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Service Quality Check: Online Shopping

Upakul Sarmah and Mrinmoy K. Sarma
see through e-shopping.

Supply Chain: Barriers and Benefits Indian SMEs

Rouhollah Zahedirad and B. Shivaraj
flick through logistics.

Sustainable Supply Chains: 3 BL and QFD Approach

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Services Quality Dimensions: Indian Food Retailers

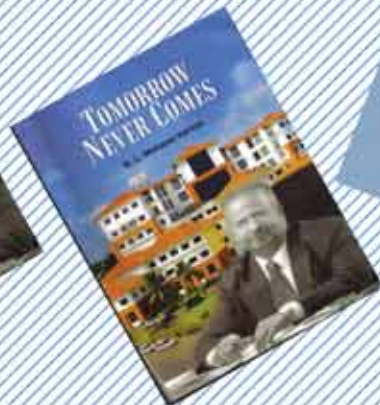
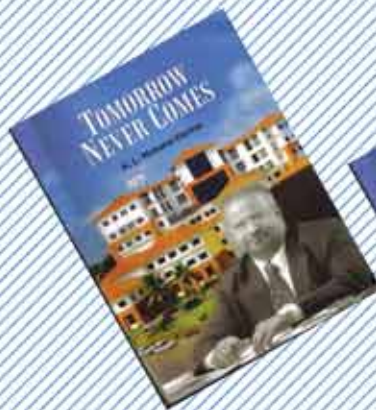
G. S. David Sam Jayakumar and K. Abdus Samad
tell how readers smile in retail.

Dynamics of Retention: Practices and Strategies

Ananthan B. R. and Sudheendra Rao L.N.
discover common means of retention.



An Entrepreneur's trials and tribulations in building up institutions, narrated in a highly readable, fictional style. This is the first time a real life story is told as fiction.



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Overview

The Internet is playing a predominant role in the lives of Indian consumers these days. E-commerce business has witnessed rapid increase and online shopping has grown exponentially. India ranks on third position in terms of the number of online shoppers in the world.

The report of the Internet and Mobile Association of India reveals that our e-commerce market is growing at an average rate of 70 percent annually. The present trend clearly indicates enormous scope for accelerated growth in the immediate future.

However, it is the travel booking and stock trading segment that accounts for a major share of online purchasing in India. Growth in transaction in other segments like retail shopping is yet to pick up momentum. Lack of consumer trust in the functional mechanism of e-commerce and the quality of products and services offered, seem to work as limiting factors.

It is in this context that we bring to you, in this issue, a lead article which is a study paper on Service Quality Check in Online Shopping.

Manufacturing companies are growing truly global these days with the support of efficient supply chain management. A company can develop a product in Germany, manufacture it in India and market it in America or Australia if they have a robust supply chain system. But, the whole concept of supply chain management seems to be still in a nascent stage in India.

The second lead article in this issue is on Barriers and Benefits of Supply Chain for Indian SMEs.

As usual, this issue carries many more learned articles on a variety of topics like working capital management, emotional intelligence, sustainable supply chain, employee retention, customer satisfaction, services quality dimensions, et al.

I am confident that you will find this issue informative and enlightening.

Dr. G. P. C. NAYAR
Chairman, SCMS Group of Educational Institutions.



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Editorial



Rhetoric of Space and Business

system adequate?

Everyday life is full of space: where we live, where we work, how we communicate. Everyday life is about the kinds of houses we live in, the kinds of houses we wish to live in, the structure of the neighbourhood and the spatial organization of the office. Do we live in gated communities? Is the store close by or do we need to drive there? Is there a public park for an early morning walk? Is the public transport

Cultures of space are its production, consumption, and regulation. It is not a study of urban geography. It is not the phenomenology of space. It moves between spaces of residence, city development projects, and the discourses that inform, influence, and construct these spaces. It means that it is involved in the rhetoric of space employed in property development, home, and city projects of the state.

It explores how the rhetoric of space in these three kinds of spaces embodies certain cultural notions about topography, life, and economy. It is interested in the cultural construction of spaces. The rhetoric and discourses of space are mostly about projects that are in progress rather than already built areas.

Space informs life style because the geography of your home and office determines your class and social status. Where you live determines how you live. It informs your work habits and your modes of transport. A space that is not comfortable, or is surrounded by excessive noise or pollution can be emotionally and psychologically disturbing.

Space is a social construct. The social is located in space. Social space is always dynamic, constituted by social relations. Space is also about power-real or symbolic. Social space might consist of contradictory, even conflictual spaces: it is never one but many spaces.

We need discuss the spaces of property, housing, townships, and city development projects as trans-locality in the present context. Social actors like employers, employees, politicians, corporate managers, property developers interact with local and extra local institutions and social processes in the formation of relations, identities and meanings.

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Service Quality Check: Online Shopping

Upakul Sarmah and Mrinmoy K. Sarma

Abstract

Service Quality in an electronic context has lured large scale research attention, during the last two decades. The World has witnessed a sea change in Online Shopping during this period. The criticality of Electronic Service Quality (e-SQ) has been well established in the realms of modern retailing. However, the consumer aspects in terms of service quality have seldom been dealt with. With the added importance of online sales and the growing number of shoppers patronizing online stores, it is imperative for marketers to develop a better understanding of the e-shoppers

Key words:

Online Shopping, Service Quality, Electronic Service Quality, e-SQ Variables.



