. Attitude development strategies can be designed based on the outcomes of the research.

References

1. Al-Somali, S.A., Gholami, R. and Clegg, B (2009), "An investigation into the acceptance of online banking in Saudi Arabia", *Technovation*, Vol. 29, pp. 130-141
2. AnkitKesharwani, Shailendra Singh Bisht, (2012), "The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model", *International Journal of Bank Marketing*, Vol. 30 Issue: 4, pp.303-322
3. DimitriosMadininos et.al , "An examination of the critical factors affecting consumer acceptance of online banking- A focus on the dimensions of risk", *Journal of Systems and Information Technology*, Vol. 15 No. 1, 2013 pp. 97-116 , Emerald Group Publishing Limited 1328-7265
4. Sonia Barquin , Vinayak HV "Digital Banking in Asia: What do consumers really want?" Mc Kinsey Report, 2015, Mckinsey.com

5. Neha Alawadi, "India's internet user base 354 million, registers 17% growth in first 6 months of 2015: IAMAI report, ET Bureau Sep 3, 2015
6. Irfan Bashir, Chendragiri Madhavaiah, (2015), "Consumer attitude and behavioural intention towards Internet banking adoption in India", Journal of Indian Business Research, Vol. 7 Issue: 1, pp.67-102, doi: 10.1108/JIBR-02-2014-0013
7. Pikkarainen, K., Pikkarainen, T. Karjaluoto, H. and Panhila, S (2004), "Consumer acceptance of online banking an extension of the of Technology acceptance model" Internet Research, Vol 14, No.3, pp224-235.
8. S.M. Cunningham, D. Cox (Ed.), "The major dimensions of perceived risk, in: Risk Taking and Information Handling in Consumer Behavior", Harvard University Press, Cambridge, Mass, 1967.
9. Serkan Akinci, Safak Aksoy and Eda Atilgan "Adoption of Internet banking among sophisticated consumer segments in an advanced developing country", The International Journal of Bank Marketing, Vol. 22 No. 3, 2004 pp. 212-232, Emerald Group Publishing Limited 0265-2323
10. Xin Luo a, Han Li, Jie Zhang, J.P. Shim, "Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services", Decision Support Systems, Vol. 49 pp. 222–234, (2010) Elsevier publication.
11. Ziqi Liao, Michael Tow Cheung, (2002), "Internet-based e-banking and consumer attitudes: an empirical study", Information & Management, Vol. 39 pp.283–295.

Table No. 1: Reliability Statistics of Risk Perception Measuring Statements.

Cronbach's Alpha	N of Items
.836	11

From the above table the following inference is as follows:

- The Cronbach's Alpha co-efficient for risk analysis is 0.836, which is sufficiently reliable (>0.7) which validates the scale reliability for the statements which measured the risk perception of customers.

Risk Analysis: The respondents' perception related to the risk of using online banking were measured using the Likert scale of five point from strongly agree to strongly disagree. The eleven statements related to various risk perceptions like Performance risk, Security risk, Financial risk, Privacy risk, Time risk, Psychological risk and Social risk were used to measure the users risk perception.

Table No 2: Showing the Respondents Risk Perceptions of E-banking.

Descriptive Statistics			
	N	Mean	Std. Deviation
While using e banking ,I have to be careful to avoid mistakes.	1000	4.03	.958
There is a risk that my account can be hacked	1000	3.40	1.207
Fake internet sites are present and difficult to identify the genuine site.	1000	3.39	1.211
E banking websites have technical problems	1000	3.26	1.204

Risk of spending extra time	1000	3.12	1.201
Others can get my information online	1000	2.90	1.319
I may lose money in internet banking	1000	2.84	1.260
My usage of net banking will not be accepted by others	1000	2.79	1.269
I will look foolish to others in case of any problems arise during net banking.	1000	2.68	1.199
Instead of net banking it is convenient to go the branch.	1000	2.56	1.319
I will be nervous while operating net banking	1000	2.53	1.258
Valid N (listwise)	1000		

Based on the above table it is inferred that the users perceive the Performance risk and Security risk higher in operating internet banking. Next they perceive time risk or convenience risk in case of any problems encountered in transacting online followed by privacy risk and financial risk. Financial risk is followed by social risk. Psychological risk is the least perceived risk with 2.53 mean this can be inferred that users are confident of using internet for banking.

Table No 3: Reliability statistics of Attitude statements

Cronbach's Alpha	N of Items
.738	22

The Cronbach's Alpha co-efficient for the statements which measure the attitude is 0.738 which is sufficiently reliable (>0.7), which validates the scale reliability for the statements which measure the customer attitude.

The attitudes towards E-banking was measured using Likert scales. The attitude was measured using Fishbein Model. The respondents were asked to express the Belief and the Importance that they attach to the attributes of E-banking. Attitude was measured using the Formula: $Attitude = \sum (b_i * e_i)$, where b_i is strength of belief and e_i is the evaluation score that they attach to the attribute b_i .

Example: Salient belief of e banking is measured using Likert scale of five point strongly agree to strongly disagree

e- banking is simple to transact:	SA	A	Neutral	DA	SDA
bi:	(5)	(4)	(3)	(2)	(1)
Simplicity of usage of e-banking is important:	SA	A	Neutral	DA	SDA
ei:	(5)	(4)	(3)	(2)	(1)

The attitude towards simplicity is calculated by multiplying b_i and respective e_i score.

The maximum attainable attitude score of simplicity attribute is 25; least score is 1; neutral score is 9. After ascertaining the belief and the respective evaluation scores of all attitude statements the sum of the product of b_i and e_i is calculated to know the overall attitude.

In the research 11 statements of belief and respective 11 statements of evaluation are developed to measure the customer attitude towards E- banking. The following table analyses the attitude scores of each attitude attribute.

Table No 4: Showing Likert Scores of Customer Attitude toward E-banking

Variable	Mean	Std. Deviation
Attitude – Simplicity	18.79	5.209
Attitude –Confidentiality	18.23	5.549
Attitude – Safety	17.24	5.199
Attitude – Promptness	17.04	5.228
Attitude – Trustworthy	16.99	5.421
Attitude – Website Updation	16.98	6.019
Attitude – Speed	16.98	5.281
Attitude – Easy Navigation	16.96	5.425
Attitude – Product information	16.42	5.486
Attitude – Website Aesthetics	15.40	5.789
Attitude – Responsiveness	15.17	6.388

Blue Ocean Strategy – its Significance and Comparison with Red Ocean Strategy and Porter's Five Forces Model

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Abstract

W. Chan Kim and Renée Mauborgne, professors at INSEAD and co-directors of the INSEAD Blue Ocean Strategy Institute, in Fontainebleau, France wrote and published book titled "Blue Ocean Strategy" in 2005 and written by. The book has been translated into 43 languages and has sold over 3.5 million copies from the time of its publishing. Wall Street Journal, Business Week, and the Amazon.com named the book as a bestseller. The book was designated as one of the "Best Books of 2005" by Fast Company magazine. It also won "The Best Business Book of 2005" Prize at the Frankfurt Book Fair Based on a study of 150 strategic moves spanning more than a hundred years and thirty industries. In their book Kim & Mauborgne argued that companies can succeed not by battling competitors, but rather by creating "blue oceans" of uncontested market space. They proclaimed that these strategic moves create a jump in value for the company, its buyers, and its employees while unlocking new demand and making the competition irrelevant. The book provides with analytical frameworks and tools to substitute an organization's ability to systematically create and capture blue oceans. An extended edition of the book was published in February, 2015. The expanded edition appraises all strategic moves in the book, bringing their stories up to the present, and adds new chapters on achieving strategic orientation and avoiding red ocean traps as well as expanding the discussion on sustainability and renewal. The paper discusses the Blue Ocean Strategy, its significance and compares with Red Ocean Strategy and Porter's Five Forces Model.

Keywords: Blue Ocean Strategy, Red Ocean Strategy, Value Innovation.

Introduction

The term "*Blue Ocean*" has been derived from the book "Blue Ocean Strategy" (Harvard Business Review Press, expanded edition, 2015), by W. Chan Kim and Renee Mauborgne. Blue Ocean Strategy describes how companies conventionally worked in "Red Ocean" conditions, where businesses savagely fought against each other for a share of the marketplace. But, as per Blue Ocean strategy, organizations should find a way to work in a marketplace that is free of competitors. Blue Ocean Strategy presents a methodical approach to making the competition irrelevant and outlines principles and tools that any organization can use to craft and capture their own blue oceans. In short, Blue Ocean Strategy is a business theory that proposes that companies are better off searching for methods to gain "uncontested market space" than engaging in traditional competition.

Building blocks of Blue Ocean Strategy:

- Value Innovation
- Tipping point innovation
- Fair process or 3E principles – Engagement, Explanation, clarity of Expectations

In blue oceans, demand is created rather than fought over. There is plenty of opportunity for growth that is both profitable and rapid. In blue oceans, competition is irrelevant because the rules of the game are waiting to be set. Blue Ocean is an analogy to describe the wider, deeper potential of market space that is not yet explored.

Eight Key points of Blue Ocean Strategy:

i. It's grounded in data

Blue ocean strategy is founded on a decade-long study of more than 150 strategic moves spanning more than 30 industries over 100 years.

ii. It pursues differentiation and low cost

Blue ocean strategy is based on the simultaneous pursuit of differentiation and low cost. It is an 'and-and,' not an 'either-or' strategy.

iii. It creates uncontested market space

Blue ocean strategy doesn't aim to out-perform the competition. It aims to make the competition irrelevant by recreating industry limits.

iv. It empowers us through tools and frameworks

Blue Ocean Strategy offers systematic tools and frameworks to break away from the competition and create a blue ocean of uncontested market space.

v. It provides a step-by-step process

It provides a step by step process i.e. from assessing the current state of play in an industry to exploring the six paths to new market space and to understand how to convert non-customers into customers. Blue ocean strategy provides a clear four-step process to construct the to-be blue ocean strategy.

vi. It maximizes opportunity while minimizing risk

The blue ocean idea index allows us to test the commercial feasibility of our ideas and shows us how to refine our ideas to maximize our upside while curtailing the downside risk.

vii. It builds execution into strategy

The process and tools are comprehensive, easy to understand and communicate, and visual – all of which makes the process non-intimidating and an effective path to building execution into strategy and the collective wisdom of a company.

viii. It shows us how to create a win-win outcome

As an integrated approach to strategy, blue ocean strategy shows how to align the three strategy propositions – value, profit, and people – to ensure your organization is aligned around your new strategy and that it creates a win for buyers, the company, and for employees and stakeholder.

Blue Ocean vs. Red Ocean

- Kim and Mauborgne argue that while traditional competition-based strategies (red ocean strategies) are necessary, they are not sufficient to sustain high performance. Companies need to go beyond competing. To seize new profit and growth opportunities they also need to create blue oceans. The authors argue that competition based strategies assume that an industry's structural conditions are given and that firms are forced to compete within them, an assumption based on what academics call the structuralist view, or environmental determinism.
- To sustain themselves in the marketplace, practitioners of red ocean strategy focus on building advantages over the competition, usually by assessing what competitors do and striving to do it better. Here, grabbing a bigger share of the market is seen as a zero-sum game in which one company's gain is achieved at another company's loss. Hence, competition, the supply side of the equation, becomes the defining variable of strategy. Here, cost and value are seen as trade-offs and a firm chooses a distinctive cost or differentiation position. Because the total profit level of the industry is also determined by structural factors, firms principally seek to capture and redistribute wealth instead of creating wealth. They focus on dividing up the red ocean, where growth is increasingly limited. Blue ocean strategy, on the other hand, is based on the view that market boundaries and industry structure are not given and can be reconstructed by the actions and beliefs of industry players. This is what the authors call *the reconstructions view*. Assuming that structure and market boundaries exist only in managers' minds, practitioners who hold this view do not let existing market structures limit their thinking. To them, extra demand is out there, largely untapped. The crux of the problem is how to create it. This, in turn,

requires a shift of attention from supply to demand, from a focus on competing to a focus on *value innovation* – that is, the creation of innovative value to unlock new demand. This is achieved via the simultaneous pursuit of differentiation and low-cost. As market structure is changed by breaking the value/cost tradeoff, so are the rules of the game. Competition in the old game is therefore rendered irrelevant. By expanding the demand side of the economy, new wealth is created. Such a strategy therefore allows firms to largely play a non-zero-sum game, with high payoff possibilities.

- Red Ocean companies try to outperform their rivals to grab a greater share of existing demand. As the market space gets crowded, prospects for profits and growth reduce. Products become commodities and cut throat competition turns the ocean bloody red. Blue Ocean companies, in contrast, access untapped market space and create demand, and so they have the opportunity for highly profitable growth. In Blue Oceans, competition is irrelevant. Yes, imitators arise, but experience shows there is a wide window of opportunity to stay ahead of imitators.
- What consistently separates winners from losers in creating Blue Oceans is their approach to strategy. Creators of blue oceans do not use the competition as their benchmark, but follow a different strategic logic that we call *value innovation*. Instead of focusing on beating the competition, make them irrelevant by simultaneously creating a leap in value for buyers and your company, thereby opening up new and uncontested market space. The comparison between Blue Ocean and Red Ocean Strategies is furnished in Table 1.

Table 1: Comparison Between Blue Ocean and Red Ocean Strategies

Blue Ocean Strategy	Red Ocean Strategy
Create uncontested market space	Compete in existing market space
Make the competition irrelevant	Beat the competition
Create and capture new demand	Exploit existing demand
Break the value-cost trade-off	Make the value-cost trade-off
Align the whole system of a firm's activities in pursuit of differentiation low cost	Align the whole system of a firm's activities with its strategic choice of and differentiation or low cost

Blue Ocean Strategy and Porter's Five Forces

The rapid pace of innovation and change in recent years has led scholars and executives to search for an approach to strategy that is more dynamic than Harvard Professor Michael Porter's classic "five forces." One of the most successful efforts to do so is the book "Blue Ocean Strategy," by W. Chan Kim and Renee Mauborgne.

While avoiding use of Mr. Porter's name, Mr. Kim and Ms. Mauborgne nevertheless attack him head on, arguing that

- The "five forces" analysis is a formula for remaining in "red oceans," where the sharks compete mercilessly for the action.
- The key to exceptional business success, they say, is to redefine the terms of competition and move into the "blue ocean," where you have the water to yourself.
- The goal of these strategies is not to beat the competition, but to make the competition irrelevant.
- Among the examples they cite is Cirque du Soleil, the Canadian company that redefined the dynamics of a declining circus industry in the 1980s. Under conventional strategy analysis, the circus industry was a loser. Star performers had "supplier power" over the company. Alternative forms of entertainment, from sporting events to

home entertainment systems, were relatively inexpensive and on the rise. Moreover, animal rights groups were putting increased pressure on circuses for their treatment of animals. Cirque du Soleil eliminated the animals and reduced the importance of individual stars. It created a new form of entertainment that combined dance, music and athletic skill to appeal to an upscale adult audience that had abandoned the traditional circus.

- Instead of “five forces”, Mr. Kim and Ms. Mauborgne talk about “four actions” that can help you create a blue ocean strategy. The actions are found by answering these questions:
 - a. **Which of the factors that the industry takes for granted should be eliminated?**
In the case of Cirque du Soleil that included animals, star performers, and the three separate rings.
 - b. **Which factors should be reduced well below the industry's standard?**
Cirque du Soleil reduced much of the thrill and danger associated with conventional circuses.
 - c. **Which factors should be raised well above the industry's standard?**
Cirque du Soleil increased the uniqueness of the venue by developing its own tents, rather than performing within the confines of existing venues.
 - d. **Which factors should be created that the industry has never offered?**
Cirque du Soleil introduced dramatic themes, artistic music and dance, and a more upscale, refined environment.
- Mr. Kim and Ms. Mauborgne argue that businesses should focus less on their competitors and more on alternatives; they also should focus less on their customers, and more on non-customers, or potential new customers.

Blue Ocean Strategy and Value Innovation

- The cornerstone of blue ocean strategy is “value innovation”, a concept originally outlined in Kim & Mauborgne's 1997 article “Value Innovation - The Strategic Logic of High Growth”. Value innovation is the simultaneous pursuit of differentiation and low cost, creating value for the buyer, the company, and its employees, thereby opening up new and uncontested market space. The aim of value innovation, as articulated in the article, is not to compete, but to make the competition irrelevant by changing the playing field of strategy. The strategic move must raise and create value for the market, while simultaneously reducing or eliminating features or services that are less valued by the current or future market. The Four Actions Framework is used to help create value innovation and break the value-cost trade-off.
- Value innovation challenges Michael Porter's idea that successful businesses are either low-cost providers or niche-players. Instead, blue ocean strategy proposes finding value that crosses conventional market segmentation and offering value *and* lower cost. Educator Charles W. L. Hill proposed a similar idea in 1988 and claimed that Porter's model was flawed because differentiation can be a means for firms to achieve low cost. He proposed that a combination of differentiation and low cost might be necessary for firms to achieve a sustainable competitive advantage.
- Many others have proposed similar strategies. For example, Swedish educators Jonas Ridderstråle and Kjell Nordström in their 1999 book *Funky Business* follow a similar line of reasoning. For example, “competing factors” in blue ocean strategy are similar to the definition of “finite and infinite dimensions” in *Funky Business*. Just as blue ocean strategy claims that a red ocean strategy does not guarantee success, *Funky Business* explained that “Competitive Strategy is the route to nowhere”. *Funky Business* argues that firms need to create “sensational strategies”. Just like blue ocean strategy, a sensational strategy is about “playing a different game” according to Ridderstråle and Nordström. Ridderstråle and Nordström also claim that the aim of companies is to create temporary monopolies.