Upakul Sarmah, Research Scholar, Department of Business Administration, School of Management Sciences, Tezpur University, Assam - 784028, E-mail: upakul@tezu.ernet.in



Mrinmoy K. Sarma, Professor and Dean, School of Management Sciences, Tezpur University, Assam - 784028, E-mail: mrinmoy@tezu.ernet.in

People go for shopping to fulfill various motives: be it *Personal* (discharging responsibility, diversion from routine work, self-gratification etc.) or *Social* (peer group attraction, status and authority, bargaining pleasure) or *Impulsive* motives (Tauber, 1972). For a person who wants to shop from home, there could be various alternatives like the traditional catalog shopping and tele-shopping and the newly emerging online or internet shopping. There are many advantages for distant shoppers or in-home shoppers. Gillett (1976) underlined the benefits as convenience, getting merchandize assortment, avoiding inconvenience of store shopping etc. In 1987, Darian suggested five types of convenience that distant shopping offers:

- i) reduction in shopping time;
- ii) timing flexibility;
- iii) saving of physical effort;
- iv) saving of aggravation; and
- v) the opportunity to engage in impulse buying or directly responding to an advertisement.

Way back in 1970, Gillett identified three basic sources of in-home or distant shopping: the large general merchandise catalog houses; stores offering telephone shopping; and other firms selling primarily long distance by mail. While these traditional distant shopping modes are fairly established in non-store retailing formats, Rowley (1996) had suggested the apparent possibility of teleshoppers turning into online shoppers. Similarly, Muldoon (1996) (as cited by Jones *et al.*, 1998) and Jones *et al.*, (1998) proposed the possibility of internet shopping displacing the catalog shopping due to its perceived advantages over traditional distant shopping modes. Nagurney *et al.*, (2001) highlighted the phenomenal increase in the internet-based shopping over other distant shopping modes. The emergent developments in the realms of internet shopping (Dholakia *et al.*, 2002) are so noteworthy that in the passage of time, online shopping got interchangeably used in lieu of distant shopping. More recent works of Sinha and Kar (2010) emphasized the role of internet shopping as a developing retail format in India in the 21st Century.

Growing Importance of Internet Shopping

From a business perspective, the internet can help firms achieve operational efficiencies by shrinking the distribution channel in addition to creating new markets (Alba *et al.*, 1997). For the consumer, the internet can help to facilitate communication, controlled search option for products and services, compare options for shopping and receive instant gratification for intangible products and services (e.g. software) (Hoffman *et al.*, 1996). Transaction costs for the consumer are also reduced as the internet provides direct access to multiple options and eliminates time and space barriers (Aldridge *et al.*, 1997).

With the explosive growth witnessed by internet commerce in consumer goods market, businesses are trying to attain a competitive advantage by using e-commerce as mode of interaction with customers (Lee *et al.*, 2005). Internet-only companies have surfaced in many industries while the internet has been employed by many companies to furnish their online services. The internet can be an effective device for the maintenance of superior service offerings and higher standards in retailing by providing customers rapid and convenient completion of the whole procurement transaction cycle (Yang *et al.*, 2003). The key determinants of success or failure in the realms of internet retailing are not merely website presence

and low price but also electronic service quality (Yang, 2001; Zeithaml, 2002). Hence, the criticality of internet retailing in facilitating non-price competitive advantages emanating from superior service quality can not be undermined.

Service Quality

Early scholarly writings on Service Quality (Gronroos 1982; Lehtinen and Lehtinen 1982; Lewis and Booms 1983; Parasuraman *et al.*, 1985) suggested that Service Quality stems from a comparison of what customer feels a company should offer (i.e. expectations) with the company's actual service performance (as cited by Parasuraman *et al.*, 2005). The concept of Service Quality was extensively studied for the first time by Parasuraman *et al.*, in 1988. The SERVQUAL model developed by them has found wide use in measuring customer perceptions of service quality. The initial model contained 10 variables under five dimensions viz. tangibles, reliability, responsiveness, assurance and empathy. But in 1994, the number of variables in this Model was revised to 21 (as cited by Seth *et al.*, 2005). Quality in internet retailing is conceptually similar to conventional service quality (Gronroos *et al.*, 2000, Meuter *et al.*, 2000). Like conventional service quality, internet retailing quality is understood to be a multi-dimensional construct that incorporates the functional aspects of the service process as well as the technical aspects of the service outcome (Gronroos *et al.*, 2000, Collier and Bienstock, 2006). The SERVQUAL model has been used by different researchers to study service quality in internet shopping by slightly rewording the scale items. However, it has become increasingly evident that methods of measuring service quality in electronic setting should be significantly different from physical marketplace services (Parasuraman and Grewal, 2000), because customer perceptions of e-services may not necessarily be same as that of traditional services.

Electronic Service Quality (E-SQ)

Electronic Service Quality (e-SQ) has found research attention in the works of Loiacono *et al.* (2000), who (as cited by Parasuraman *et al.*, 2005), developed the WebQual – a scale for rating Web sites on 12 dimensions. However, this scale has been criticized by researchers (Parasuraman *et al.*, 2005) as having utility to website designers only, not to measure service quality as experienced by the customer. Yoo and Donthu (2001) developed a nine-item SITE-QUAL (as cited

by Parasuraman *et al.*, 2005) for measuring site quality on four dimensions and like the WebQual, it did not cover all the aspects of the online purchase process. In 2002, Barnes and Vidgen developed another scale to measure an organization's e-commerce offering which they also called WebQual (as cited by Parasuraman *et al.*, 2005). But the same has been criticized for being a transaction specific assessment of a site, rather than being a comprehensive measure of service quality. Madu and Madu (2002) also presented a synthesis of 15 dimensions to measure the quality of a virtual service or operation.

The unique capabilities of an online medium of shopping in providing interactivity, personalized experiences, community, content, increased product selection and information suggest that the traditional concepts of service and retailing quality would be inadequate in an online context (Wolfenbarger and Gilly, 2003). They further underlined the importance of developing a complete conceptual framework for defining and measuring online retail quality (eTailQ) from the beginning to the end of the transaction, including information search, website navigation, ordering, customer service interactions, delivery and satisfaction with the ordered product. The eTailQ model developed by them contains 14 items under four factors viz. Fulfillment/Reliability, Website Design, Customer Service and Security/Privacy.

However, in 2000, Zeithaml, Parasuraman, and Malhotra's (2000) study identified a dozen of website features at the perceptual-attribute level and categorized them into 11 e-SQ dimensions: Reliability; Responsiveness; Access; Flexibility; Ease of navigation; Efficiency; Assurance/trust; Security/privacy; Price knowledge; Site aesthetics; and Customization/personalization. Based on the items of this previous study, Parasuraman *et al.*, (2005) redefined Electronic Service Quality (e-SQ) as the extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery. They developed the E-S-QUAL scale containing 22 items under four dimensions viz. Efficiency, Fulfillment, System Availability and Privacy.

Some of the other notable authors who worked in the area of e-SQ consisted of Cristobal *et al.*, (2007) who developed a perceived e-service quality (PeSQ) scale with four dimensions viz., web design, customer service, assurance and order management. Shachaf *et al.*, (2008) tried to determine e-service quality in academic and public libraries with dimensions like

timely response, reliability and courtesy. Stiakakis and Georgiadis (2009) put forward e-service quality criteria like security, responsiveness, accessibility, information accuracy, customization, customer service, confidence, web site design etc.

Electronic Service Quality (E-Sq) Variables

Information is an important e-SQ variable highlighted by authors like Loiacono *et al.*, (2000), Yoo and Donthu (2001), Barnes and Vidgen (2002), Wolfenbarger and Gilly (2003), Yang *et al.*, (2003), Collier and Bienstock (2006). The easiness of searching for the information and understanding of information along with its rich content can define superior service quality in an online setting. The reliability of the information is also an important attribute of quality. Similarly, *time* is another e-SQ variable suggested by Loiacono *et al.*, (2000), Yoo and Donthu (2001), Yang *et al.*, (2003), Lee and Lin (2005), Parasuraman *et al.*, (2005), Collier and Bienstock (2006). The time to search for a product, making a purchase etc. are the dimensions this variable can be broken down into. Moreover, information should be available as and when one needs it i.e., timely information. These authors also propounded the *simplicity of use* as a variable defining e-SQ. Simplicity of use can have dimensions like the ease of remembering the cyberspace address (URL) of the site, provision for maintaining wish-list of products, customer homepage, search history of products and shipment options like preferred courier, speed-post etc. Such provisions may also fall under the dimension *proper level of personalization* as suggested by Stiakakis and Georgiadis (2009) apart from the above authors. Authors like Yoo and Donthu (2001), Yang *et al.*, (2003), Wolfenbarger and Gilly (2003), Lee and Lin (2005), Parasuraman *et al.* (2005), Collier and Bienstock (2006) put forward the *delivery time of a product* as well as *choice of payment* as important factors in increasing the usability of a shopping site. Collier and Bienstock (2006) went on to say the provision for *multiple delivery time options* (like 0-3 days, 4-7 days etc.) as an e-SQ variable.

Loiacono *et al.*, (2000), Yoo and Donthu (2001), Madu and Madu (2002), Wolfenbarger and Gilly (2003), Cristobal *et al.*, (2007), Stiakakis and Georgiadis (2009) suggested *site aesthetics* as an important e-SQ variable. Attractive look of the website, good assortment and arrangement of products (also suggested by Barnes and Vidgen, 2002), virtual demo of

product features are various dimensions of aesthetics of a shopping site. Yoo and Donthu (2001), Wolfinbarger and Gilly (2003), Lee and Lin (2005), Collier and Bienstock (2006) listed *fast and easy transaction* as an e-SQ variables which relates to the functionalities of the shopping site. The speed of transaction, error-free transactions, number of links in the transaction process, the ease of navigation, ease of cancellation etc. form the functional aspects of the site. Yang *et al.*, (2003), Parasuraman *et al.* (2005), Collier and Bienstock (2006) also suggest *easy check-out* and *accurate transaction record* as functional dimensions of e-SQ. The shopping site should also provide *clear instructions* (Yang *et al.*, 2003, Collier and Bienstock, 2006).

Safety and security are two of the most significant quality aspects in an online shopping context. Numerous authors like Yoo and Donthu (2001), Wolfinbarger and Gilly (2003), Yang *et al.* (2003), Lee and Lin (2005), Parasuraman *et al.*, (2005), Collier and Bienstock (2006), Stiakakis and Georgiadis (2009) highlighted this in their works. Presence of security symbols and messages also adds to the superior quality image of a site (Collier and Bienstock, 2006).

Reliability in an online context is perhaps the most important quality dimension which is well appreciated by the authors Yoo and Donthu (2001), Madu and Madu (2002), Yang *et al.*, (2003), Wolfinbarger and Gilly (2003), Lee and Lin (2005), Parasuraman *et al.*, (2005), Collier and Bienstock (2006), Shachaf *et al.*, (2008). Reliability in safe and timely delivery of products, accurate representation of the product, presence of reputed brand names, product with guarantees or warranties, presence of reputed couriers etc., are different variables within this dimension of e-SQ. Collier and Bienstock (2006) further suggested that the availability of advertised item in the inventory makes customers rely more on a shopping site than others. Yang *et al.*, (2003) highlighted the importance of *internal and external collaboration* as electronic service quality variables.