- Kim and Mauborgne explained that the aim of companies is to create blue oceans that will eventually turn red. This is the same idea expressed in the form of an analogy. Ridderstråle and Nordström also claimed in 1999 that "in the slow-growth 1990s overcapacity is the norm in most businesses". Kim and Mauborgne claim that blue ocean strategy makes sense in a world where supply exceeds demand.

Examples of businesses using blue ocean strategy concepts:

- **China Mobile:** China Mobile CEO Wang Jianzhou talked about China's hinterland as a classic "blue-ocean market," where the company is casting its net widely without worrying about getting tangled up with the nets of rivals.
- **Pitney Bowes:** Michael Critelli, the departing CEO of Pitney Bowes, explained how Pitney Bowes created the Advanced Concept & Technology Group (ACTG), a unit responsible for identifying and developing new products outside. Critelli cited ACTG's development of a machine, which enables people to design and print their own postage from their desktops, as an example of a blue ocean strategic move.
- **Starwood:** One group which has been exploring blue ocean thinking for the past three years is Starwood Hotels and Resorts. In an interview to INSEAD Knowledge, Robyn Pratt, Vice President, Six Sigma and Operational Innovation talks about how they are taking a step-by-step approach to implementing the concept.
- **Wii:** Rather than releasing a more technologically advanced video game console with more features as in previous generations, Nintendo released a console with innovative controls made to attract populations that are typically excluded from the target demographic for video games, such as the elderly.

Blue Ocean Strategy: Indian Examples

- **Naukri.com**, which was founded by Sanjeev Bikhchandani. Considering the platform and time of birth of Naukri, Mr. Sanjeev had many other options to do or start-up with and enter into the competition world. But Naukri was a way different stuff. Naukri.com was found on 1997 – days which internet wasn't that popular in India. Naukri.com entered the uncontested market space with a different business strategy of that time and we all know the status now.
- **Subhiksha**, the rapidly grown retail chain in South India (may be India) founded by R Subramaniam. Subhiksha was founded during the days which it was difficult to find all the stuffs we require at a single place! With a different kind of thought and execution Subhiksha grew with 1600 outlets selling groceries, fruits, vegetables, medicines and mobile phones etc. Even though everything winded up in 2009, still Subhiksha is known for its startup and glory!
- **Varkeys Supermarket**, from the God's own Country Kerala. The Varkeys Supermarket is the first and leading supermarket chain in Kerala. The stores and its concepts have played a vital role in revolutionizing the tastes & shopping patterns of the people of Kerala. Providing all the needs of a household under one roof, it has made its mark as a "**single stop shop**" for its customers.
- **TATA Motors:** In their recent product, the "Nano Car", they have adopted combination of differentiation and low cost as stated in blue ocean strategy. It is the outcome of combining value innovation and playing a different game.

The Illustrated Example of Murugappa Group – How a Blue Ocean strategy helped the Murugappa group:

The Rs. 22,000-crore Murugappa Group made its choice a few years ago: To swim in peace and grow. Whether it is making fertilizers or cycles, it has formulated a business strategy that beats the competition not by outdoing them but by making them irrelevant.

Group's Executive Vice-Chairman A. Vellayan as the head of strategy for the group then, he decided to put some of these concepts into practice. He wanted to create a Blue Ocean for Murugappa group.

The fertilizer business is a tough one — subsidy-driven, no reward for innovation and no incentive to invest in technology. He decided to implement the concept in Coromandel International after discussions with the business heads concerned.

The company –

- Created a retail chain of 500 full-service centres that sell products and services to farmers;
- Diversified its product base to include production of 250,000 tonnes of compost from municipal waste; and
- Set up two soluble fertilizer units, a non-subsidy source of revenue.

In the process, the company has grown closer to the farmers. It has also expanded globally, with a phosphoric acid business and consultancy.

At the time the concept was kicked off within the Group, the fertilizer company's shares of Rs. 10 were trading at Rs. 40; today its Re 1 shares are traded at Rs. 240. Over the next three years it aimed to get less than half its revenue, about 40 per cent, from fertilizers, while the new areas will contribute over 60 per cent. A significant target, considering that in 2011-12 fertilizer sales accounted for 90 per cent of Coromandel International's revenue of over Rs. 9,800 crore. By 2015, the company wanted to step up its compost production to one million tonnes. The soluble fertilizer business is a 60,000-tonne market with 90 per cent being imported.

A similar thought process has gone into the cycle business which, traditionally, was a fragmented sector. The Group's BSA Go Stores have changed the cycle-buying experience with their modern ambience. The diversification into sports goods and the fitness segment also helped the group.

In financial services, Chola Asset Finance has targeted speed of service as a differentiator. It has nearly 1,000 full-service branches in Tier III and IV towns to be close to its customers.

Criticism of Blue Ocean Strategy

- While Kim and Mauborgne propose approaches to finding uncontested market space, at the present there are few success stories of companies that applied their theories in advance.
- A critical question is whether this book and its related ideas are *descriptive* rather than *prescriptive*. The authors present many examples of successful innovations, and then explain from their Blue Ocean perspective – essentially interpreting success through their lenses.
- The research process followed by the authors has been criticized on several grounds. Criticisms include claims that no control group was used, that there is no way to know how many companies using a blue ocean strategy failed and the theory is thus unfalsifiable, that a deductive process was not followed, and that the examples in the book were selected to "tell a winning story."
- Brand and communication are taken for granted and do not represent a key for success. Kim and Mauborgne take the marketing of a value innovation as a given, assuming the marketing success will come as a matter of course.
- The blue ocean/red ocean analogy is a powerful and memorable metaphor, which is responsible for its popularity. This metaphor can be powerful enough to stimulate people to action. However, the concepts behind the Blue Ocean Strategy (such as the competing factors, the consumer cycle, non-customers, etc.) are not new. Many of these tools are also used by Six Sigma practitioners and proposed by other management theorists.
- Many of the book's key concepts were previously covered in "*Competing For The Future*" by Gary Hamel and C.K. Prahalad, which was published in 1996. The authors encouraged managers to stake out new marketing space, which they termed *white space*, in order to "create and dominate emerging opportunities."

Conclusion

- The four key hurdles comprise the *cognitive, resource, motivational* and *political* hurdles that prevent people involved in strategy execution from understanding the need to break from status quo, finding the resources to implement the new strategic shift, keeping your people committed to implementing the new strategy, and from overcoming the powerful vested interests that may block the change.
- The Blue Ocean Strategy draws attention towards the correlation of success stories across industries and the formulation of strategies that provide a solid base to create unconventional success. Unlike the "Red Ocean Strategy", the conventional approach to business of beating competition derived from the military organization, the "blue ocean strategy" tries to align innovation with utility, price and cost positions.
- The Blue Ocean Strategy mocks at the phenomena of conventional choice between product/service differentiation and lower cost, but rather suggests that both differentiation and lower costs are achievable simultaneously.
- The Blue Ocean Strategy justifies with original and practical ideas that neither the company nor the industry is the best unit of analysis of profitable growth; rather it is the strategic move that creates "Blue Ocean" and sustained high performance.
- Value innovation is necessarily the alignment of innovation with utility, price and cost positions. This creates uncontested market space and makes competition irrelevant.
- The strategy deals with the issues of how to develop and align the three strategy propositions of value, profit and people, how to sustain and renew blue ocean strategy at both the business level and the corporate level, and how to avoid red ocean traps that keep organizations anchored in existing market space even as they attempt to create new market space.
- Blue Ocean Strategy challenges everything you thought you knew about strategic success and provides a systematic approach to making the competition irrelevant.

References

1. Chan K.W., Mauborgne R (2005), "Blue Ocean strategy", Harvard Business Review Press.
2. Chan K.W., Mauborgne R.(2015), "Blue Ocean strategy", Expanded Edition, Harvard Business Review Press.
3. Hamel G., Prahalad C.K (1996), "Competing for the future", Harvard Business School Press.
4. Murray A., (2010) "The Wall Street Journal Guide to Management" Harper Business.
5. Porter Michael E (1998), "Competitive Strategy: Techniques for Analyzing Industries and Competitors" The Free Press.

Web References

1. <http://guides.wsj.com/management/strategy/what-is-blue-ocean-strategy/>
2. <http://www.blueoceanstrategy.in/en/about-bos/red-vs-blue>
3. <https://bizspark.wordpress.com/tag/indian-companies-with-blue-ocean-strategy/>
4. <http://www.thehindubusinessline.com/companies/how-a-blue-ocean-strategy-helped-the-murugappa-group/article4341023.ece>
5. <https://hbr.org/2004/10/blue-ocean-strategy>
6. <https://hbr.org/2015/03/red-ocean-traps>

Post Purchase Customer Satisfaction on the Different Car Batteries A Study of Warangal

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Abstract

The present research study measures the post purchase customer satisfaction on the different car batteries. Different batteries companies have entered into the market to satisfy the needs of the customers. From them, this study is mainly based on Car batteries industries limited to know the satisfaction of customers. The study surveyed 100 users' opinions. On the basis of findings it is evident with the most of the respondents opined that they are moderately satisfied of getting the post purchases services on the car batteries.

Keywords: Customer Satisfaction, Services, Car Batteries, India

Introduction

A highly satisfied customer stays brand loyal for longer time & buys more products as the company introduces new products and upgrades existing products. A brand loyal customer talks favorably about the company and its products, and costs less to serve than new customers because transactions are routine. Customer satisfaction depends on a product's perceived performance developing value to a beneficiary's expectation. If the product performance falls short of the beneficiaries expectations the beneficiary dissatisfied if the performance match the expected beneficiary satisfied. If the performance exceeds expectations the beneficiary is delighted. Outstanding marketing companies go out of their way to keep their customers satisfied. Customer's satisfaction makes repeat access and they tell others about their good experience with the product the key is to match customer's expectations with companies' performance. Smart companies aim to delight customer by providing only what they can deliver than delivering more than they promise. When it comes in the field of service sector like telecommunication services, customer satisfaction is the core indicator to achieve success. If customers are satisfied with the given services to them they can continue the consumption of that company otherwise they immediately switch to alternate service provider to satisfy their desires.

In modern times, the business organizations are adopting new techniques and methods for the growth of the business. The organizations are giving better services to their customers to face challenges posed by the competitors. For every business, it is not only important to retain the present customers but also to attract the new customers. So there is a need to ascertain the customers use regarding the services provided by key organizations. This survey is done with the own emphasis upon customer satisfaction for car batteries after sale service in the city of Warangal. This survey is done by the means of the questionnaire which helps to know the satisfaction of customers about car batteries after sale service.

Review of Literature

Customer satisfaction is defined as a customer's overall evaluation of the performance of an offering to date (Johnson and Fornell 1991). This overall satisfaction has a strong positive effect on customer loyalty intentions across a wide range of product and service categories, including telecommunications services (Fornell 1992; Fornell et al. 1996). As an overall evaluation that is built up over time, satisfaction typically mediates the effects of product quality, service quality, and price or payment equity on loyalty (Bolton and Lemon 1999; Fornell et al. 1996). It also contains a significant affective component, which is created through repeated product or service usage (Oliver 1999). In a service context, overall satisfaction is similar to overall evaluations of service quality. Compared with more episode-based or transaction-specific measures of performance, overall evaluations are more likely to influence the customer behaviors that help a firm, such as positive word of mouth and repurchase (Boulding et al. 1993). Historically, satisfaction has been used to explain loyalty as behavioral intentions (e.g., the likelihood of repurchasing and recommending). However, Verhoef (2003) argues that longitudinal data that combine survey measures with subsequent behavior should be used to establish a causal

relationship between perceptions and behavior. For example, Bolton (1998) finds a positive effect of overall customer satisfaction on the duration of the relationship for cellular phone customers, and Bolton and Lemon (1999) show a positive effect of overall satisfaction on customer usage of telecommunications subscription services. In a large-scale study of automotive customers, Mittal and Kamakura (2001) show a strong, albeit nonlinear, effect of customer satisfaction on repurchase behavior, such that the functional form relating satisfaction to repurchase is marginally increasing. They also find large differences in the satisfaction–retention relationship across customer characteristics. On the basis of these studies, we expect customer satisfaction to have a significant influence on customer retention that varies across customers.

Objectives of The Study

The objectives of the study are as follows.

1. To study the “Customer Satisfaction” amongst the users of “Car Batteries”.
2. To assess the after sale service provided by the dealer.
3. To make suggestions for improvement of their products & services from the customer's point of view based on this research to fulfill customer's needs.

Need and Importance of The Study

Different batteries companies have entered into the market to satisfy the needs of the customers. The customers are facing different problems and those problems they are not in a position to report directly to dealers and to the company. So, to know and bring before the company this survey has been carried out in order to determine various problems faced by the customers to meet their concern needs.

Research Methodology

Primary data is collected by administering a questionnaire to the chosen sample. Secondary data is collected from organization Manuals, Journals, News papers, Books, and available. For the purpose of the study a sample of 100 respondents was taken. The study is conducted in the Warangal District. Stratified sampling technique is used to evaluate the data. Finally, the collected data, tabulated, evaluated, analysed and interpreted.

Limitations of The Study

1. The survey is conducted in Warangal only.
2. As the sample size is 100, the data may not be accurate.
3. As the sample is insignificant to the total population.

Data Analysis and Interpretation

Table 1. Awareness of various Brands of Car Batteries

S.No	Options	No. of Respondents	% of Respondents
1	Yes	76	76
2	No	24	24
Total		100	100

Source: Compiled from questionnaire

Interpretation:

According to the revealed data, 76 per cent of the respondents are aware of the various brands of car batteries and 24 per cent of the respondents are unaware of all the forms of car batteries. The study expressed that the majority of

respondents are aware only about the well known brands available in the market. The unaware respondents stated that due to lack of advertising and promotions of the product they are unaware about some brands.

Table 2. Factors Motivating the Buying Behaviour of the Customers

S.No	Options	No. of Respondents	% of Respondents
1	Price	08	08
2	Brand name	28	28
3	Reliability	32	32
4	Service offered	20	20
5	Warrantee	12	12
Total		100	100

Source: Compiled from questionnaire

Interpretation:

According to data, it is evident that 8 per cent of the customers are purchasing the products according to the Price while 28 per cent of the respondents were motivated by the Brand Name whereas 32 per cent of the respondents are purchasing because of the reliability while 20 per cent of the customers are motivated by services offered, and 12 per cent of the respondents are purchasing according to the warranty. The mix response of the respondents shows that they are not keen in only one aspect (like price or warrantee) to purchase the car batteries. They look several features to purchase it.

Table 3. Reliability of the Product and Services offered

S.No	Options	No. of Respondents	% of Respondents
1	Excellent	30	30
2	Good	57	57
3	Fair	03	03
4	Bad	10	10
Total	100	100	

Source: Compiled from questionnaire

Interpretation:

From the available data it is observed that 30 per cent of the respondents viewed that the reliability of the car batteries are excellent while 67 per cent of them expressed it good. Whereas only 3 per cent of the respondents viewed it is a fair. However, 10 per cent of the respondents are unhappy with the reliability of the product and services which are being offered. These respondents may be dissatisfied with the local brands available in the market.

Table 4. Durability of the Product and Services offered

S.No	Options	No. of Respondents	% of Respondents
1	Excellent	30	30
2	Good	55	55
3	Fair	06	06
4	Bad	09	09
Total		100	100

Source: Compiled from questionnaire

Interpretation:

From the above data it is clear that 30 per cent of the respondents viewed that the durability of the car batteries is Excellent. Further, 64 per cent of the respondents viewed that the durability is good and 6 per cent of the respondents said it as a fair. However, only 09 per cent of the respondents have given the negative reply to this question. This may be because Car batteries are specially designed to suit the vehicles requirements making full use of Car's expertise, technological superiority and field experience. The task is not completed as per their opinion.

Table 5. Service Centre's Used by the Customers

S.No	Options	No. of Respondents	% of Respondents
1	Serviced by the authorized dealer	94	94
2	Serviced by local mechanic	06	06
Total		100	100

Source: Compiled from questionnaire

Interpretation:

It is observed that 94 per cent of the users get their battery serviced at authorized service centers while only 6 per cent of them get their battery serviced at local mechanic. This shows the satisfaction level of customers on the services provided by the industries. It is evident by the study that almost all the respondents prefer to use the services of service center for repairs and maintenance.

Table 6. Response of the Personnel at the Service Centers

S.No	Options	No. of Respondents	% of Respondents
1	Excellent	21	21
2	Good	70	70
3	Fair	06	06
4	Bad	03	03
Total		100	100

Source: Compiled from questionnaire

Interpretation:

From the collected data it is evident that 21 per cent of respondents who availed the service from the service centers felt that the response of the personnel was excellent. Whereas 70 per cent of respondents felt that the response was good. Further 6 per cent of them felt that the response was fair. However, only 3 per cent of them felt that the response was bad. From the study it is clear that the personnel of car batteries industries are very devoted in catering to the need of the customers.