Barnes and Vidgen (2002), Wolfinbarger and Gilly (2003), Yang *et al.*, (2003), Lee and Lin (2005), Parasuraman *et al.*, (2005), Collier and Bienstock (2006), Cristobal *et al.*, (2007) advanced the *willingness to respond to customer needs* as an e-SQ variable that leads to better responsiveness image of a shopping site. They further (along with Loiacono *et al.*, 2000 and Stiakakis and Georgiadis, 2009) suggested *prompt*

handling of enquiries as e-SQ variable. *Sincere interest in problem solving* (Wolfinbarger and Gilly, 2003 and Collier and Bienstock, 2006), *compensation for mistakes made by the site* (Parasuraman *et al.*, 2005 and Collier and Bienstock, 2006), *good return policy* (Yoo and Donthu, 2001 and Parasuraman *et al.*, 2005), *correct refund of returned product* (Yang *et al.*, 2003 and Collier and Bienstock, 2006) are certain other variables defining service quality in the electronic context.

Conclusion

The above discussion has tried to make an overview of the works related to the field of service quality in an electronic context. It further tries to make an analysis of different electronic service quality (e-SQ) variables found in existing literature. While this has already been established that service quality measurement differs significantly from that of traditional marketplace services, it would also be pertinent to note the likelihood of changes in e-SQ dimensions over period of time at the face of path breaking advances in the frontiers of technology. Greater emphasis on the quality dimensions of online shopping warrants utmost attention as it is increasingly growing in popularity in the contemporary world of marketing. It is, therefore, expected that further empirical studies will provide more insight in this area.

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Supply Chain: Barriers and Benefits Indian SMEs

Rouhollah Zahedirad and B. Shivaraj

A b s t r a c t

The purpose of this research is to provide academics and practitioners a qualitative and quantitative analysis of the barriers and benefits of effective supply chain collaboration (SCC). In addition, the concept is explored in the context of small and medium enterprises (SMEs) in India. Data was collected across multiple industries among 152 Indian SMEs. Findings reveal managers recognized lack of supply chain management team; lack of clear alliance guidelines and lack of proper supply chain training are major barriers to successful SCC. Customer satisfaction, output quality and customer responsiveness rate are perceived as more enduring than cost saving. Future researches should focus on dyadic or triadic data collection from different parties in a supply chain.

Key words:

Co-operative: Supply Chain Collaboration, SMEs, India.



Rouhollah Zahedirad, Research Scholar, B.N. Bahadure Institute of Management Sciences (BIMS), Department of Business Administration, University of Mysore, Mysore, Karnataka, Email: mzr_11@yahoo.com



Dr. B. Shivaraj, Senior Professor of B.N. Bahadure Institute of Management Sciences (BIMS), University of Mysore, Mysore, Karnataka, Email: bshivaraj@hotmail.com

In an increasingly dynamic and competitive business world, proper management of the supply chain is a key feature for promoting efficient management and for developing important competitive advantages (Park and Krishnan, 2001; Quayle, 2003; Anderson and Christensen, 2005; Rao *et al.*, 2005) such as this. Supply Chain Management (SCM) refers to the close collaboration of supply chain member to make potential benefits. These benefits include inventory reduction, improved delivery service, and shorter product development cycles (Stanley *et al.*, 2008).

This collaboration strengthens the relationship, raising satisfaction (Morrisey and Pittaway, 2006; Rao *et al.*, 2006) and improving company and supply chain performance (Ford *et al.*, 1998). Despite these enticing benefits, organizations who partner in strategic supply chains continue to encounter barriers. These barriers exist at multiple level of organization: the organizational, intra-organizational and inter-organizational levels. For example, strategic supply chains may encounter performance “glitches” or the ability to meet customer demand

(Hendricks and Singhal, 2003) from such things as quality and production problems, employee apprehension to yield up control, and poor collaborative planning. These glitches can be quite costly in terms of higher inventory and lower sales growth (Hendricks and Singhal, 2005).

Hence, many writers, (Lewis, 1990; Lamming, 1993; Hines, 1994; Gattorna and Walters, 1996; Christopher, 1998; Gunasekaran *et al.*, 2001), have recognized the increased need for Supply Chain Collaboration (SCC), stressing out the establishment of closer and long-term working relationships, even partnerships with suppliers at various levels in the chain, as a way to construct ever more efficient and responsive supply chains, in order to deliver exceptional value to customers. However, collaboration in the supply chain is not always easy to achieve, even when past communication restrictions, regarding efficient data and information exchanges between supply chain members, have been more or less surpassed by the information and communication technology revolution and the development of e-business applications (Matopoulos *et al.*, 2007).

A number of factors related to the business environment, the specific industry features, and endogenous firm characteristics, may still influence the series of dyadic business relationships, which constitute the supply chain, enabling or deteriorating this way collaboration opportunities. Despite the barriers that potentially deteriorate collaboration among companies for many industries all over the world, especially for Small and Medium Enterprises (SMEs) with their own managerial systems, collaboration between supply chain members is becoming more of a necessity than an option. As Cadihon and Fearn (2005) argue, most of the researchers on supply chain collaboration typically focus on large multinational companies, while into a great extent SMEs play a significant role in the economic world. Authors mainly identify the employment potential and the number of firms as the major reasons for focusing on this sector. This shift in focus has been even more profound in India.

Drawing on this aspect, the purpose of this paper is to provide empirical evidence of potential barriers and benefits of SCC in the Indian SMEs. Our arguments begin in section 2 with a review of the salient theory and literature of SCC in terms of barriers and benefits. Section 3 describes the research methodology, including the development of the survey instrument and sample. We present and discuss the results of

the study in section 4 and finally section 5 concludes this paper along with further research direction.

Background: SCC, Barriers and Benefits

In this section, we review the literature of the barriers and benefits to supply chain collaboration. This literature review begins first with the definition and explanation of SCC itself expressed by different authors. As the search continued, we broadened our search to other journals and trade press that discussed barriers and benefits of supply chain collaboration in SMEs.