Table 7. Maintenance of the Batteries

S.No	Options	No. of Respondents	% of Respondents
1	Service on time	88	88
2	Negligent	12	12
Total		100	100

Source: Compiled from questionnaire

Interpretation:

From the given data it is evident 88 per cent of users got their battery serviced on time as prescribed by the manufacturer while 12 per cent of them were negligent. This negligence may be due to over work load, communication gap, technical defects etc.

Table 8. Perceived Quality of Service

S.No	Options	No. of Respondents	% of Respondents
1	Excellent	15	15
2	Good	82	82
3	Bad	03	03
	Total	100	100

Source: Compiled from questionnaire

Interpretation:

Accordingly 15 per cent of the users perceived that the services provided by the industries are excellent. 82 per cent of the users perceived that the service to be good. However, 3 per cent of the users perceived that service is bad. It indicates that the quality of service is acceptable.

Table 9. Degree of Satisfaction

S.NO	Options	No. of Respondents	% of Respondents
1	Satisfied	88	88
2	Dissatisfied	12	12
	Total	100	100

Source: Compiled from questionnaire

Interpretation:

As per the analysis overwhelming respondents i.e., 88 per cent to the total customers stated that they are satisfied with the product which the product and services offered by the car batteries industries. However, only 12 per cent of the respondents expressed dissonance about the product and services which they have received. They felt that there is a need for further improvement and development.

Recommendations

The following are the recommendations of the study:

1. Customer response is the key element of customer satisfaction. If the customers fail to receive the response from the service centers then it may leads to the dissonance. The management should be strict and prompt while attending to the customer grievances.
2. The quality of the services needs to be improved in terms of reliability and durability of the services offered.
3. Negligence from the dealers, service centers or service providers may create dissatisfaction to the customers. Therefore, customers problems should be considered properly and try to reach to their expectations.
4. The company has to organize frequent service camps for the customers of the replacement market as this brings the customers becoming loyal to the firm.

Conclusion

Customer satisfaction and care has always been the focus of any industry. The service personnel at the service centers of car batteries industries are very dynamic. They are always prepared to offer their services as soon as the customer drops in. They do not keep their customers waiting for long. The prompt service offered by firms through its company network has been the attribute of its service network. Maintenance of the battery as prescribed by the manufacturer is the key to good performance of the battery. So, the companies insist the users to get their battery serviced on time. It is the user who has to ensure maintenance for the efficient performance of his battery.

References

1. Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a continuous Service Provider: The Role of Satisfaction," *Marketing Science*, 17 (Winter), 45–65.
2. Boulding, William, Ajay Kalra, Richard Staelin, and Valarie A. Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, 30 (February), 7–27.
3. Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience," *Journal of Marketing*, 56 (January), 6–21.
4. Johnson, Michael D. and Claes Fornell (1991), "A Framework for Comparing Customer Satisfaction Across Individuals and Product Categories," *Journal of Economic Psychology*, 12 (2), 267–86.
5. Katherine N. Lemon (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction," *Journal of Marketing Research*, 36 (May), 171–86.
6. Miettila, A. and Moller, K. (1990), "Interaction perspective into professional business services: a conceptual analysis", paper presented at the Research Development on International Industrial Marketing and Purchasing, Milan.
7. Mittal, Vikas and Wagner Kamakura (2001), "Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effects of Customer Characteristics," *Journal of Marketing Research*, 38 (February), 131–42
8. Oliver, Richard L. (1999), "Whence Consumer Loyalty?" *Journal of Marketing*, 63 (Special Issue), 33–44.
9. Verhoef, Peter C. (2003), "Understanding the Effect of Customer Relationship Management Efforts on Customer Retention and Customer Share Development," *Journal of Marketing*, 67 (October), 30–45.

Effects of Energy Commodity Price Risk on Firm Value A Case Study of Select Firms from Indian Power Sector

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Abstract

The energy commodity price volatility indicates a vital basis of risk to power sector business enterprises whose principal operations are subjected to direct exposure to thermal coal, crude oil and natural gas price fluctuations. Therefore, energy commodity price risk exploration has drawn considerable interest from academicians, investors, economist, financial analysts and risk management practitioners in recent years as it touches virtually every economic entity—from individuals, to organizations, to the economy. Hence, this paper empirically analyses the influence of energy commodity price risk on firm value of Indian power sector firms. The data has been sourced from PPAC of India, various AGM reports of sample firms, BSE database and analyzed using econometrics techniques with the help of EViews. GARCH analysis exhibits limited influence of energy commodity price risk on firm value of select sample firms. Effects of energy commodity price risk was not uniformly significant across the sample firm's firm value since their principal operations were directly or indirectly influenced by resource procurement practices, ownership pattern, operational diversification and other firm specific qualitative/quantitative factors. The observed outcome of this paper would be valuable to power sector stakeholders who needs to identify the effects of energy commodity price risk before strategizing their future course of activities to protect the top and bottom lines of their firms. Finally, the results are important to our country as power sector has been able to augment the growth of other allied sector dependent on energy.

Keywords: Commodity, power, energy, price-risk, thermal coal, stationary, regression,

Jel code classification: C22, C53, C58, G32

Introduction

During the past decade, energy commodity prices were highly instable exhibiting high volatility which is typically greater than the fluctuations observed in other financial risk factors such as exchange rate and interest rate volatility. According to corporate financial principles, price volatility indicates an important basis of risk to commodity intensive firms since commodity is a vital input or output factor of production process and thus it affects the firm value. The exposure and influence of price volatility has been highly significant to commodity intensive sectors like, oil-gas, power, transportation, metals, tyre, aviation etc. since commodity prices virtually affects their entire value chain.

Commodity price risk management strategies can vary significantly across the sectors based on the quantum of exposure and firm's competitiveness in the market. The strategy has been also greatly determined by the nature of the operations in the value chain. For instance, producers are not focused solely on the price risk of their raw material input price risk; they may also manage their output price risk through active revenue price risk management. Energy commodity consumers, on the other hand, are more likely to be focused on the purchase price variances created by market volatility.

Corporate entities that take a traditional approach to manage commodity price risk are able to address mild volatility but not large or sustained increases or decreases in prices. Traditional approaches in managing energy commodity price risk generally employ a series of risk management activities, including procurement contracts, financial hedging, passing on price increases to customers, and accepting cost increases in an uncoordinated fashion. These approaches result in risk management programs that are often reactive in nature and biased toward market opportunities and short-term tactics, which leads to excessive trading costs and the potential for trading losses.

In the present business environment power sector firms will continue to experience unprecedented price volatility and the business organizations are looking at energy commodity price risk management as an integral part of their strategy to manage costs, maintain competitive advantage and augment the enterprise value so that stakeholder's interest could be protected in the dynamic world. Firms need to manage price risk across the value chain, from trading and supply to distribution and marketing, and employ performance measures that are timely and relevant. To successfully manage the commodity price risk, firms must implement a structured approach that identifies, measures the exposure; quantifies the influence across the corporate value chain.

The existing research work in corporate risk management typically deals with the impact of foreign exchange and/or interest rate risk on firm value. In contrast, modest attention was given on commodity price risk and very few studies have been undertaken to analyze the influence of energy commodity price risk on enterprise value. Generally, commodity prices have been subjected to high fluctuations and therefore they exhibit a significant source of price risk to the power sector firms. On the basis of inadequate experiential research work in corporate risk management with special reference to energy commodity price risk, a broad analysis is needed in order to analyze the effects of commodity prices on individual firms belonging to resource intensive sectors or industries from the Indian context. This article analyzes the use of energy commodity as an essential input factor for corporate principal operation and thus tries to establish the relevance of energy commodities in Indian power sector. The Indian power sector provides a unique perspective from which we can empirically explore the influence of thermal coal, natural gas and crude oil price risk on enterprise value. This paper consists of following sections. Section I starts with introduction; section II & III specifies objectives & hypotheses of the paper respectively. Section IV provides a brief review of relevant literature. Section V discusses the overview of Indian power sector with select player's profile. Section VI represents the methodology and data description. Section VII contains the empirical hypothesis testing, VIII offer findings and section XI concludes the paper.

Objectives

1. To present an overview of Indian power sector
2. To determine the key factors affecting energy commodity price in India
3. To compute the level of energy commodity price exposure on Indian power sector firms
4. To measure the effects of energy commodity price risk on enterprise value of Indian Power sector firms

Hypotheses

- H1₀:** Select key determinants do not affect price volatility of energy commodity in India
H1_a: Select key determinants do affect price volatility of energy commodity in India
H2₀: Select firms of Indian Power sector do not exhibit significant level of energy commodity price exposure
H2_a: Select firms of Indian Power sector do exhibit significant level of energy commodity price exposure
H3₀: There is no influence of energy commodity price volatility on firm value of select firms of Indian Power sector
H3_a: There is an influence of energy commodity price volatility on firm value of select firms of Indian Power sector

Review of Literature

Eduardo Borensztein (1994), devised a new model for commodity price estimation using the macroeconomic determinants considering supply side effects.

Rene M. Stulz and Rohan Williamson (1996) tried to shed a light on past theories of exposure analysis and quantified the exposure using the regression and simulation methods.

G. David Haushalter, Randall A. Heron & Erik Lie (2002) examined the sensitivity of equity values of oil producers to changes in the uncertainty of future oil prices. They conclude that corporate risk management can increase shareholder value by reducing the expected costs of financial distress and under investment

Sohnke M. Bartram (2005), indicate that corporations exhibit net exposures with regard to several commodity prices. Even though commodity prices are highly volatile, commodity price risk is, however, not found to be of greater importance than other financial risks.

Yanbo Jin and Philippe Jorion (2007) showed that hedging activities are recognized by the market, as hedging variables do have an impact on stock price exposure to gold prices.

Narayan P. K. and Sharma S. S. (2011) oil price affects returns of firms differently depending on their sectoral location, lagged effect of oil price on firm returns and oil price affects firm returns differently based on firm size, implying strong evidence of size effects.

Ramos S. B. and Veiga H. (2011) found oil and gas sector in developed countries responds more strongly to oil price changes than in emerging markets.

Serkan Yilmaz Kandir et al (2014), investigated the exchange rate exposure to Turkish energy firms by adding Fama-French three factor model including oil price.

Indrani Hazarika (2015) in her paper analyzed the financial performance of top five oil and gas companies worldwide and revealed that fluctuating oil prices do not significantly impact the profitability, liquidity, efficiency and financial health of top oil and gas companies.

George Dionne and Martin Garand () investigated North American gold mining firms and significant determinants that affect the hedging decision. The outcome of the study suggests that several factors significantly affect the firm value through hedging policy.

Sohnke M. Bartram () says Firm value is influenced in many direct and indirect ways by financial risks, which consist of unexpected changes of foreign exchange rates, interest rates and commodity prices.

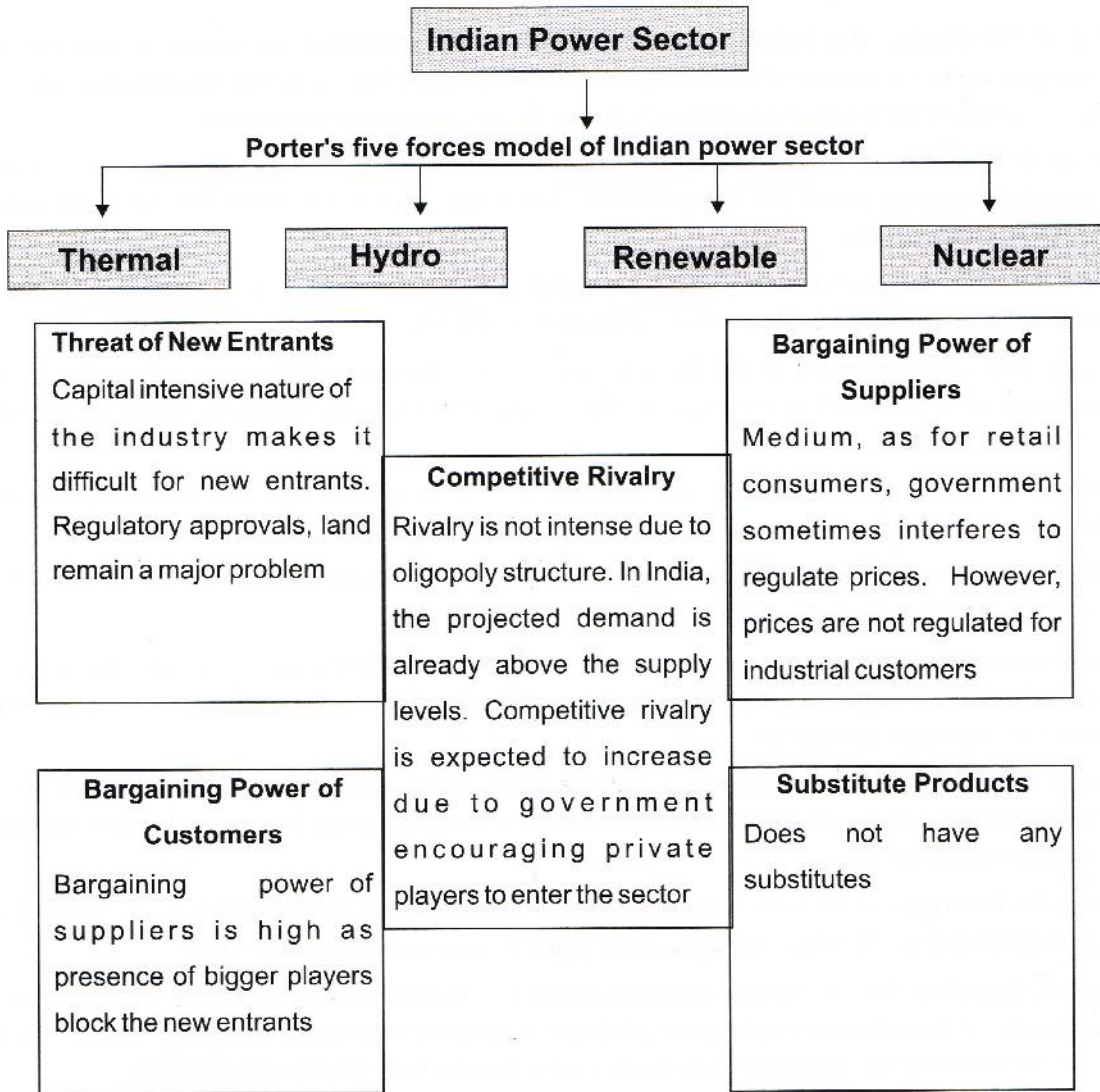
Sripad K. Devalkar, Ravi Anupindi, Amitabh Sinha () considered the dynamic risk management problem for a commodity processor in a multi-period setting and proposes a dynamic risk measure based on the conditional value at risk (CVaR), to model the firm's risk aversion in a time-consistent manner over the planning horizon.

Overview of Indian Power Sector

Power is one of the most critical components of infrastructure; crucial for the economic growth and welfare of nations. India's power sector is one of the most diversified in the world. Sources of power generation range from conventional sources such as coal, lignite, natural gas, oil, hydro and nuclear power to viable non-conventional sources such as wind, solar, and agricultural and domestic waste. Indian power sector is undergoing a significant change that has redefined the industry outlook. Sustained economic growth continues to drive electricity demand in India. The Government of India's focus on attaining 'Power for all' has accelerated capacity addition in the country. At the same time, the competitive intensity is increasing at both the market and supply sides (fuel, logistics, finances, and manpower). Figure 1 provides structure of Indian Power sector, Table 1 provides swot analysis of Indian power sector.

The Government of India has identified power sector as a key sector of focus so as to promote sustained industrial growth. Some initiatives by the Government of India to boost the Indian power sector. The Government of India plans to set up a US\$ 400 million fund, sourced from The World Bank, which would be used to protect renewable energy producers from payment delays by power distribution firms, while at the same time protecting the distribution firms from the shrinking market for conventional grid-connected power, caused by wider adoption of roof-top solar power generation. Table 2 provides profile of sample firms in power sector.

Figure 1: Structure of Indian Power Sector



Source: TechSci Research & India Brand Equity Foundation

Table 1: SWOT Analysis of Indian Power Sector

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> Future growth potential Huge resource based backup Oligopoly market structure 	<ul style="list-style-type: none"> Financially unhealthy electricity board Transmission and distribution challenges Theft of power
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> Technological upgradation Automation and centralized grid system Green energy imitative 	<ul style="list-style-type: none"> Energy commodity price risk Liberal FDI policy Dependence on traditional technology

Table 2: Profile of Sample Firms

Name of the firm	National Thermal Power Corporation	Tata Power	Adani Power
Year of Establishment	1975	1911	1996
Stock Market Listing	BSE and NSE	BSE and NSE	BSE and NSE
Enterprise Value [FY2015-16]	Rs. 188,177.92 crore	Rs. 27,960.36 crore	Rs. 35,235.36 crore
Annual Revenue [FY2015-16]	Rs. 71,770.50 crore	Rs. 8,993.37 crore	Rs. 12,685.59 crore
Net Profit [FY2015-16]	Rs. 10,242.91 crore	Rs. 771.62 crore	Rs. 5.62 crore
Total Assets [FY2015-16]	Rs. 214,619.26 crore	Rs.34,094.92 crore	Rs. 42,045.11 crore
EPS [FY2015-16]	Rs. 12.42	Rs. 2.36	Rs. 0.02
Total Workforce [FY2015-16]	21633	4126	2000
NPM [FY2015-16]	14.52%	9.14%	0.05%
ROA [FY2015-16]	4.77%	2.26%	0.01%
RONW [FY2015-16]	11.53 %	5.31%	0.06%
ROCE [FY2015-16]	5.66 %	2.76%	0.02%

Source: AGM reports 2015-16

Research Methodology

This research paper has used a mixed research design, consisting of exploratory and causal research design, research approach was deductive, research strategy was quantitative to analyze the effects of commodity price risk on enterprise value of select firms. The firms were selected referring to commodity exposure based on probability stratified & non-probability judgmental sampling technique. The following table provide brief summary of research methodology employed in this paper.

Table 3: Research Methodology

Type of Research	Applied; Exploratory and Causal
Research Approach	Deductive and Inferential
Research Strategy	Quantitative
Research Method	Survey
Time Horizon	Longitudinal, Time Series [2006 - 2016]
Sampling Design	Sample Unit Commodity intensive firm Sampling technique Stratified and Judgmental Sample size 03 Commodity 01 Sector 03 Firms
Data Collection Method	Secondary Data
Data Collection Sources	Multi Commodity Exchange, Bombay Stock Exchange, National Stock Exchange, Reserve Bank of India, CEA of India, website of firms, World Bank database, IMF commodity series, IEA commodity database, Indian petroleum & planning cell, UNCTAD database, OPEC commodity series
Models and Tests for Data	Normality Test Jarque-Bera Test Unit Root Test ADF & PPP Tests

	Stationarity Test	KPSS Test
	Cointegration Test	Johansen Test
	Causality Test	Granger Test
	Exposure Test	Market model Test
	GARCH Test	Univariate Test

Data Analysis and Discussion

The data analysis was performed in three broad phases along with necessary sub-phases in order to have better interpretations and inference drawing on the observed results. In the first phase, authors have employed descriptive statistical analysis and time series econometrics analysis on the particular data variables related to energy commodity and firms selected for this study. Second phase deals with the unit root test on select data variables. Finally, third phase contains exposure and effects analysis related to energy commodity price risk and enterprise value of firms using market model regression and GARCH model respectively.

Effects of Key Determinants on Crude Oil Price Risk

According to Louis H. Ederington & et al, 2011 survey, energy information administration reports, OPEC white papers and referring to other several studies, crude oil price variations were not only affected by fundamental forces such as demand and supply but also by other exogenous factors like OPEC production, inventory level, exchange rate fluctuations, technological advancements, number of rigs in operation, growth in industrial production and wholesale price index.

Descriptive Statistical Analysis

The main component of the descriptive statistical analysis, summary statistics have been used to compute the measures of central tendency, measures of variability and dispersion of the given data set. Supplementary testing of data has been done in order to verify the normality assumption of time series data. Table 4 provides descriptive statistics of Crude oil price and its select determinants.

Table 4: Descriptive Statistics of Crude Oil Price and its Select Determinants

Particulars	Co-Price	Cons	IIP	Forex	OPEC-Prod	OPEC-Int	WPI	Rigs
Mean	1.898	4.086	2.112	1.705	4.468	3.431	2.315	3.188
Median	1.916	4.082	2.104	1.687	4.472	3.429	2.293	3.244
Max	2.122	4.242	2.240	1.834	4.511	3.484	2.569	3.304
Min	1.448	3.961	2.000	1.595	4.421	3.407	2.008	2.678
Std. Dev.	0.147	0.057	0.047	0.068	0.023	0.015	0.162	0.133
Skewness	-0.767	0.162	0.368	0.267	-0.317	1.387	0.057	-1.753
Kurtosis	2.946	2.618	2.478	1.822	2.183	5.283	1.644	5.369
J-BTest	11.80	1.253	4.079	8.355	5.352	64.544	9.257	89.602
Prob.	0.000	0.534	0.130	0.015	0.068	0.000	0.009	0.000
Obs.	120	120	120	120	120	120	120	120

Source: data compilation and computation by authors using EViews 7

All the data series have shown a positive mean value justifying the upward trend of time series in which OPEC crude oil production has recorded highest mean value and foreign currency has observed the lowest mean value among

the select variables. Standard deviation being less than one for all select variables which indicate limited variability during the reference period of the study. The measures of dispersion have indicated non-normality of data series that has been confirmed by the Jarque-Bera test.

Unit Root Test

Theory of price behavior in commodity markets indicates that commodity prices are autocorrelated, convergent and stationary series (Dabin Wang and William Tomek, 2007). Hence, to assess the unit root of all series, test was performed at levels and first difference with the insertion of intercept in the test equation. Table 5 provides unit root test of crude oil and its select determinants.

Table 5: Unit root test of crude oil and its select determinants

Variable	ADF Test Statistics	5% Level CV	p-value	H ₀	Unit Root
Co-Price	-2.1734		0.2171	Accept	Yes
Consumption	1.5389		0.9993	Accept	Yes
IIP	0.6216		0.9898	Accept	Yes
Forex	-0.3938		0.9055	Accept	Yes
OPEC-Prod	-1.2691		0.6420	Accept	Yes
OPEC-Int	-0.2387		0.9291	Accept	Yes
WPI	-1.4172		0.5717	Accept	Yes
Rigs	-0.5869		0.8682	Accept	Yes
D(Co-Price)	-6.6490	-2.886	0.000	Reject	No
D(Consump.)	-3.1897		0.0237	Reject	No
D(IIP)	-4.2568		0.0009	Reject	No
D(Forex)	-7.861		0.000	Reject	No
D(OPEC-Prod)	-6.3750		0.000	Reject	No
D(OPEC-Int)	-13.8083		0.000	Reject	No
D(WPI)	-10.4784		0.000	Reject	No
DD(Rigs)	-3.8745		0.003	Reject	No

Source: data compilation and computation by authors using EViews 7

Since this study has used ten-year data and during that period data series might have witnessed structural breaks/changes, long memory, effects of exogenous factors so it is necessary to employ ADF unit root test. During the reference period of the study, crude oil prices were subjected to 2008 Global economic crisis, commodity super cycle bust in 2012 and unrest in MENA region etc. It is inferred that data series have recorded low variability patterns followed by small variations over an extended time horizon and large fluctuations followed by high variability for a prolonged period. The first difference form of data series justifies absence of unit root and facilitate rejection of null hypothesis as p-value is significant as per test result for all select variables.

Granger Causality Test

Crude oil price risk was kept as dependent variable and other select variables were used as the causal factor to ascertain the significant effects. Table 6 provides Granger causality test for Null Hypothesis

Table 6: Granger Causality Test

Null Hypothesis	F-Stat	Prob.
CONS does not Granger Cause CODOL	1.45632	0.1762
FX does not Granger Cause CODOL	1.20046	0.3044
IIP does not Granger Cause CODOL	0.90088	0.5280
OPECINVENT does not Granger Cause CODOL	1.64394	0.1144
OPECPROD does not Granger Cause CODOL	1.93067	0.0570
RIGS does not Granger Cause CODOL	0.89355	0.5343
WPI does not Granger Cause CODOL	0.62496	0.7730

Source: data compilation and computation by authors using EViews 7

Rising consumption of crude oil is the fundamental factor that demonstrates the growth and expansion of economic activities of a country and India being the second fastest growing economy in the world in terms of GDP it supports the demand side effects on crude oil prices. In the past decade India have recorded a CAGR of 9% in crude oil consumption and was ranked the third highest consumer worldwide.

India's balance of trade statistics indicates that crude oil products alone accounted for around 80% of import bill and therefore the Dollar rate has a direct impact on crude oil prices.

Crude oil is a major energy source for manufacturing industries in India and to maintain steady industrial production cycle running energy plays vital role. Referring to the IIP statistics, it is evidenced that our country has been demonstrating healthy growth rate and this corroborates demand side pressure on crude oil prices.

OPEC controls majority of crude oil reserves and production activities so any decision by OPEC member would affect the crude oil prices directly.

The number of rigs in operation for crude oil exploration indicates the supply side adjustments made by the oil producing members and will have a corrective effect on price. If more rigs are in operation, more supply and oil prices may cool off in short-run.

Wholesale Price Index shows the overall status of economy and level of price changes in goods. Crude oil goes in to almost all aspects of economic activities and hence influences growth momentum both in short and long terms.

GARCH TEST

General Autoregressive Conditional Heteroscedasticity test procedure evaluates the variance of a data series which is sum total of three components. Long-term average variance, variance in the immediate past and returns in the immediate past. Table 7 provides Grarch Test for various determinants.

Table 7: GARCH Test

Determinants	z-Stat	Prob.	R ²	ARCH-LM	Q-Stat	Normality
Consumption	12.08	0.000	-0.52	0.3122	Insignificant	Yes
Forex	30.02	0.000	-0.47	0.0557	Insignificant	Yes
IP	10.14	0.000	-0.44	0.5228	Insignificant	Yes
OPEC Invent.	-10.50	0.000	0.36	0.5374	Insignificant	Yes
OPEC Prod.	10.75	0.000	-0.61	0.0087	Significant	No
Rigs in use	29.62	0.000	0.32	0.0068	Significant	No
WPI	41.38	0.000	0.48	0.1532	Insignificant	Yes

Source: data compilation and computation by authors using EViews 7

The test statistics revealed a highly significant result and thus supports the rejection of null hypothesis, "Select key determinants do not affect price volatility of energy commodity in India" and non-rejection of alternative hypothesis, "Select key determinants do affect price volatility of energy commodity in India".

The diagnostic tests were conducted in order to justify the model correctness for the variables under study and it was found that both ARCH-LM and Q-Stat were highly insignificant. J-B test disclosed residual normality for majority of the key determinants with the exception of OPEC production and rigs in operations. This insignificant result supports the classic econometric model building principles and hence the test was correct to explain the influence of select determinants on crude oil price risk. Table 8 provides descriptive statistical analysis of natural gas determinants.

Table 8: Descriptive Statistical Analysis of Natural Gas determinants

Particulars	NGPRICE	COPRICE	FOREX	IIP	US CONSMPI	WPI	OPECINVT
Mean	2.3388	1.8989	1.7055	2.1122	3.3044	2.3252	3.4317
Median	2.3339	1.9168	1.6870	2.1043	3.2792	2.2939	3.4291
Maximum	2.7347	2.1221	1.8340	2.2407	3.5057	2.5698	3.4841
Minimum	2.0047	1.4483	1.5952	2.0000	3.1643	2.0081	3.4072
Std. Dev.	0.1397	0.1476	0.0685	0.0470	0.0861	0.1620	0.0154
Skewness	0.2404	-0.7677	0.2671	0.3689	0.4970	0.0575	1.3870
Kurtosis	2.8893	2.9465	1.8228	2.4789	2.1646	1.6442	5.2832
Jarque-Bera	1.21751	1.8040	8.3554	4.0798	8.4311	9.25716	4.5449
Probability	0.5440	0.0000	0.0153	0.1300	0.0147	0.0097	0.0000
Observations	120	120	120	120	120	120	120

Source: data compilation and computation by research scholar using EViews 7

Standard deviation being less than one for all select variables which indicate limited variability during the reference period of the study. OPEC crude oil inventory has expressed kurtosis value greater than 3 indicating leptokurtic nature with heavy peak tails. The measures of dispersion have indicated non-normality of data series that has been confirmed by the Jarque-Bera test. Table 9 provides unit root test - ADF test for natural gas determinants.

Table 9: Unit Root Test - ADF test for natural gas determinants

Variable	ADF Test Statistics	5% Level CV	p-value	H0	Unit Root
NGas-Price	-1.782	-2.886	0.387	Accept	Yes
Co-Price	-1.506		0.526		
Forex	0.137		0.967		
OPEC-Int	-0.2387		0.9291		
IIP	0.621		0.989		
US Cons.	-0.548		0.876		
WPI	-1.417		0.571		
D(NGas-Price)	-10.109		0.000	Reject	No
D(Co-Price)	-6.6490		0.000		
D(Forex)	-7.832		0.000		
D(OPEC-Int)	-13.808		0.000		
D(IIP)	-4.256		0.000		
D(US Cons.)	-5.898		0.000		
D(WPI)	-10.478		0.000		

Source: data compilation and computation by research scholar using EViews 7

It is inferred that data series have recorded low variability patterns followed by small variations over an extended time horizon and large fluctuations followed by high variability for a prolonged period. The first difference form of data series justifies absence of unit root and facilitates rejection of null hypothesis as p-value is significant in both the tests for all selected variables. Table 10 provides Granger test for Natural gas determinants.

Table 10: Granger test for Natural Gas Determinants

Particular	F-Stat	Prob.
CODOL does not Granger Cause NGPRICE	2.32244	0.0613
FX does not Granger Cause NGPRICE	1.23271	0.3014
IIP does not Granger Cause NGPRICE	0.51498	0.7249
OPECINVENT does not Granger Cause NGPRICE	1.86423	0.1220
USCONS does not Granger Cause NGPRICE	0.75284	0.5583
WPI does not Granger Cause NGPRICE	0.41550	0.7971

Source: data compilation and computation by research scholar using EViews 7

Crude oil and natural gas are substitutes to each other and both the commodities are major inputs of energy generation. Therefore, crude oil and natural gas prices have shown bi-directional influence on each other.

Natural gas is a major source for power generation and manufacturing of fertilizers in India. The growth in the power generation and fertilizer production has illustrated an upward trend over the past decade and thus justified the effects of industrial production of natural gas price volatility. OPEC is the main energy cartel in the world and any action taken by it on the production front would have a direct effect on the energy commodity prices both in the short run and long run worldwide. Table 11 provides GARCH test for Natural Gas determinants.

Table 11: GARCH test for Natural Gas Determinants

Determinants	z-Stat	Prob.	R2	ARCH-LM	Q-Stat	Normality
CO-PRICE	1.370	0.170	-0.17	0.373	Insignificant	No
FOREX	-7.35	0.000	0.15	0.177	Insignificant	No
IIP	-5.432	0.000	0.10	0.298	Insignificant	No
OPECINVT	-17.19	0.000	0.29	0.531	Insignificant	Yes
US-CONS	-1.041	0.297	-0.14	0.366	Insignificant	No
WPI	-11.54	0.000	0.05	0.126	Insignificant	No

Source: data compilation and computation by research scholar using EViews 7

The test statistics revealed a highly significant result except for crude oil & US gas consumption and hence supports the rejection of null hypothesis, "Select key determinants do not affect price volatility of energy commodity in India" and non-rejection of alternative hypothesis, "Select key determinants do affect price volatility of energy commodity in India". The diagnostic tests were accompanied in order to validate the model correctness for the variables under study and it was found that both ARCH-LM and Q-Stat were highly insignificant. Table 12 provides descriptive statistics for Thermal Coal determinants.

Table 12: Descriptive Statistical for Thermal Coal Determinants

Particulars	COALPRICE	OILPRICE	NGPRICE	WPICOAL	IPELE	FX
Mean	3.639	1.89	4.119	2.218	2.158	1.705
Std. Dev.	0.128	0.147	0.141	0.082	0.073	0.068
Maximum	3.917	2.122	4.378	2.322	2.304	1.834
Minimum	3.331	1.448	3.807	2.070	2.025	1.595
Skewness	-0.545	-0.767	-0.070	-0.656	0.139	0.267
Kurtosis	2.702	2.94	1.930	2.168	1.861	1.822
Jarque-Bera	6.386	11.80	5.819	12.069	6.871	8.355
Probability	0.041	0.002	0.054	0.002	0.032	0.015
No. of Obs.	120	120	120	120	120	120

Source: data compilation and computation by research scholar using EViews 7

All the data series have shown a positive mean value vindicating the upward trend of time series in which natural gas has observed the highest mean value and foreign currency has observed the lowest mean value among the select variables. All of the select data series have observed the skewness values less than one and indicate the overall absence of symmetric distribution. The measures of dispersion have indicated non-normality of data series that has been confirmed by the Jarque-Bera test. Table 13 provides unit root test ADF test for thermal coal determinants.

Table 13: Unit Root test - ADF test for Thermal Coal Determinants

Variable	ADF Test Statistics	5% Level CV	p-value	H0	Unit Root
COALPRICE	-2.903		0.048	Reject	No
OILPRICE	-2.173		0.217	Accept	Yes
NGPRICE	-1.739		0.408	Accept	Yes
WPICOAL	-1.696		0.430	Accept	Yes
IPELE	0.947		0.995	Accept	Yes
FX	-0.393	-2.886	0.905	Accept	Yes
D(OILPRICE)	-6.649		0.000	Reject	No
D(NGPRICE)	-8.157		0.000	Reject	No
D(WPICOAL)	-8.736		0.000	Reject	No
D(IPELE)	-9.827		0.000	Reject	No
D(FX)	-7.861		0.000	Reject	No

Source: data compilation and computation by research scholar using EViews 7

It is inferred that data series have recorded low variability patterns followed by small variations over an extended time horizon and large fluctuations followed by high variability for a prolonged period. The first difference form of data series justifies absence of unit root and facilitate rejection of null hypothesis as p-value is significant in both the tests for all select variables. Table 14 provides granger test for thermal cost determinants.