Supply Chain Collaboration

Lambert and Cooper (2000) define supply chain in terms of business processes that interact among different companies that aim to aggregate value to end consumers (such as a relationship between supplier and customer). Wood and Zuffo (1998) define supply chain as organizational network that organize economic activities by means of co-ordination and collaboration among companies, and that are formed to reduce uncertainties and risks (Batt, 2003). They provide a basic rationale to justify collaborative initiative in the supply chain.

The term “*collaboration*” in the supply chain context has different interpretations. Some authors speak about integration between parties (Bagchi *et al.*, 2005; Forhlich and Westbrook, 2001; Pagell, 2004; Peterson *et al.*, 2005; Van der Vaart and Van Donk, 2008), about supply chain collaboration (Cardnii *et al.*, 2005; Holweg *et al.*, 2005; Min *et al.*, 2005; Shirodkar and Kempf, 2006; Stank *et al.*, 2001; Vereeck and Muylle, 2006), or about alliances (Stuart, 1997; Yang, 2008). Others talk about dyadic (e.g. buyer - supplier or buyer-manufacturer) relationships (Bensaou, 1999; Dwyer *et al.*, 1987; Fynes and Voss, 2002; Goffin *et al.*, 2006; Kozan *et al.*, 2006; Szwajczewski *et al.*, 2005; Wasti *et al.*, 2006), collaborative relationships (Hoyt and Huq, 2000; Johnstone *et al.*, 2004) partnerships (Gadde and Snehota, 2000 ; Spina and Zotteri, 2000), supplier – retailer collaboration (Shell *et al.*, 2006) or supply side collaboration (Fu and Piplani, 2004). The fundamental rationale behind all these terms appears to be that companies cannot successfully compete by themselves and therefore seek establishment of arrangements with other entities in the supply chain. Terms like integration coordination and collaboration are complementary to each other in a supply

chain as they consist of similar elements (Arshinder and Deshmukh, 2008). We will use the term supply chain collaboration in the remainder of this paper to describe barriers and benefits of this collaborative attitude in SMEs.

Supply chain collaboration is often seen as a powerful instrument in achieving effective and efficient supply chain management (Fu and Piplani, 2004; Mentzer *et al.*, 2000). However, the concepts for supply chain collaboration are not as well defined as they should be (Holwegu *et al.*, 2005), but Vachon and Klassen (2008) explained that collaboration can be as inter-organizational interactions between the supply chain members, and may include either upstream interactions toward supplier or downstream interactions toward customers. Collaboration is about organizations and enterprises working together and can be viewed as a concept going beyond normal commercial relationships (Matopoulos *et al.*, 2007).

Collaboration appears as enterprises that recognize cases where working and operating alone is not sufficient to resolve common problems and to achieve the desired goals (Huxlam, 1996; Corbett *et al.*, 1999, Barrat and Oliveira, 2001; Wagner *et al.*, 2002). Corsten and Felde (2005), Kanter (1994), Spekman (1998), Dyer (1996) and Heide and John (1990) gathered important collaborative attributes: collaboration is a specific form of relational change that implies creating joint values,

requires a high level of cooperation and determination, and has been conceptualized as either creating joint process by means of substantial investments in co-specialized assets or simply as joint actions. In other words, a collaborative supply chain involves “two or more independent companies that work jointly to plan and execute supply chain operations with greater success than when acting in isolation” (Simatupang and Sridharan, 2002). Supply chain collaboration is inserted in a behavioristic and physical context. The behaviouristic or interpersonal context involves several aspects:

- ◆ Trust (Ganesan, 1994; Morgan and Hunt, 1994; Zaheer and Vankatraman, 1995; Kumar, 1996);
- ◆ Interdependence and sharing risks and rewards (Ganesan, 1994; Mohr and Spekman, 1994; Lu and Yan, 2007);
- ◆ Reciprocity and mutual understanding (Zaheer and Venkatraman, 1995; Andraski, 1998; Barrat, 2004; Moberg *et al.*, 2003; Monczka and Morgan, 1997); and
- ◆ Commitment (Morgan and Hunt, 1994) .

The physical context involves joint actions (Heide and John, 1990) and/or sharing data, such as strategic information,