Table 14: Granger test for Thermal Coal Determinants

Particular	F-Stat	Prob.
OILPRICE does not Granger Cause COALPRICE	5.291	0.006
NGPRICE does not Granger Cause COALPRICE	3.452	0.035
IPELE does not Granger Cause COALPRICE	0.445	0.641
WPICOAL does not Granger Cause COALPRICE	0.851	0.429
FX does not Granger Cause COALPRICE	3.109	0.048

Source: data compilation and computation by research scholar using EViews 7

Thermal coal, Crude oil and natural gas are substitute energy commodities and are used extensively by power generation, steel, metal and heavy manufacturing sectors in India. The consumption decisions are done by these sectors in terms of price level and supply of commodity. Thus thermal coal, crude oil and natural gas prices have shown influence on each other both in the long-run as well as in the short run.

Thermal coal is the main input for electricity generation in India and it accounts for 55% of power generation which is nearly twice as compared with world standard for power generation. Electricity is a main source for manufacturing industries in India and to maintain their production cycle running smoothly, demand for electricity is growing drastically over the past five years. The policy maker's action plan for major electrification of our country puts demand side effects on thermal coal and augments the price volatility.

India have sufficient coal reserves but not able to extract sufficient quantity of coal to fulfill the demand on policy grounds and technological obsolescence. Therefore, to maintain the steady economic growth, the need to import the coal from other countries is necessary and thus it augments the import bill of our country. To obligate the import bill, foreign currency (Dollar) adds influence on thermal coal prices. Table 15 provides GARCH stat for thermal coal determinants.

Table 15: GARCH stat for Thermal Coal Determinants

Determinants	z-Stat	Prob.	R2	ARCH-LM	Q-Stat	Normality
OILPRICE	28.411	0.000	0.29	0.120	Insignificant	Yes
NGPRICE	24.266	0.000	0.55	0.500	Insignificant	Yes
IPELE	3.611	0.000	-0.04	0.166	Insignificant	No
FX	4.273	0.000	-0.15	0.004	Insignificant	No
WPICOAL	28.845	0.000	0.35	0.976	Insignificant	Yes

Source: data compilation and computation by research scholar using EViews 7

The test statistics revealed a highly significant result and hence supports the rejection of null hypothesis, "Select key determinants do not affect price volatility of energy commodity in India" and non-rejection of alternative hypothesis, "Select key determinants do affect price volatility of energy commodity in India".

The diagnostic tests were executed to confirm the model correctness for the variables under study and it was found that both ARCH-LM and Q-Stat were highly insignificant. This insignificant result supports the classic econometric model building theory and hence the test was correct to explain the influence of select determinants on thermal coal price volatility.

Exposure Analysis

The analysis of commodity price exposure on firm's market value was carried out using the market model regression in which continuous stock return of a firm is considered as dependent variable, percentage change in

commodity price as independent variable and market index (BSE) continuous returns as a control variable. The main goal of this market model is to analyze the commodity price exposure and not the pricing of commodity price risk on firm's market value. Table 16 provides analysis of power sector firms.

Table 16: Exposure analysis of Power Sector Firms

Firm	Crude oil				Natural Gas				Thermal Coal			
	R2	Coeff.	Sig.	F-Sig	R2	Coeff.	Sig.	F-Sig	R2	Coeff.	Sig.	F-Sig
NTPC	0.27	0.001	0.61	0.000	0.29	-0.001	1.55	0.000	0.28	0.002	0.318	0.000
AP	0.40	-0.001	0.134	0.000	0.38	0.008	0.809	0.000	0.40	-0.001	0.101	0.000
TP	0.11	0.001	0.529	0.001	0.11	0.001	0.628	0.000	0.10	0.001	0.895	0.000

Source: data compilation and computation by authors using EViews 7

Based on the market model exposure analysis, it was realized that sample firms from Indian Power sector did not reveal considerable level of energy commodity price exposure on market return variable. Therefore; the null hypothesis, "Select firms of Indian Power sector do not exhibit significant level of energy commodity price exposure" was not rejected. The select firms have exhibited small exposure to energy commodity price variations. The observed outcomes of this study are comparable to the documented results of past studies conducted on commodity price exposure by Tufano (1996), Peterson and Thiagarajan (2000), Haushalter (2001), Chidambaran, fernado and Spindt (2001), Sohnke Bartram (2005). There could be many potential validations for the obtained results. Energy commodity prices indicate high level of volatility which might only affect few small cash flows, specifying the trivial influence in contrast to other risk factors that are more imperative, less volatile but influences larger cash flows of firms. Power sector firms are commodity intensive; commodity is an important input factor of principal business operation and commodity prices affects the cost-revenue equation, hence firms routinely control their exposure to protect the downside effects.

Influence of energy commodity price risk on Firm value

This section provides a quantitative overview of energy commodity price risk and its influence on enterprise value of select firms. The following univariate GARCH model was used to assess the influence of crude oil price risk on enterprise value. Table 17 provides GARCH TC-EV of power sector firms.

$$EV_{Firm} = C + Cd$$

Where, EV_{Firm} is dependent variable (Enterprise Value)

Cd is independent variable (crude oil, thermal coal and natural gas price risk)

C expresses constant of the model

Table 17: GARCH TC-EV of Power Sector Firms

Test	Particular	NTPC	ADANI	TATAP
GARCH Test	R2	-0.038	0.129	0.103
	z-Stat	0.2510	0.279	3.113
	Prob.	0.801	0.780	0.001
Correlogram Q-Stat	Prob.	Insignificant	Insignificant	Insignificant
Correlogram Squared Residuals Test	Q-Stat Prob.	Insignificant	Insignificant	Insignificant
ARCH L-M Test	Test statistics	0.049	1.173	0.041
	Prob. Chi-Sq.	0.824	0.278	0.839
Residuals Normality Test	Jarque-Bera	0.998	0.045	0.963
	Prob.	0.607	0.977	0.617

Source: data compilation and computation by research scholar using EViews 7

The table 17 illustrates the influence of thermal coal price fluctuations on enterprise value in which TATA Power have revealed a partial significant result. The non-significant outcome of thermal coal price on firm value might be attributed to the fact that, all firms have captive coal mine license and price variability may not be directly affect them unless otherwise regulatory body make changes in royalty payment proportion or in other scenario firms need to import the thermal coal to fulfill the additional demand of power generation. Also firms employ substitutability strategy for generation of power using different mixture of energy input commodities. Table 18 provides GARCH CO-EV of power sector firms.

Table 18: GARCH CO-EV of Power Sector Firms

Test	Particular	NTPC	ADANI	TATAP
GARCH Test	R ²	-0.128	0.028	0.070
	z-Stat	-9.822	-2.799	52.496
	Prob.	0.000	0.005	0.000
Correlogram Q-Stat	Prob.	Insignificant	Insignificant	Insignificant
Correlogram Squared Residuals Test	Q-Stat Prob.	Insignificant	Insignificant	Insignificant
ARCH L-M Test	Test statistics	0.252	0.373	0.864
	Prob. Chi-Sq.	0.615	0.540	0.352
Residuals Normality Test	Jarque-Bera	0.774	0.719	0.559
	Prob.	0.678	0.697	0.755

Source: data compilation and computation by research scholar using EViews 7

The above table illustrates the influence of crude oil price volatility on enterprise value of select firms. NTPC, ADANI and TATA power have revealed partial significant results. The test statistic revealed small effects of crude oil price volatility on the sample firm's operational/strategic activities and affected the enterprise value during the past decade. In the Indian Power sector, crude oil is not commonly used energy commodity since majority of power plants are fired using thermal coal or natural gas as an input. The major reason for limited usage of crude oil is credited to timely supply, storage issues, price fluctuations, technological obsolescence, and overall margin gain. Table 19 provides GARCH NG-EV of power sector firms.

Table 19: GARCH NG-EV of Power Sector Firms

Test	Particular	NTPC	ADANI	TATAP
GARCH Test	R ²	0.126	-0.110	0.273
	z-Stat	-12.619	0.104	-2.091
	Prob.	0.000	0.916	0.030
Correlogram Q-Stat	Prob.	Insignificant	Insignificant	Insignificant
Correlogram Squared Residuals Test	Q-Stat Prob.	Insignificant	Insignificant	Insignificant
ARCH L-M Test	Test statistics	0.244	1.548	0.888
	Prob. Chi-Sq.	0.620	0.213	0.345
Residuals Normality Test	Jarque-Bera	1.420	0.747	0.427
	Prob.	0.491	0.688	0.807

Source: data compilation and computation by research scholar using EViews 7

The test statistic revealed direct exposure of natural gas price volatility on the sample firm's operational/strategic activities and affected the enterprise value during the past decade. The insignificant influence of natural gas price on firm value might be attributed to the fact that, all firms have contractual supply deal on fixed price basis and price variability may not be directly affect them unless otherwise new contractual terms are enforced when the

regulatory body brings in new norm for natural gas price or firms need to procure additional gas at market price to fulfill the supplementary demand of power generation. Firms may employ substitutability strategy for generation of power using different mixture of energy input commodities when the prices are highly volatile.

Based on the analytically obtained results, the hypothesis testing was performed to investigate the validation of proposed postulation with respect to commodity price volatility and firm value. The empirical result suggests that two out of three firms of Indian Power sector have witnessed limited influence and rejection of null hypothesis was not done. Thus, the null hypothesis, "There is no influence of energy commodity price volatility on firm value of select firms of Indian Power sector" was not rejected and the alternative hypothesis, "There is an influence of energy commodity price volatility on firm value of select firms of Indian Power sector" was rejected based on the test statistics.

The diagnostic tests were employed to validate the right model specification. The ARCH-LM test was executed to check for remaining ARCH effect if any and it was found that the test statistic was insignificant at all standard levels of significance. The $p\text{-value} > 0.05$ and supports the acceptance of null hypothesis, i.e. 'there is no ARCH effect'. The correlogram squared residuals test was performed & observed that test output has been insignificant at all standard levels and it suggests to acceptance of null hypothesis, i.e. 'there is no serial correlation in the residual' and justifies correct specification of variance equation. Correlogram Q-statistic has been insignificant for mean equation and validating optimal arrangement of mean equation. The residual normality test was conducted using the Jarque-Bera test, the results were non-significant specifying fulfillment of normality assumption. Therefore, it is concluded that model specification was appropriate on the basis of insignificant diagnostic tests results.

Findings

- Energy commodity prices are more volatile than financial assets like foreign exchange rate and interest rate but the quantum and level of risk was relatively very small.
- Energy commodity prices were subjected to major structural breaks/changes during the past decade like global financial crisis, credit challenges in Euro zone, slowdown of Chinese GDP, bust of commodity super cycle etc.
- Rise of commodity exchanges in the developing countries have led to excessive derivative contract trading and this affected the spot prices of commodity referring to the future/forward settlement prices.
- Crude oil price has disclosed partial long term association but strong short term causal relationship with select determinants and GARCH test found to be highly significant.
- OPEC action or behavior with respect to crude oil had drastically affect the prices as it enjoys the cartel power in the world.
- Thermal coal and natural gas prices did record limited short run association but a very strong long run relationship with select determinants indicating substantial effects on price volatility.
- Crude oil, natural gas, thermal coal & natural rubber prices along with key determinants indicated stationarity at first difference thus representing mean reverting feature and also limited exposure to seasonality trend
- Thermal coal is the main input for electricity generation in India and it accounts for 55% of power generation which is nearly twice as compared with world standard for power generation.
- India have sufficient coal reserves but not able to extract sufficient quantity of coal to fulfill the demand on policy grounds and technological obsolescence.
- To maintain the steady economic growth, the need to import the coal from other countries is necessary and thus it augments the import bill of our country, also affecting exchange rate.
- The overall commodity price exposure effects were not significant to Power sector firms as select firms were able to mitigate the price risk with operational expertise, economies of scale, focus on institutional market, regulatory support, and persistent increasing demand for power by the Indian economy to maintain growth momentum.
- Power sector firms have not revealed significant influence of commodity price volatility and all firms were able to safeguard themselves from price risk based on backward integration.

- In the Indian Power sector, crude oil is not commonly used energy commodity since majority of power plants are fired using thermal coal or natural gas as an input.
- Competition is not intense due to oligopoly structure of Indian power sector
- Launch of the UMPP scheme through tariff-based competitive bidding Ease of land possession, provision of fuel, water and necessary clearances for enhancing investor confidence in Indian power sector
- Elimination of licensing policy for electricity generation in Indian power sector
- 100 per cent FDI is allowed under automatic route for power sector except atomic energy.
- Crude oil accounts for 33% of the world's primary energy consumption.
- Natural gas is a vital component of the world's energy supply.
- Natural gas is one of the cleanest, safest, and the most useful of all energy sources
- The largest coal reserves are found in the United States, Russia, China, Australia and India
- Coal is the largest source of energy for the generation of electricity worldwide, as well as one of the largest worldwide anthropogenic sources of carbon dioxide releases
- The largest exporters of coal are Australia and Indonesia while the largest importers are Japan China South Korea.

Conclusion

The paper empirically analyzes the influence of energy commodity price risk on firm value of Indian power sector. Determinants of energy commodity price risk have indicated strong association and they affect the price variability in short as well as in the long run. Commodity exposure was not significant across the firms. Effect of commodity price risk was not uniformly significant across the sample firms since their principal operations were directly or indirectly influenced by ownership pattern, operational diversification, economies of scale/scope, exposure to international trade, backward/forward integration, pass-through mechanism, involvement in derivative contracts and other firm specific qualitative/quantitative factors. The empirical outcome of this study would be valuable to energy commodity intensive sector stakeholders who needs to identify the influence of commodity price risk before strategizing their future course of activities to protect the top and bottom lines of their enterprises. Finally, the results are important to our country since the commodity intensive sector like power going to play a vital role in days to come as our regulatory body have taken forward looking progressive initiatives like deregulation of commodity pricing policy, implementation of progressive FDI norms, new energy policy, national electrification mission, global investors meet etc. to fillip the untapped commodity intensive sectors in India. Future studies may use multivariate models to identify the influence of other quantitative factors of price risk on enterprise value in a more sophisticated manner and other outstanding aspects of corporate firm value are left for future empirical exploration.

References

1. Andersen, T., Bollerslev, T., Diebold, F.X. and Labys, P. (2003). Modeling and Forecasting Realized Volatility. *Econometrica*, 71, 529-626
2. Aswath Damodaran. (2006). *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance*, 2nd edition, New Jersey, Wiley, ISBN: 978-0-471-75121-2.
3. Bollerslev, T. (1986). Generalized Autoregressive Conditional Heteroscedasticity. *Journal of Econometrics*, 31 (3), 307-27.
4. Bollerslev, T., Chou, R. Y., and Kroner, K. F. (1992). ARCH Modeling in Finance: A Review of the Theory and Empirical Evidence. *Journal of Econometrics* 52, 5-59.
5. Carol Alexander. (1998). *Risk management and analysis: measuring & modeling financial risk*, Wiley's
6. Chris Brooks. (2008). *Introductory Econometrics for Finance*, 2nd edition, Cambridge, Cambridge University Press.

7. Christopher L. Culp and Merton Miller. (1995). Metallgesellschaft and the economics of synthetic storage. *Journal of Applied corporate finance*, 7(4), 62-76
8. Christopher L. Culp and Merton Miller. (1995). Hedging in the theory of corporate finance: a reply to our critics. *Journal of Applied corporate finance*, 8(1), 62-76
9. Damodar Gujarati, Dawn Porter & Sangeetha Gunasekar. (2011). *Basic Econometrics*, 5th edition, New York, McGraw-Hill, ISBN: 9780071333450
10. Dickey D. A., and W. A. Fuller. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of American Statistical Association*, 74 (366), 427-31.
11. Don Bredin & John Elder. (2011). US Oil Price Exposure: The Industry Effects, working paper series. School of Business, University College Dublin, Ireland
12. Eduardo Borensztein and Carmen M. Reinhart. (1994). The macroeconomic determinants of commodity prices. *IMF Staff Paper*, 41(2), 236-261.
13. Engle R. F. (1982). Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of UK Inflation. *Econometrica*, 50 (4), 987-1007
14. Engle, R.F., and T. Bollerslev. (1986). Modeling the Persistence of Conditional Variances. *Econometric Reviews*, 5, 1-50.
15. Engle, R. F., and Ng, V. K. (1993). Measuring and Testing the Impact of News on Volatility. *Journal of Finance*, 48, 1749-78.
16. Engle, R. F. and Andrew J. Patton. (2001). What good is a volatility model? *Quantitative Finance*, Volume 1, 237-245
17. G. David Haushalter, randall A. Heron and Erik Lie. (2002). Price uncertainty and corporate value. *Journal of Corporate Finance*, 8, 271-286,
18. Georges Dionne and martin Garand. Risk management determinants affecting firms' values in the Gold mining industry: New empirical results
19. Haushalter G. D., Heron R. A., Lie E. (2002). Price uncertainty and corporate value. *Journal of Corporate Finance*, 2002, 8(3), 271-286.
20. <http://www.adanipower.com/investors/financials>
21. <http://www.bseindia.com/>
22. <http://eaindustry.nic.in/home.asp>
23. <http://elibrary.worldbank.org/page/wb-working-papers>
24. <https://www.google.com/finance>
25. <https://www.ibef.org/industry/indian-aviation.aspx>
26. <http://www.imf.org/external/research/>
27. <https://in.finance.yahoo.com/>
28. <http://www.ntpc.co.in/en/investors/financial-results>
29. http://www.opec.org/opec_web/en/publications/338.htm
30. <https://www.rbi.org.in/>
31. <https://www.tatapower.com/investor-relations/annual-reports-archive.aspx>
32. Indrani Hazarika. (2015). Performance analysis of top oil & gas companies Worldwide with reference to oil prices. *Journal of energy & economic development*, 1(1), 62-78
33. Jarque, C.M. and Bera, A. K. (1980). Efficient tests for normality, homoscedasticity and serial independence of regression residuals. *Economics Letters* 6, 225-259.

34. Jarque, C.M., & A.K. Bera. (1987). A test for normality of observations and regression residuals. *International Statistics Review*, 55, 163-172.
35. Peter Mackay and Sara B. Moeller. (2007). The Value of Corporate Risk Management. *The Journal of Finance*, Vol. LXII, No. 3
36. Peter Tufano. (1998). The determinants of stock price exposure: Financial engineering and Gold Mining Industry. *Journal of Finance*, 53(3), 1015-1052
37. Phillips P. C. B. and P. Perron. (1988). Testing for a Unit Root in Time Series Regression. *Biometrika*, 75(2), 335–346.
38. Rene M. Stulz and Rohan Williamson. (1996). Identifying and quantifying exposures.
39. Robert W. Faff and Andrew Marshall. (2005). International evidence on the determinants of foreign exchange rate exposure of multinational corporations. *Journal of international business studies*, 36(5), 539-558
40. Serkan Yilmaz Kandir, Ahmet Erismis and Ihan Ozturk. (2014). Investigating exchange rate exposure of energy firms: evidence from Turkey. *Prague Economic Papers*
41. Sohnke M. Bartram. (2005). The impact of commodity price risk on firm value – an empirical analysis of corporate commodity price exposures. *Multinational finance journal*, vol. 9, no. ¾, 161-187
42. Sohnke M. Bartram, Gregory W. Brown, and Jennifer Conrad. (2011). The Effects of Derivatives on Firm Risk and Value. *Journal of Financial and Quantitative Analysis*, Vol. 46(4), 967–999
43. Walter Enders. (2015). *Applied Econometric Time Series*, 4th edition, New Jersey, Wiley, ISBN 978-1-118-80856-6
44. Yanbo Jin and Philippe Jorion. (2006). Firm value and hedging evidences from US oil and gas producers. *Journal of Finance*, 61(2), 893-919
45. Yanbo Jin and Philippe Jorion. (2007). Does Hedging Increase Firm Value? Evidence from the Gold Mining Industry, working paper, California State University.

Rewriting the Rules Altogether in Indian Telecom Industry: A case study of Reliance Jio Infocom Limited

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Abstract

No Indian will ever have to pay for voice calls again - a single statement that marked the beginning of a new era when Mukesh Dhirubhai Ambani announced the launch of a new telecom operator Reliance Jio Infocom Limited at the 2016 Reliance Annual General Meeting. Telecom industry in India has been very competitive since early 2000. Over the years Bharti Airtel has been the choice of Indian consumers for its constant upgradation followed by Vodafone, Idea, BSNL etc. This paper throws light on Jio as a new entrant into the Indian telecom industry, strategically posing humungous challenges to its competitors and future plans of success

Keywords: Reliance Jio, Telecom Industry, Challenges

Introduction

In June 2010, RIL bought a 96% stake in Infotel Broadband Services Limited (IBSL), which had won 22 circles in the Broadband Wireless Access (BWA). Although they were unlisted, they were worth over Rs 4,800cr, and were the only company to gain broadband spectrum in all 22 zones of India. They started to work as a telecom subsidiary of Reliance and later in January 2013, they were named Reliance Jio Infocom Limited.

The 4G services were initially launched only for Jio's partners, its staff and their families on 27 December 2015. Bollywood actor Shah Rukh Khan, the brand ambassador of Jio, kickstarted the launch event which took place in Reliance Corporate Park in Navi Mumbai, along with celebrities like musician A R Rahman, actors Ranbir Kapoor and Javed Jaffrey, and filmmaker Rajkumar Hirani. The closed event was witnessed by more than 35000 RIL employees. The company commercially launched its services on 5 September 2016. Within the first month of commercial operations, Jio announced that it had acquired 16 million subscribers. Jio crossed 50 million subscriber mark in 83 days since its launch subsequently crossing 100 million subscribers on 22 February 2017.

How did it Begun?

It all started with Reliance unveiling their plans to launch 4G in India. With no background in telecom field (Reliance Communication is owned by Anil Ambani and not Mukesh Ambani) The project involved laying of Optical Fiber Cables for approximately 3.5 lakh kms all over India. This was not going to be an easy task for Reliance although they have had previous experience of taking up mammoth projects and complete those within time. Until now in India, all the cable laying works were taking place by digging the roads. The utility companies had to apply for a permission to local authorities to dig up the roads. Upon receiving such permission only then they can dig the roads to lay in the utilities. Laying of 3.5 lakh kms of cable and getting permission for all that was itself a big roadblock for this project.

Reliance then decided to go with a technology which is little known in India. It is called as Horizontal Directional Drilling (HDD). The machinery using this technology does not require digging of roads to lay in the utility. It drills its own way

from underground and installs the utility. You can find lot of videos on YouTube explaining this technology. By the time they were ready to launch 4G in some cities, Airtel had beaten them in launching their own 4G network. While Reliance was going all gaga about their 4G launch, Airtel was silently working on getting their network ready. This involved a great marketing strategy by Airtel. They started with launching 4G internet using dongles.

The project also had some technological challenges. When you are laying a cable for mobile phone network, you also need to have strong network for towers. While other players like Airtel, Idea, Vodafone already had their own tower network, Reliance Jio did not have one. They had to start from the scratch while their competitors had to only upgrade their currently existing towers to 4G capable towers. While doing this Reliance also had to make sure that their customers are not getting bad service. We all are very familiar with what happened earlier when Reliance Communication had launched their services. In this case they had to make sure that they deliver the promise of good network countrywide and not just in urban areas. Table 1 provides information on origin of JIO.

Table 1 : What Led to the Origin of Jio?

Year	Description
2002	Death of Dhirubhai Ambani left some major ownership issues between his two sons – Anil Ambani & Mukesh Ambani
2005	Kokilaben Ambani (mother) intervened and split Reliance into two parts. Anil got Telecom, Power, Entertainment & Financial Services and Mukesh got Reliance Industries & Petro Chemical
2006	Entered into a non-compete agreement
2010	Agreement was scrapped/expired
2010	Mukesh Ambani bought 96% stake in Infotel Broadband which had won 4G spectrum in all sectors in India. Later they renamed it to Jio, and started building fiber optic network around the country

Service Offerings

a) High speed data across the country

The speed of the internet can go up to one Gigabit per second (1GBPS), and Reliance Jio is expected to be able to cover 90 percent of the Indian population by the first quarter of next year. This is the core of Reliance Jio, the project is dedicated to the Prime Minister's vision of a digital India.

b) Sustainable hardware and software quality

"It is future ready, and it can be easily upgraded to support even more data as technologies advance to 5G, 6G and beyond" was mentioned in the 2016 Reliance Annual General Meeting. A part of the plan is to offer handsets to interested customers, which are going to be enabled with Voice over LTE (VoLTE) technology for people to be able to seamlessly use the data services of Jio. These handsets are going to be available at prices as low as Rs 2,999.

c) Instant activation, online or offline

In the next six weeks, RIL will ensure that anyone who walks into a Reliance store with an Aadhar card for Jio activation will have an activation and access to high speed data services in 15 minutes. They are also going to facilitate e-KYC activations, which won't even require customers to leave their homes to avail the facilities.

d) Digital fund and entrepreneurial benefits

They have created a Jio Digital India fund, which is meant to be used to partner with thousands of digital entrepreneurs in India and help fuel their growth with the high end platform that they have created. They are looking to create Digital Entrepreneurship Hubs in cities to increase opportunities for companies with good potential.

e) Access to 8 premium Jio applications viz, Jio Play, JioOn Demand, Jio Beats, JioMags, Jio News, Jio Express News, Jio Drive, Jio Security. These applications were complimentary to the launch offer and customers could access and download and go live streaming restricted to a limit of 1GB daily with high speed and over then reduced to 128mbps**f) Factual Data**

1. Voice is truly free– no charge towards voice or the data used to make 4G voice calls
2. "Unlimited at Night" pertains to 4G data used between 2am – 5am
3. JioNetWiFi Hotspot
4. The prepaid packs with denominations Rs.19, Rs.129 and Rs.299 cannot be availed as a First recharge by new subscribers
5. Students -25% additional 4G and WiFi data benefits
6. Prepaid tariffs are inclusive of all applicable taxes
7. Postpaid subscribers opting for the Auto-debit will get 15% discount on the bill value (Taxes Extra)
8. 4G plans can only be availed by customers possessing a LTE compatible handset
9. Unlimited SMS referred in the plan benefits will be capped at 100 free SMS per day in compliance with TRAI Regulations

(Source : <https://www.jio.com/en-in/4g-plans>)

The Reliance Jio Master Plan: Volume

It is evident that an new entrant like that of Jio into the most vibrant Indian Telecom sector where market is lead by Bharti Airtel followed by Vodafone and Aditya Brila's Idea, the only way to route out and compete is low pricing strategy mounted with huge volume. Thus Jio came up with the master plan where Volume spoke louder than words.

- Step one** : Undercut the market price by giving attractive discounts
- Step two** : Let everyone switch to Jio for internet use at cheap rates
- Step three** : Unleash the power of fibre optic network to give super fast internet
- Step four** : Grow your subscriber base
- Step five** : Recover your investment using the large number of users

How does Reliance Jio Plan to Profit?

India is home to the world's second largest mobile user base and internet users. Understandably, the telecom sector in the country is hyper-competitive, with multiple groups planning to capture the largest piece of the pie. Reliance JioInfocomm Limited is the newest player to enter the competition and it's not just winning the game but rewriting the rules altogether. Table 2 provides information on Top five countries with highest number of internet users.

Table 2 : Top 5 Countries with highest number of Internet users - June 30, 2016

#	Country or Region	Population 2016 Est.	Internet Users 30 June 2016	Internet Penetration	Growth(*) 2000-2016
1	China	1,378,561,591	721,434,547	52.3%	3,106.4%
2	India	1,266,883,598	462,124,989	36.5%	9,142.5%
3	United States	323,995,528	286,942,362	88.6%	200.9%
4	Brazil	206,050,242	139,111,185	67.5%	2,682.2%
5	Indonesia	258,316,051	132,700,000	51.4%	6,535.0%

Source:<http://www.internetworldstats.com/top05.htm>

Reliance Jio's commercial launch in September 2016 sent shockwaves through the Indian telecom industry. The MukeshAmbani-led company launched their services with an unbelievable inaugural offer — free 4G data, voice calls and SMS for all its customers. He announced that even after the conclusion of the trial period, Jio would never charge for voice calls and that its data rates would be among the lowest in the world.

Fearful of the unchallenged domination such an offer would afford Jio (around 70 percent of the industry's revenues come from voice), India's biggest mobile network operators appealed its illegitimacy to the Telecom Regulatory Authority of India (TRAI). But TRAI found Jio's offer to be legal and instead imposed massive fines on Bharti Airtel, Vodafone, and Idea Cellular for trying to undermine the Reliance Industries Limited (RIL) subsidiary by not providing sufficient points of interconnect to its SIM card users.

Following instances would give a fair idea to the conjuncture, how Jio would make a profit:

a) The foundation

Reliance Jio was founded on Ambani's belief that mobile internet is the revolutionary technology of this century. And while it will undoubtedly undergo many transformations, the core technology will remain the same, and therein lies the crux of his plan. Fuelled by an investment of Rs 1,50,000 crore and backed by partnerships with eight global carriers viz., British Telecom, Deutsche Telecom, Millicom, MTS, Orange, Rogers, TeliaSonera and Tim. Jio has successfully created the largest only 4G and LTE networks not only in India, but in the world. A 2,50,000 kilometres route of fibre optic cables and 90,000 eco-friendly 4G towers work to provide unmatched 4G coverage in all of India's 22 telecom circles

While all the existing network providers are using a modified 2G/3G infrastructure to provide 4G in India, Jio has set up a Greenfield network (created from scratch) that offers higher bandwidth and faster speeds. The Jio network is also future-proof and capable of offering 5G and 6G connectivity as and when the technology materialises.

Reliance Jio is also the first telecom to launch a 'VoLTE-only' (Voice over LTE) network in India. This technology will shun the fluctuations of the 2G/3G network in favour of high speed data transfer which allows for more robust connectivity and clearer voice calls.

After establishing this infrastructure, Reliance Jio's next hurdle was acquiring customers. And they did it by offering the Indian population what they sorely needed: high-speed mobile internet that was affordable. Before the commercial launch of Jio, less than 15 percent of India had access to 4G connectivity.

b) Average Revenue Per User (ARPU)

Affordability and quality are the only things that make a person want to switch their mobile network. For the current network providers in India, the monthly average revenue per user (ARPU) is around Rs 150, and users who spend over Rs 250 per month are regarded as 'high value' customers. Jio's tariff plan, considering only those packs with 28 days validity, begins at Rs 149 and offers customers 0.3GB of 4G data (plus unlimited data at night) besides free voice calls, both local and STD. These rates are infinitesimal when compared to the ones charged by telecos like Airtel and Vodafone. And since there have been no complaints about quality more and more people are making the switch over to Jio. Table 3 provides information on Average revenue per user.

Table 3 : Average Revenue per user.

	S	M	M	L	XL	XXL	XXXL
Price	₹ 19.00	₹ 129.00	₹ 149.00	₹ 299.00	₹ 499.00	₹ 999.00	₹ 1499.00
Free Voice Calls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4G Data	100MB	750MB	300MB	2GB	4GB	10GB	20GB
Unlimited Data At Night (DAM-SAM)	Yes	Yes	No	Yes	Yes	Yes	Yes
Jio Apps Subscription worth ₹1,250	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SMS	100 per day	100 per day	100 per month	100 per day	100 per day	100 per day	100 per day
WiFi (JioNet Hotspot)	200MB	1.5GB	No	4GB	8GB	20GB	40GB
Validity - Prepaid	1 Day	7 Days	28 Days	21 Days	28 Days	28 Days	28 Days

Source : 2016 Reliance Annual General Meeting

From the chart we can analyze that customers will get addicted to use internet in times to come as everything around us is going digital and hence Plan 499 would be welcomed followed by higher plans for more data usage and so on. However plan 149 stands unique as it has target customers looking only for voice and little preference towards data which also coincides with the fact that ARPU in telecom sector.

c) Profit pie through LYF mobile phones

Jio offered LYF mobiles to its customers ranging as low as Rs. 2,999 onwards. These mobile were usually unsold mobile phones in China which resulted as dumping into another country. These mobile phone were bought at throw away prices and were linked with Jio's offering. All lyf mobile phones have

- ▶ Very Low Specs
- ▶ Made in China
- ▶ Re-labelled and sold in India
- ▶ Previous generation unsold 4G phones
- ▶ Among the cheapest 4G phones in the world

d) Promising future

Despite having a massive user base (over 100 million), internet penetration and speed in India is sadly low when compared to other countries. Only about 24.3 percent of the Indian population accessed the internet through mobile phones in 2016. But the figure is expected to rise to 37.4 percent in 2021 as the Indian population particularly in rural areas becomes progressively 'digital'.

As an increasing number of people will require mobile and internet connectivity in the coming decade, Reliance Jio will be in the prime position to capture the massive untapped market.

Jio's ambitions aren't limited exclusively to mobile internet. The company plans to rake in profits from its LYF brand smartphones, broadband internet offerings, and Jio mobile applications - the entire suite, which includes apps like Jio Music, Jio TV, Jio Cinema, and a digital wallet, will be charged as a Rs 15,000-per-year subscription. Reliance also plans to consolidate its 'Digital India' missive with the setting up of Jionet Wi-Fi hotspots in multiple cities like Mumbai, Kolkata, Surat, Ahmedabad, Indore, Mussoorie, and Lucknow are among the cities which currently feature these hotspots in select locations.

e) **Global Aspirations**

Internet of Things (IoT) has been widely regarded as one of the most promising technologies of future. Understanding the potential of this sector, RIL in November entered into a partnership with US-based General Electric (GE) to enter the industrial IoT space. The partnership under which RIL will reportedly develop software applications for GE's Predix cloud platform will provide IoT solutions to customers in various industries such as telecom, healthcare, oil and gas, and power among others. Driven by the industries need for increasing operational efficiency and the widespread use of data analytics, RIL will generate vast new revenue streams not only in India, but around the world.

f) **High risk high rewards**

Mukesh Ambani has recognised mobile internet to be the most profitable venture in the long run and has consequently invested considerable time and money to make RIL the foremost company in the sector. RIL's and by extension Jio's, credo is founded on the principle that a business needs a purpose beyond just making profits. As he rightly mentioned in an interview, "I believe that if you create societal value, if you create customer value and employee value, and if you focus on these, then shareholder and economic return is just a by-product." And going by the current scenario, in which Reliance Jio is certainly creating societal and customer value, the company will surely build huge revenues in the future.

g) **Psychologically 28 days make a month for Telcos**

There's a common phenomena of offering recharge pack as 28 days instead a month which has 30 and 31 days respectively. However over a year it has been noticed that customers fall to pay out 13 months (a month extra) instead of 12 months. Thus logically operators get paid for a month extra than usual.