Figure 1 - An Overall Framework of SCC

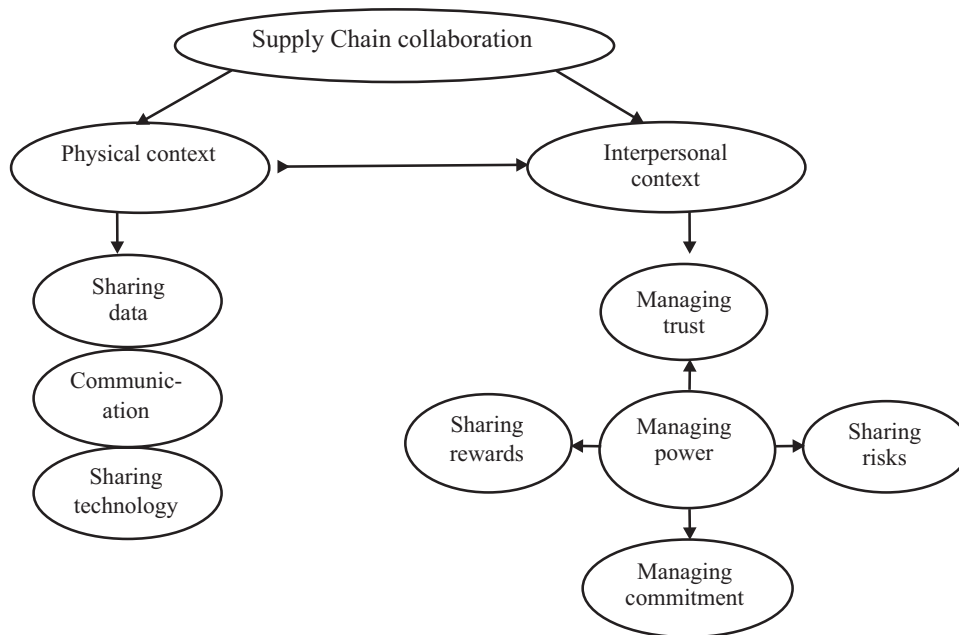


Table I - Literature Review Barriers to Supply Chain Collaboration

Barriers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	Total	
Inter firm rivalry																																				
Internal and external turf wars	*	*	*				*	*	*		*					*	*	*	*	*							*	*							16	
Poor SCM planning			*	*	*	*							*	*	*							*				*									10	
Lack of vision of SCM	*					*							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9	
Lack of channel trust			*						*							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	
Executive commitment	*								*							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	
Poor SCM understanding		*	*																*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	
Managerial complexity																																				
IS/IT deficiencies			*		*			*	*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10
Organizational structure/ culture		*							*							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9
Lack SC measurement			*													*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
Lack alliance guidelines					*											*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7

Sources : 1 - Akkermans and van Doremalen (2004); 2 - Andraski (1998); 3 - Barratt (2004a); 4 - Barratt (2004b); 5 - Bender (2000); 6 - Cox (1999); 7-Frohlich(2002); 8 - Inger et al.(1995); 9- Johson et al.(2001); 10 - Kilpatrick and factor (2000); 11- La Londe (2003); 12 - La Londe and Masters (1994); 13 - Lee (2004); 14 - Lonsdale(1999); 15 - Lummus et al. (1998); 16 - Mentzer et al. (2000); 17- Milligan (1999); 18 - Moberg et al.(2003); 19 - Monczka and Morgan (1997); 20 - Monczka and Morgan (1998b); 21 - Monczka and Morgan (1998a); 22 - Morgan (1997); 23 - Neuman and Samuels (1996);24 - New (1997); 25 - Pitera(2000); 26 - Quinn (1997a); 27 - Quinn (1999); 28 - Roux et al.(1999); 29 - Sheridan (1999);30 - Smaaglia (2004); 31- Timme and Williams-Timme (2000);32 - Tynndall (2000);33 - Tynndall et al.(1998);34 - van Hoekm et al.(1998)

communication, sharing technologies (Simatupang and Sridharan, 2002). Based on existing relevant literature, a general research framework for supply chain collaboration is suggested in figure 1.

Collaboration means that the partners work together, in a trustful, loyal and mutual environment aimed at reducing cost, reducing the misuse of equipment and resources, or improving overall supply chain performance (Whipple *et al.*, 2002). Although obtaining satisfactory benefits of collaborative supply chain is very difficult and some obstacles are available in this process, we identified barriers and benefits of SCC in the next two sub-sections.

Barriers to Supply Chain Collaboration

From the literature in Table I, the potential barriers or resisting forces are intimidating. The resisting forces to strategic supply chain collaboration come both from the nature of the organization itself and the people that compose the organization. Since last decade a number of changes have occurred in the SMEs. The entrance of global retailers, industry's consolidation in most of the sub-sectors, the changing consumer consumption attitudes, as well as the existence of more strict regulations and laws regarding SME's production, have altered the business environment for most of the companies operating in the sectors, encouraging collaboration attitudes among companies at all levels.

But in general, SMEs present a different business profile to larger companies, with particular aspects that may influence their performance (e.g. fewer resources, management styles in which there is often no separation between ownership and management, the academic education of the manager not always meeting the real needs of the firm) (Emiliani, 2000; Park and Krishnan, 2001; Beekman and Robinson, 2004; Richbell *et al.*, 2006). Therefore on the basis of these reasons some important barriers also exist which may limit collaboration intensity that many of these firms (or some of their suppliers) may not always be able to take on the cost of introducing certain information systems or may be unable to manage long-term collaboration satisfactory (Victoria and Cambra, 2009). Most of the barriers to supply chain collaboration are related to industry complex and heterogeneous structure (Matopoulos *et al.*, 2007). Generally, these barriers can be classified under one of two headings: "inter-firm rivalry" and "managerial complexity" (Park and Ungson, 2001). Inter-firm rivalry is a misalignment

of motives and behaviours among allying partners within the strategic supply chain (Park and Ungson, 2001). Some barriers under this category include poor collaboration among chain partners, lack of partners trust and lack of partner's commitment. In short, inter firm rivalry is the tendency for allying partners to compete rather than willingly co-operating. Absent a willingness to co-operate, a supply chain will not be able to attain lower costs and higher returns on investments.

Other barriers to SCC fall under managerial complexity or misalignment in allying firm's processes, structure and culture (Park and Ungson, 2001). Under the umbrella of managerial complexity barriers include information system and technological incompatibility, inadequate measurement systems and conflicting organizational structures and culture (Sheridan, 1999; Tyndall *et al.*, 1998; Quinn, 1997). Because many firms are comfortable using their systems for only their own tasks, it is not surprising to see inconsistent information and technology system and organization culture as barriers. People are change averse and unwilling to share information for fear of exposing their weakness and secrets to others. If SCC is to be implemented across company borders, a revamp in attitude and thinking is necessary (Stanley *et al.*, 2008). Whipple and Frankel (2000) commented:

"... a successful supply chain collaboration requires a modifying of habits and knowledge of the people involved and to be willing to modifying their business practices, policies, values, processes and to change relationships between partners."