Future Expansion Plan

Jio plans to launch New Submarine Cable System - Reliance JioInfocomm Ltd. (Jio), the largest 4G and mobile broadband digital services provider in India, announces the launch of the Asia-Africa-Europe (AAE-1) submarine cable system. AAE-1, the longest 100Gbps technology based submarine system, will stretch over 25,000 km from Marseille, France to Hong Kong, with 21 cable landings across Asia and Europe. The new terabit capacity and 100Gbps direct connectivity to global content hubs and interconnection points ensure that Jio will continue to offer its customers the most exceptional high speed internet and digital service experience

Due to its advanced design and route, AAE-1 provides one of the lowest latency routes between Hong Kong, India, Middle East and Europe with the fewest hops

Conclusion

Jio has brought transformational changes in digital services space to enable the vision of Digital India for 1.2 billion Indians and propel India into global leadership in digital economy. It has created an eco-system comprising network, devices, applications and content, service experience and affordable tariffs for everyone to live the Jio Digital Life. With spearhead competitions from other operators and news of consolidation of Vodafone and Idea are already on table, only Bharati Airtel stands strong in long term to compete. Nevertheless Jio has been the market disruptor off late and has changed the rules altogether in the Indian Telecom industry.

References

1. Abhishek Josh (2016, September 2) Reliance Jio Prices Revealed: 75GB 4G Data & 4500 Mins Call Time for Only Rs. 200. Retrieved from <http://trak.in/tags/business/2016/03/30/reliance-jio-data-price-voice-calling-sim-card/>
2. IANS (2016 March 31) With RJio 4G, India's mobile Internet ranking to reach top 10 globally: MukeshAmbani. Retrieved from <http://indianexpress.com/article/technology/tech-news-technology/with-rjio-4g-indias-mobile-internet-ranking-to-reach-top-10-globally-mukesh-ambani/>
3. Media release (2017, June 29) Jio launches new submarine cable system. Retrieved from <https://reliance.ssl.cdn.sdmedia.com/file/636389919460056646BO.pdf>
4. Our Bureau (2016, June 15) Reliance Jio's voice and broadband network is upgradable to 5G: Mukesh Ambani, The Economic Times. Retrieved from <http://telecom.economictimes.indiatimes.com/news/3g-4g/reliance-jios-voice-and-broadband-network-is-upgradable-to-5g-mukesh-ambani/47644803>
5. P.R Sanjai&Shavik Ghosh (2016, Jan 16) Reliance Jio to raise Rs15,000 crore through a rights issue, Livemint.com, Retrieved from <http://www.livemint.com/Industry/tyb7WgA82kVA9vGM5DtHoJ/Reliance-Jio-to-raise-Rs15000-crore-via-rights-issue.html>
6. Press Report (2016, September 26) Reliance Jio takes the green towers a step further, erects towers that look like trees, telecomtalk.com. Retrieved from <https://telecomtalk.info/reliance-jio-takes-the-green-towers/143650/>
7. Rakesh Kurup (2016 December 17) *Only 9% of mobile users have 3G connection*. Retrieved from <http://www.thehindubusinessline.com/info-tech/only-9-of-mobile-users-have-3g-connection-clsa/article8000932.ece>
8. Sumit Moitra (2015, December 21) RJio logs into biggest broadband cable system, dnaindia.com. Retrieved from <http://www.dnaindia.com/money/report-rjio-logs-into-biggest-broadband-cable-system-2157904>
9. SarithaRai (2016, December 4) India Just Crossed 1 Billion Mobile Subscribers Milestone And The Excitement's Just Beginning. Retrieved from <https://www.forbes.com/sites/saritharai/2016/01/06/india-just-crossed-1-billion-mobile-subscribers-milestone-and-the-excitements-just-beginning/#5a2a29d67db0>
10. Salman Ansari - DNA Web (2016 September 01) Here are 12 new Reliance Jio announcements MukeshAmbani made today. Retrieved from <http://www.dnaindia.com/money/report-12-new-announcements-mukesh-ambani-made-about-reliance-jio-today-2250946>
11. Tarun Mittal (21 Feb 2017), How does Reliance Jio plan to profit? Retrieved from <https://yourstory.com/2017/02/reliance-jio-business-plan>
12. TNN (2016, Jan 22) Undersea 8,000-km-long cable project by Reliance Jio, Vodafone, others reaches Chennai, The Economic Times. Retrieved from <http://telecom.economictimes.indiatimes.com/news/undersea-8000-km-long-cable-project-by-reliance-jio-vodafone-others-reaches-chennai/50686502>
13. VidhiChoudhary (2016 March 31) Reliance Jio initial investment at Rs250,000 crore. Retrieved from <http://www.livemint.com/Companies/ncT04NLRTtEMDEHAWdMPGN/Reliance-Jio-initial-investment-at-Rs150000-crore-Mukesh-A.html>

Websites

1. <https://successtory.com>
2. <https://yourstory.com>
3. <https://www.quora.com>
4. IndiaInternetUsers-internetlivestats.com
5. www.Internetworldstats.com

Analysis of Relationship between Webpage Content and Visitor

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Abstract

Advertising over the internet aims at delivering marketing messages to customers quickly, efficiently and economically. Online advertisement space is restricted. In the previous study it has been found that concentrating on the advertisements towards a specific kind of target audience will result in more visits. But it has been observed that people reach to the website has not explored. This study examines, the involvement of the website visitors based on bounce rate. The conclusion drawn from the study is that posting multiple information on a single web-page related to the product and providing hyperlinks to other pages will reduce the bounce rate.

Systematic flow of action = Advertisement viewed Clicked to visit website Engaged and clicked hyperlinks More pages viewed Information acquisition Better understanding of the product Initiation of purchase intention.

Key words: Online advertisement, Promotion of Website, Target audience, Bounce rate, Vacuum Evaporated Jaggery, Advertising on Facebook.

Introduction

Commodities refers to products that cannot be differentiate from one another since, all seems to serve the same purpose, solve the same problem, and deliver the same value. Branded products on the other hand, when a product gains awareness in the marketplace that it has special characteristics that make it different and better than others in the product category. Therefore, it becomes very important to brand. Branding is a powerful tool that distinguishes the product offering in ways that create consumer preference, gain customer confidence, and allow command premium pricing.

“Jaggery” is a natural, traditional sweetener made by the concentration of sugarcane juice. Also called 'जुड़कः' in Sanskrit, 'Gur' in Hindi, 'Bellam' in Telugu, 'Vellam' in Tamil, 'Sharkara' in Malayalam, 'Bella' in Kannada, and 'Gul' in Marathi. From ancient times jaggery is used in Ayurvedic medicine and has spiritual significance. Traditionally jaggery making process was organic, but human greed for more yield and profits has made the process unhygienic and poisonous at the other extreme. The want of purity and wholesomeness and the awareness of global warming, the need to promote clean technologies and ways and means to reduce pollution has led many to move away from the aberration and back to the old processes. Improvement in manufacturing has been quick and vast; therefore, introduction of vacuum evaporation technique has been studied and adopted to overcome the problem in the traditional jaggery manufacturing process. Jaggery is still considered as a commodity in India and a rural industry which is presumed to have no advanced techniques of manufacturing. To come out of commodity jaggery need to be branded. To brand jaggery the first step would be to inform (communicate) people about the products special characteristics by which the product would gain awareness.

Vacuum Evaporation Technology for Manufacturing Jaggery

D. B. Agro Industries, Belgaum has adopted this vacuum evaporation technology using steam for indirect heating of sugarcane juice for manufacturing of jaggery. Jaggery is manufactured in hygienically closed stainless-steel vacuum evaporators using steam heat where the temperature does not exceed 80 to 90° C, with a low carbon foot print. Due to the low temperature; all the minerals, polyphenols, flavinoids, vitamins and other nutritional contents present in the sugarcane juice are preserved in the original natural state making them available to the human body. There is no possibility of formation of the heat generated toxic chemicals like acrylamide due to the low temperature unlike as in the traditional process. In the traditional process of jaggery making is in large open mild steel pan which is heated directly using necked fire by wood, tyres, bugger waste, etc., by which the sugarcane juice is subjected to excessive heat much above 700°.

Therefore, vacuum evaporated jaggery is pure and involves high capital cost since importance is given to hygiene and capital investment in machineries.

Advertisement

There are many ways of advertisement like online advertising, newspaper advertising, radio advertising, television advertising, public speaking, door hangers and flyers, event sponsorship and word-of-mouth advertising. Compared to others online advertising is the fastest way to reach the public at large in a short time.

D. B. Agro Industries, Belgaum has developed a website, a Facebook page and has Facebook Advertisements, so that people can reach their website. In the previous study it has been found that concentrating on the advertisements towards a specific kind of target audience will result in more visits. But it has been observed that, people reach to the website have not explored enough (Effectiveness of Facebook advertisements for customer awareness building. A case study at D. B. Agro Industries, Belgaum). To encourage involvement a website page should be well designed, easy to use, appropriate information, optimised for mobile view, clear contact details, product details, etc., so that people explore and gain knowledge. In this research article, an attempt is made to understand how internet can be used for advertising and an informative website for a fast and efficient way to educate the prospective customers.

Google Analytics

D. B. Agro Industries, Belgaum has developed a website (www.dbagroindustries.com) a Facebook page and has deployed Facebook advertisements (Figure 01), so that people can reach their website. The activities on the website is tracked by Google Analytics. Google Analytics is a free Web analytics service that provides statistics and basic analytical tools for search engine optimization and marketing purposes. Google launched the service in November 2005. Google Analytics analysis can identify poorly performing pages with techniques such as funnel visualization, source of visitors (referrers), how long they stayed on the website and their geographical position. It also provides more advanced features, including custom visitor segmentation, etc. The data recorded by Google Analytics for two time spans is furnished in Table 1.

Bounce rate on Google Analytics is a bounce of a single-page session on the website. In Google Analytics, a bounce is calculated specifically as a session that triggers only a single request to the Analytics server, such as when a user opens a single page on your site and then exits without triggering any other requests to the Analytics server during that session. Calculation of bounce rate, single-page sessions divided by all sessions (meaning does not visit any other webpage), or the percentage of all sessions on website in which users viewed only a single page and triggered only a single request to the Analytics server. These single-page sessions have a session duration of zero seconds since there are no subsequent hits after the first one that would let Analytics calculate the length of the session.

Now a question arises "Is a high bounce rate a bad?" If the success of the website depends on users viewing more than one page, then, yes, a high bounce rate is bad. For instance, if the home page is the gateway to the rest of the website (e.g., product pages, checkout process, product information, news, etc.,) and a high percentage of users are viewing only the home page, then high bounce rate is not good. On the other hand, if the website has only a single-page site like a blog, or offer other types of content for which single-page sessions are expected, then a high bounce rate is perfectly normal.

Observation

The aim of the Facebook advertisement by D. B Agro Industries, was to inform and direct people to the website "www.dbagroindustries.com". The advertisement was deployed in two-time spans for 10 days each, 01st to 10th April 2017 was the first span which directed people to the Home page "www.dbagroindustries.com"(Figure02)and 04rd to 13thOctober 2017 was the second span which directed people to the page which had information regarding the product, who and how to use, etc. "http://www.dbagroindustries.com/jaggery-for-all-ages/"(Figure03).

For the first span, actual amount spent was INR.4,002.72, target group consisted of both Men and Women with age of 25 years and above from India. The advertisement was viewed for 2,01,751 times. Around 1,63,445 people viewed the advertisement at least once and 4,096 people had clicked and visited "www.dbagroindustries.com" website. Cost per click (CPC) was INR.0.98 and total new page likes achieved 109.

Criteria for the advertisement were refined for the second phase: Location – Living in: India, Age: 25-65+, Placements: on pages: News Feed on desktop computers, Instagram Feed, Third-party Apps and Websites on mobile devices, News Feed on mobile devices or Right column on desktop computers. People who match Interests: Public health, Organic food, World Health Organization, Low-carbohydrate diet, Health & wellness, Food and Environmental Hygiene Department, Organic farming, Women's health, Diet food, Dieting, Healthy diet, Preventive healthcare, Healthcare or Organic product.The most of the people visited the website from Uttar Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Punjab, and so on.Website traffic data for the second phase band width had crossed more than 1.59 GB for the month of April 2017 and the details are:

Sessions (number of active involvement)	: 1,965
Users (who have visited at least once)	: 1,787
Page Views (number of views)	: 3,073
Pages/Session (number of pages per session)	: 1.56
Avg. Session Duration (time of session)	: 36 seconds
Bounce Rate (no interaction with page)	: 81.32%
% New Sessions (first time visitors)	: 90.33%

For the second span, actual amount spent was INR.2,000.00, target group consisted of only women with age of 25 years and above from India. 17,654 times the advertisement was viewed. 12,663 people saw the advertisement at least once. 1,877 people had engaged and visited "www.dbagroindustries.com" website. Cost per click (CPC) was INR.1.07 and total new page likes achieved 27.

Criteria for the advertisement were refined for the second phase: Location – Living in: India (Goa, Karnataka, Maharashtra), Age: 25-65+, Placements: on pages: News Feed on desktop computers, Instagram Feed, Third-party Apps and Websites on mobile devices, News Feed on mobile devices or Right column on desktop computers. People who match Interests: Agribusiness, Cooking, Diet food, Farm, Farmer, Fitness and wellness, Food and Environmental Hygiene Department, Health & wellness, Healthy diet, Healthy food, Healthy Habits, Healthy Lifestyles, HVAC, Living a Healthy Lifestyle, Living Healthy, Low-carbohydrate diet, Natural product, Organic farming, Organic product, Preventive healthcare, Public health, Weight loss (Fitness And wellness), Women's health, World Health Organization, Business and industry, Agriculture, Healthcare, Fitness and wellness, Dieting, Close, Nutrition, Food and drink, Food, Organic food. People visited the website from Maharashtra, Karnataka and Goa states.Website traffic data for the second phase band width had crossed more than 1.50 GB and the details are:

Sessions (number of active involvement)	: 287
Users (who have visited at least once)	: 240
Page Views (number of views)	: 731
Pages/Session (number of pages per session)	: 2.55

Avg. Session Duration (time of session)	: 2 minutes 20 seconds
Bounce Rate (no interaction with page)	: 71.08%
% New Sessions (first time visitors)	: 80.49%

Table 1. Data from Google Analytics

First phase							
Date	Page Views	Bounce Rate	Avg. Session	Sessions	Users	Pages Session	% Sessions
1	465	90.03%	12.34	351	333	1.32	93.45%
2	351	74.73%	54.64	182	173	1.93	89.01%
3	331	74.32%	41.35	183	180	1.81	92.35%
4	319	79.19%	42.91	173	172	1.84	93.06%
5	309	84.72%	50.89	216	200	1.43	87.50%
6	287	80.11%	48.70	181	175	1.59	91.71%
7	286	77.78%	40.88	180	170	1.59	89.44%
8	279	77.59%	28.68	174	172	1.60	89.08%
9	245	80.12%	23.75	166	163	1.48	90.96%
10	201	86.16%	30.51	159	150	1.26	83.65%
	3073	81.32%	35.73	1965	1888	1.56	90.33%
First phase							
Date	Page Views	Bounce Rate	Avg. Session	Sessions	Users	Pages Session	% Sessions
1	196	44.44%	542.25	36	25	5.44	55.56%
2	137	48.39%	237.13	31	27	4.42	74.19%
3	121	65.00%	162.65	40	36	3.03	80.00%
4	61	80.49%	22.00	41	39	1.49	85.37%
5	53	86.67%	45.53	45	44	1.18	95.56%
6	52	78.95%	57.05	19	18	2.74	73.68%
7	44	61.11%	85.11	18	18	2.44	77.78%
8	28	88.00%	23.96	25	24	1.12	80.00%
9	22	75.00%	22.75	16	15	1.38	93.75%
10	17	93.75%	18.31	16	16	1.06	93.75%
	731	71.08%	140.07	287	262	2.55	80.49%

Findings

From the Table 1 the comparative study of effectiveness of the Facebook advertisement was analysed using independent samples t-test. P-values were calculated through SPSS software for two-tailed test and interpreted. Table 2 provides the information on group statistics. Table 3 provides the results of t-test. Table 4 provides information on Page Statistics

Table 2. Group Statistics

Group Statistics					
	Phase	N	Mean	Std. Deviation	Std. Error Mean
Page Views	04	10	307.3000	70.18080	22.19312
	10	10	73.1000	58.79994	18.59417
Sessions	04	10	196.5000	56.32298	17.81089
	10	10	28.7000	11.29454	3.57165
Users	04	10	188.8000	52.20217	16.50778
	10	10	26.2000	10.26104	3.24482
% New Sessions	04	10	0.9000	0.02789	0.00882
	10	10	0.8110	0.12078	0.03819

Table 3. Results of t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
** variances considered										
Page Views	Equal variances assumed**	.002	.968	8.089	18	.000	234.200	28.95303	173.37195	295.02805
	Equal variances not assumed			8.089	17.464	.000	234.200	28.95303	173.23797	295.16203
Sessions	Equal variances assumed**	3.360	.083	9.237	18	.000	167.800	18.16547	129.63576	205.96424
	Equal variances not assumed			9.237	9.723	.000	167.800	18.16547	127.16776	208.43224
Users	Equal variances assumed**	3.102	.095	9.665	18	.000	162.600	16.82366	127.25480	197.94520
	Equal variances not assumed			9.665	9.694	.000	162.600	16.82366	124.95377	200.24623
% New Sessions	Equal variances assumed	7.543	.013	2.270	18	.036	.08900	.03920	.00665	.17135
	Equal variances not assumed **			2.270	9.957	.047	.08900	.03920	.00161	.17639

From above t-test calculations, the p-value is <0.001 for pages views, sessions and users, likewise the p-value is <0.05 for % new sessions. We conclude that, there is a significant difference between the mean between the two-time phases. This statistically significant means that, the "improved reach" is unlikely due to chance, but due to the concentrated effort in second phase towards more specific of target audience.