Benefits of Supply Chain Collaboration

Supply chain collaboration puts firms in a position of achieving better performance (Yahia, 2009). To reach there, all participating members should make all necessary arrangement of collaborative practices, play according to rules, struggle to achieve the leading supply chain benchmarks, and follow all ethical principles to make things work well. The importance of SCC to make better performance has been emphasized by several writers (Fernie, 1995; Lawrence, 1997; Morton, 1997; Wood, 1997). Table II offers a sample of the SCC benefits literature. Of the discussed benefits, increased inventory turnover, increased revenue and cost reduction across the chain are the most sought after (Daugherty *et al.*, 2005; Attaran,

Table II - Literature Review Benefits of Supply Chain Collaboration

Barriers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	Total	
<i>Inter firm rivalry</i>																																				
Internal and external turf wars	*	*	*				*	*	*		*					*		*	*	*						*	*									16
Poor SCM planning			*	*	*	*							*	*	*			*	*	*					*	*										10
Lack of vision of SCM	*					*								*	*	*		*	*	*					*	*										9
Lack of channel trust			*					*								*		*	*	*					*	*										8
Executive commitment	*							*										*	*	*				*	*											7
Poor SCM understanding		*	*															*	*	*				*	*											7
<i>Managerial complexity</i>																																				
IS/IT deficiencies		*	*		*		*	*	*	*						*		*	*	*					*	*										10
Organizational structure/ culture	*							*		*						*		*	*	*				*	*											9
Lack SC measurement		*	*												*	*	*	*	*	*				*	*											8
Lack alliance guidelines				*											*			*	*	*				*	*											7

Sources : 1 - Akkermans and van Doremalen (2004); 2 - Andraski (1998); 3 - Barratt (2004a); 4 - Barratt (2004b); 5 - Bender (2000); 6 - Cox (1999); 7-Frohlich(2002); 8 - Inger et al.(1995); 9- Johson et al.(2001); 10 - Kilpatrick and factor (2000); 11- La Londe (2003); 12 - La Londe and Masters (1994); 13 - Lee (2004); 14 - Lonsdale(1999); 15 - Lummus et al. (1998); 16 - Mentzer et al. (2000); 17- Milligan (1999); 18 - Moberg et al.(2003); 19 - Monczka and Morgan (1997); 20 - Monczka and Morgan (1998b); 21 - Monczka and Morgan (1998a); 22 - Morgan (1997); 23 - Neuman and Sarnuels (1996);24 – New (1997); 25 – Pitera(2000); 26 – Quinn (1997a); 27 – Quinn (1999); 28 – Roux et al.(1999); 29 – Sheridan (1999);30 – Smagalla (2004); 31- Timme and Williams-Timme (2000);32 – Tyndall (2000);33 – Tyndall et al.(1998);34 – van Hoekm et al.(1998)

Table III - Profile of Responding Companies

Tyupe of Industry	Freauency	%	Number of employees	Frequency	%
Metals	41	27	Less than 50	23	15
Food Production	30	19.8	50-100	58	38.1
Chemical, Plastic,	28	18.4	100-250	71	47
Chemical, plastic paper	22	14.5	Total	152	100.0
Textile industry	17	11.2			
Others	14	9.2			
Total	152	100.0			

2004; Ferdows *et al.*, 2004; Leonard and Cronan, 2002, Fine, 2000). Collaboration in supply chain not only enables partners to reduce one another's costs but also allows inventory to cycle through to customers faster (Stanley *et al.*, 2008). Two other core benefits of SCC include decreased order cycle times and greater product availability (Leonard and Cronan, 2002; Stank *et al.*, 1999; Sheridan, 1999; Van der Vorst and Beulens, 1999).

Close relationships with suppliers leave room for special orders in unique times of high demand, helping satisfy the customer expectations. Addition benefits are market responsiveness, improving lead-time, improving customer satisfaction, and remaining competitive (Chin *et al.*, 2004). Overall, SCC potentially creates value for all members in the chain, but such benefits are different in importance and degree among partners in a supply chain (Agrawal and Pak, 2001). Mainly, these benefits are classified into customer focus benefits and company focus benefits (Table VI).

Research Methodology: SME and Data

In recent years the Small and Medium – sized Enterprises (SMEs) have come under “public policy limelight” (Schogl, 2004). Authors mainly identify the employment potential and the number of firms as the major reasons for focusing on this sector. This shift in focus has been even more profound in India as a fast economical growth in the world. A major

frustration for most researchers in the SMEs area is the lack of scientific data on this sector in the country. The only major source of data is the Confederation of Indian Industry (CII, 2006). Hence, before developing the research methodology and data gathering we need to understand what exactly a SME is.

Definition of SME

Literature has defined SMEs by a wide variety of definitions and criteria. Verhess and Meulenberg (2004) and firm in the SME sector in general revolve around the owner / entrepreneur. Carson *et al.* (1995); Verhess and Meulenberg (2004) define SMEs as “a firm that is run and controlled under the direct supervision of the owner.” SMEs have also been defined by the number of employees; Chew (1998) defines SMEs as:

- ◆ Tiny establishments – firms with 5-9 workers;
- ◆ Small establishments – firms with 10-49 workers; and
- ◆ Medium establishments – firm with 50-99 workers.