Table 4. Page Statistics

Day	First phase			Second phase		
	Avg. Session Duration (Seconds)	Pages/Session	Bounce rate	Avg. Session Duration (Seconds)	Pages/Session	Bounce rate
1	12.34	1.32	90.03%	542.25	5.444	4.44%
2	54.64	1.93	74.73%	237.1	34.42	48.39%
3	41.35	1.81	74.32%	162.65	3.03	65.00%
4	42.91	1.84	79.19%	22.00	1.49	80.49%
5	50.89	1.43	84.72%	45.53	1.18	86.67%
6	48.70	1.59	80.11%	57.05	2.74	78.95%
7	40.88	1.59	77.78%	85.11	2.44	61.11%
8	28.68	1.60	77.59%	23.96	1.12	88.00%
9	23.75	1.48	80.12%	22.75	1.38	75.00%
10	30.51	1.26	86.16%	18.3	11.06	93.75%
	35.73	1.56	81.32%	140.07	2.55	71.08%

From the above statistics, we infer that in the second-time phase visitors to the website had a high involvement. Average session duration the second phase was 140.07 seconds as compared to 35.73 seconds in the first phase. There was 104.34 seconds (almost 1.5 minutes) increase in the average amount of time users spent viewing a specified page or screen, or set of pages or screens. Pages/Session (average page depth) in the second phase was 2.55 pages, but only 1.56 pages in the first phase. There was one-page increase in the average number of pages viewed during a session (repeated views of a single page are counted). The first phase, percentage of single-page sessions in which there was no interaction with the page was 81.32% which is quite high. In the second phase the bounce rate had reduced by a whopping 10.24% at 71.08%. The improved bounce rate was due to posting multiple information on a single web-page related to the product and the benefits which is in stored for the customer, by providing hyperlinks to other pages has reduce the bounce rate and more pages were viewed. The page statistics proves that the second phase visitors had a high involvement in the website.

Discussion & Conclusion

However good the product is, the truth is that no-one will buy it if they believe that they don't need it. One won't persuade anyone that they need to buy what is offered unless people have clearly understood what benefits are in stored for them. The focus of business strategy is, how a firm can communicate their product value to customer and develop advantage strategy. For communicating, business need advertise. To reach large masses in a short time economically online advertisement is the best way. Today's world is digital, and more and more people are equipped with a personal computer, tablet, smart phone, etc. People spend a ridiculous amount of time on social media. Facebook is too huge for a business of any size to ignore. Facebook is where the future customers hang out. Facebook provides a platform which is highly scalable content promotion. Entrepreneurs creating great endeavours basically they want people to know about it. Businesses can target users with Facebook Ads by location, demographics, age, gender, interests, behaviour, etc.

This comparative study exhibited that, the second phase had more involvement. The “<http://www.dbagroindustries.com/jaggery-for-all-ages/>” page has information that made it interesting for the viewers and provided hyperlinks to appropriate pages. Including hyperlinks in the content is very important.

Reasons to including hyperlinks in the content:

Credibility – Hyperlinks is a new age footnote, like in a publication one must name a source, cite a reference, or refer to another publication, a hyperlink does it in the body of your content.

Increases page views – By referencing other articles or pages on the website, a hyperlink could keep readers on the website for longer time.

Improves search engine optimization – It is very important that another site should link to the website. This will improve the rating of the website pop up when someone searches on Google. Google takes note of this and rewards it by pushing the website rating up.

Assists the Call to Action – When a hyperlink into the ‘call to action’ button, the chances of a conversion improve. People are lazy creatures. By hyperlinking the contact page, the subscription form or a landing page on the website appear.

Usability – There is a saying, ‘If you want something done, do it yourself, right?’ This applies to hyperlinks. It’s so much easier for the reader to verify the reference material, find related content or answer a call to action when given them something to click on.

People like to ‘do’ things when they get to a website. Give them a hyperlink to click on and reap the benefits at the same time. Regular use of hyperlinks will improve the SEO and help in propagating knowledge.

Thus, we conclude that Facebook advertisements are very effective for directing the people to a website. Once the person visits the website he/she should be engaged so that the basic goal “building customer awareness” is achieved. Therefore, a website should be well designed, easy to use, appropriate information, optimised for mobile view, clear contact details, product details, etc., so that people explore and gain knowledge. Which in turn could lead to sales.

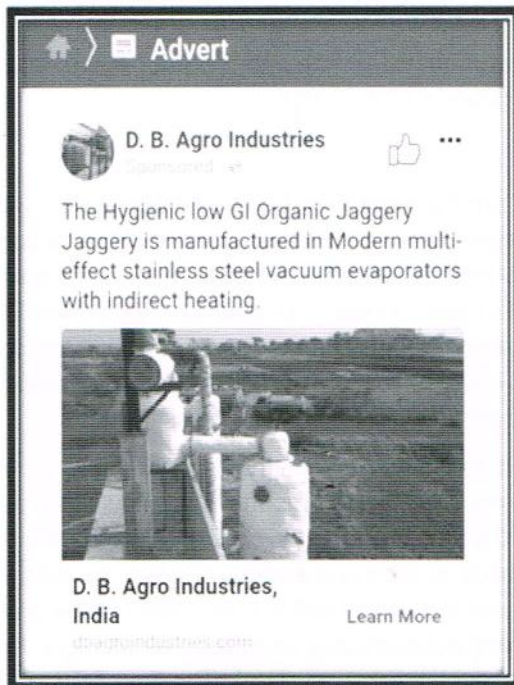
“<http://www.dbagroindustries.com/jaggery-for-all-ages/>” page has achieved this goal.

References

1. Arcanjo Francisco P., Pinto Vicente P., Arcanjo Maria R., Amici Márcia R. & Amâncio Olga M. (2009), "Effect of a beverage fortified with evaporated sugarcane juice on haemoglobin levels in preschool children", *Public Health*, Vol. 26(4), pp. 350-35
2. BohdanPikas, Gabi Sorrentino, Niagara University (2014), "The effectiveness of online advertising: consumer's perceptions of ads on Facebook, Twitter and YouTube.", *Journal of Applied Business and Economics* vol. 16(4).
3. Christian Dougoud (Sep 2013), "Branding in Asia: "If you are not a brand, you are a commodity", Blog Article.
4. Garrett A. Johnson, Randall A. Lewis & Elmar I. Nubbemeyer, (Sep 2016) "The online display ad effectiveness funnel & carryover: A meta-study of predicted ghost ad experiments", SSRN.
5. GuiLiberali, Glen Urban, Benedict Dellaert, Catherine Tucker, Yakov Bart, Stefan Stremersch (2017), "online advertising effectiveness across media channels and countries", *Theory and Practice in Marketing conference*.
6. Kim Eriksen, Claus Hemmingsen and John Kuada, "Online marketing - new models of advertising?" (2008), Thesis.
7. Kshirsagar, Prof. Vikas (Apr 2012), "A study of jaggery in Maharashtra", *Research Journal for Renaissance in Intellectual Disciplines*, Vol. 1, Issue 1.
8. Nayaka M.A. Harish, Sathisha U.V., Manohar M.P., Chandrashekar K.B. & Dharmesh Shylaja M. (2009), "Cytoprotective and antioxidant activity studies of jaggery sugar", *Food Chemistry*, Vol. 115, pp. 113-118
9. Puja Pawar (2012), "A study of jaggery market in Kolhapur district", Jazan University.
10. Pallavi Mishra (2014), "Rise of online advertising in India: an overview", *J Mass Communication Journalism* 4:1

11. Seyed Rajab Nikhashemi, LailyPaim, SaeidehSharifiFard (2013) "The effectiveness of e-advertisement towards customer purchase intention: Malaysian perspective", IOSR Journal of Business and Management (IOSR-JBM), Volume 10, Issue 3, PP 93-104
12. www.analytics.google.com, website reference
13. www.dbagroindustries.com, website reference
14. www.facebook.com, website reference
15. www.facebook.com/ads/manager/, website reference

Figure 1 - Facebook advertising - Phase one



Phase two



Figure 2 – Home page



Figure 3 – Jaggery for all ages



The Gen Z Effect - The Six Forces Shaping the Future of Business

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About the Book – *The Gen Z Effect: The Six Forces Shaping the Future of Business* is a 200 paged book with concoction of Technical, Business and Macroeconomic ingredients. It is published by Biblimotion Inc, USA, bearing ISBN number 978-1-629560-31-1 @ copyright 2014.

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Tom Kouropoulos is acknowledged as one of the industry's leading futurists. He is the author of ten books and founder of Delphi Group. Tom is also a columnist for Inc.com, an adjunct professor at Boston University Graduate School of Management he is fondly called as one of the *"Truly deep thinkers in the arena of technology and culture"*.

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Review of the Book

Whois GenZ? Welcome to it - Gen Z from many sources are the ones born between 1995-2015, These are ideally a bunch of people possessing traits like digital natives, Tech savvy, Hyper connected Junkies whose expectations will radically change the business forever, They are believed to be blind for the distinction between Technology and natural behaviour of certain objects, for people of GEN Z technology is a just another thread in the fabric of their lives, They are hatchlings imprinted with technology. However being Gen Z is not their birthright rather a conscious effort to adopt new behaviour, All individuals irrespective of their age bands fitting into and compatible to **IOT** (Internet of things), being able to attune to disrupting technology in their lives, personal and professional processes are categorized as Gen Z.

One of the most profound changes in business and society is the emergence of the post-Millennial generation, this book delineates that, the future generation is all set to grow at an exponential rate, Technology will rule the roost in all walks of life from food we eat, to cars we drive to the fabric we wear and will be the life blood of all businesses. While every new generation has faced its share of disruption in technology, economics, politics and society, no other generation in the history of mankind has had the ability to connect every human being on the planet to each other and in the process to provide the opportunity for each person to be fully educated, socially and economically engaged. What might this mean for business, markets, and educational institutions in the future? In this revolutionary new book, *The Gen Z Effect: The Six Forces Shaping the Future of Business*, authors Tom Kouropoulos and Dan Keldsen delve into a vision of the future where disruptive invention and reinvention is the acknowledged norm, touching almost every aspect of how we work, live and play. From radical new approaches to marketing and manufacturing to the potential obliteration of intellectual property and the shift to mass innovation, to the decimation of our oldest learning institutions through open source and adaptive learning, *The Gen Z Effect* provides a mind-bending view of why we will need to embrace Gen Z as the last, best hope for taking on the world's biggest challenges and opportunities, and how you can prepare yourself and your business for the greatest era of disruption, prosperity, and progress the world has ever experienced. The authors express that underlying six forces will define and influence the future businesses, hence it is inevitable for today's business to embrace them.

Six Dominant Forces the Influence the Future of Businesses Are

1. **Breaking Generations** – Facing an imminent population redistribution that equalizes the number of humans globally across the globe. The traditional population pyramid highlighting the phase from birth to death will change its shape owing to change in birth rate, Mortality rate due to advancements in health care, Improved sanitation, Access to clean water, Advanced vaccination etc. Hence it is very common to see today people of all age bands ranging from a teenager to septuagenarian or even more working in the same organisation or may be

on the same floor unlike in the past without this broad spectrum. As a result of wide spectrum of age, Consumer Demand, Choices, Life style, Hobbies are totally unsynchronized to influence business activities thereby. (For example from homemade food to packed food to Junk food choices).

2. **Hyper connecting-** Moving toward exponential hyper connecting among people, computers, machines, and slides have connected the world virtually to adhere to the cliché “Global Village”. Today we go beyond religious communities to speak of online reader’s community, Wildlife Conservation Community, Recruiters/Talent hunt Community, Lawyers, Doctors, Engineers Community and host of other communities connected through Internet the world over. This connectivity evokes new business opportunities namely online consultation, online job portals etc.
3. **Slingshooting** – Exploiting disruptive advances in user experience and affordability, turning the cutting edge technology into the room, allowing large segments of the population to catch up, seemingly overnight with technology pioneer. With the advent of GPS devices, Smart Chips & Cards, Micro controllers, Navigational devices and many technology creeps in all walks of life for instance a wrist watch once used to keep and check time is today equipped with high end technology to serve multiple needs namely fitness tracker, acts a mini virtual dairy, predicts and notifies chances of rain, Helps navigate through and dodge traffic paths. Without a shadow of doubt it is imperative for watch makers to incorporate these and many other features in their models in a bid to sustain in the business. Similarly it calls in for other business players to integrate the latest trends.
4. **Shifting from affluence to influence** – leveraging the ability to influence world events through sizeable communities rather than via large pools of capital. Mass communication to accomplish mass appeal, once considered to be a herculean task, is today at the click of finger tips. Advertisements/Commercials, Celebrity Endorsements, National & International Automobile Exhibitions, Furniture Exhibitions and other events with larger magnitude have a significant impact on prospective buyers. To further reinforce the brand promotion by making the communication more transparent and crystal clear there is significant assistance from social media- YouTube videos, Web links etc., Influence in 21st century is driven by credibility, connectivity and customer engagement for Gen Z junkies.
5. **Adopting the world as a classroom** - pushing toward global availability and affordability of education through all levels of schooling, educational institutions are not confined to infrastructure and four walls of classrooms, Instead they consider the globe as a learning platform (MOOCS – Massive Open Online Courses for instance). Educational Institutions will need to embrace new methods of teaching and learning and teach beyond the curriculum yet bank on traditional principles. Learning through gaming, animation, Student engagement will be order of the day.
6. **Life Hacking** – Taking shortcuts through systems we can focus on outcomes rather than processes, making meaning and purposes the center of our personal and professional experience. It is an era to focus on doing things away from convention. The box really is your experience and to think out of the box you first need to accept the fact that the box – your experience – is not only the pathway. Life hacking in the context of this book does not connote a negative or apprehensive meaning, it essentially means finding solutions to the problems that are unheard and unprecedented. Through hacks we address a new problem at hand, be it connected to Intellectual Property, Manufacturing or any other domain. Solution providing entities will find new footing in the business scenario.

Key Takeaways from the Book

The Gen Z Effect provides constructive insights through examples and suggestions of why we need to embrace Gen Z and how we can prepare ourselves and our businesses for the greatest era of disruption, prosperity, and progress the world has ever experienced.

1. **Reverse Mentoring** is the need of the hour, which refers to the process where a young executive/ fresher mentors some of the most powerful executives / top leaders of the organisations. A youngster/fresher professing

intense knowledge of technology transfers his/her knowledge to senior executives who are not so well equipped (CISCO is an example).

2. **Voting** which once was limited to age of 18, is now open to all across age bands facilitated through surveys on social networking sites. Which would in turn strengthen R&D, L&D activities of many business organisations.
3. **Transit of Technology** –Integration of multiple gadgets, devices and thereby get access to the globe, Technology gets attached to eye glasses, Cars, Lifestyle, Gadgets, Retailing, Shopping, Bags, Pockets to e-pockets, Wallets to e-wallets, Kitchen, Office Desks, Laptops. So technology becomes indispensable and inevitable part of life.
4. **Changing Classrooms** - Teacher / Professor was once believed to be the most senior person in the classroom, but today widespread students from various demographics due to sabbaticals, Student exchange programs and many other endeavors the previously belief does not hold true. In education saber-tooth curriculum will last in the minds of people, we believe we had the best method of education best pedagogy and syllabus, nonetheless it gets outdated and is ephemeral with passing time.
5. **Gen Z Celebrity** – We are entering into rampant entrepreneurship and a perfect storm of ideas, funding and hungry global talent is creating a stream of opportunities without a precedent.
6. **Start Ups- Gen Z** junkies do not want traditional jobs spanning from 10 to 5, which are safe, secured and with assured salary. Instead they aspire to initiate startups by taking risks, facing uncertainty and address existing problems of the society and become entrepreneurs eventually. They are ready to embrace a certain degree of failure, yet still celebrate participation.
7. **Crowd Funding- Gen Z** banks on contemporary trends like the crowd funding which is a project or venture by raising monetary contributions from a large number of people. Crowd funding is a form of alternative finance, although the concept can also be executed through mail-order subscriptions, benefit events, and other methods, it is typically performed through Internet. Gen Z does not rely on conventional banking system, and red-tapism involved there off.

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