SMEs have been defined as firms having less than 100 employees (Nooteboom, 1994; Fong, 1971), but according to European Commission (2005) classification, small firms are firms with less than 50 employees and medium – sized firms are firms with less than 250 employees. For the purpose of this study we chose to define of SMEs and develop research

Table IV - Combined and Functional Collaboration Ranking of Barriers

	Combined			Internal Collaboration			Supplier Collaboration			Customer Collaboration		
	Mean	Rank	%5-7	Mean	Rank	%5-7	Mean	Rank	%5-7	Mean	Rank	%5-7
Panel I :Barriers*												
Lack SCM teams	6.01	1	94.2	6.07	1	97.3	6.08	1	100	5.89	4	85.2
Lack clear alliance guidelines	5.91	2	89.2	5.73	2	84.2	5.95	2	95.0	6.03	1	88.6
Lack SCM training	5.87	3	84.6	5.71	3	84.1	5.95	3	89.3	5.97	2	80.4
Lack top management support	5.34	4	71.8	5.15	4	63.0	5.67	6	84.3	5.19	10	68.7
Lack willingness to share information	5.24	5	73.0	3.91	12	43.3	5.92	4	88.2	5.90	3	87.5
Lack of joint learning attitude	5.15	6	66.0	4.63	6	59.1	5.86	5	77.4	4.97	12	61.6
Incompatible SCM plan	5.08	7	66.0	4.64	5	62.1	5.59	7	75.7	5.00	11	63.2
Poor financial support	5.03	8	67.0	3.91	11	43.0	5.34	11	74.0	5.86	5	83.0
Lack shared risks and rewards	5.00	9	61.9	4.17	9	51.7	5.47	9	68.2	5.37	9	66.0
Inconsistent logistics/transportation	4.97	10	66.9	3.92	10	38.9	5.34	10	79.7	5.67	7	82.2
Lack of trust	4.54	11	59.0	4.40	8	53.0	5.30	12	81.2	3.93	15	42.8
Inadequate information system	4.51	12	53.0	3.28	16	28.5	5.47	8	70.4	4.79	13	60.3
Lack common operating goals	4.50	13	61.6	3.01	17	29.3	4.97	13	68.1	5.53	8	87.4
Non- aligned measurement	4.47	14	57.6	3.85	13	42.0	3.87	16	43.9	5.68	6	87.0
Lack of commitment	4.34	15	48.4	4.58	7	48.9	4.39	14	50.3	4.05	14	46.1
Improper communication technology	3.65	16	45.9	3.29	15	37.6	4.07	15	51.7	3.60	16	48.6
Organization boundaries	3.45	17	42.6	3.82	14	43.5	3.45	17	40.1	3.19	17	44.2

sampling as firms with less than 250 employees (European Commission, 2005).

Data Collection

The research is based on quantitative approach using a questionnaire survey to ask about barriers and benefits of supply chain collaboration with internal supply chain members (internal collaboration) and with external members of supply chain (supplier and customer collaboration). Data was collected across multiple setting (industries) among Indian Small-Medium Enterprises (SMEs). We randomly selected a total 700 registered firms for our study in two states, Karnataka and Tamil Nadu. These two states are very successful to develop SMEs in different sectors (Confederation of Indian Industry, 2006). The survey, through the mailed questionnaire and direct submission (geographically accessible firm), was conducted within three months period (Dec, 2010 until Feb, 2011). For collected questionnaire through the e-mail, the first mailing contained a cover letter, the survey instrument, which was sent to the sample (geographically inaccessible) in the first week of December 2010. The second mailing was sent approximately 15 days later to those who had not responded to the first mailing. Three weeks after the second mailing, a third mailing was sent to all remaining non respondents, and some of the questionnaire belong to the geographical accessible firms were collected personally in this period of time.

As a result, 156 questionnaires were finally received with a response rate of 22.3 percent. After eliminating four incomplete questionnaires, 152 questionnaires were deemed usable, yielding a 21.7 percent valid return rate. Harrison and new (2002) reporting that the return rate of their survey questionnaire was five percent, therefore, we consider our response rate to be acceptable. The demographic data of the respondents is presented in Table III.

Results and Discussions

Mean score for each survey question was compiled and ranked from highest to the lowest in importance regarding the barriers and benefits of supply chain collaboration in SMEs. Ranking were then ordered by different collaboration function with the chain. Response rankings were then also listed by the percent of respondents that ranked survey items a five or above. The mean scores, ranking, and percentages of score five or greater

are listed in Table IV and V with respect of three collaborative perspectives: Internal Collaboration, Supplier Collaboration, and Customer Collaboration. The combined means ranks and scores five or above also are presented. Table VI summarizes the top ten barriers and benefits to SCC.

Barriers to Supply Chain Collaboration

Conceptually, strategic supply chain collaborations seem to succeed or fail on the degree of resource sharing among partners (e.g. information, knowledge, technique, technology, skills) and the partner's ability to use these resources effectively in changing environments (Stanley *et al.*, 2008). In this section, we highlight some of the main causes for why partners are unable to successfully share resources and make effective supply chain collaboration in SMEs.

The main causes for supply chain collaboration being unable in SMEs to share their resources and utilize those resources, may be divided into two broad categories with Park and Ungson's (2001) dichotomy that we discussed earlier: inter-firm rivalry and managerial complexity (Table VI). The three groups of functional collaboration were consistent in their evaluations of the barriers to SCC, where, almost two variables are varied by three types of collaboration. "Lack of top management support" ranked as the fourth (63 percent, mean = 5.15) and sixth (84.3, mean = 5.67) most serious barrier to internal collaboration as well as supplier collaboration respectively, while, this barrier ranked as the only tenth barrier to customer collaboration at the lower number of four and six. Similarly, "non-aligned measures" are ranked as the sixth most critical barrier to customer collaboration compared to a ranking of sixteen for supplier collaboration.

On the bases on the survey data, greatest barriers go to the first four barriers namely are, lack of SCM team (94.2, mean = 6.01), lack of clear alliance guidelines (89.2, mean = 5.91), lack of SCM training (84.6, mean = 5.87) and lack of top management support (71.8, mean = 5.34), which all of these variables receive on average score of five or greater in three different types of collaborations. In short, these types of barriers fall under the concept of managerial complexity. According to the research data human nature is the primary barrier to successful supply chain collaboration. Stanely *et al.*, (2008) states, some managers believe that people throughout their organizations were

Table V - Combined and Functional Collaboration Ranking of Benefits

	Combined			Internal Collaboration			Supplier Collaboration			Customer Collaboration		
	Mean	Rank	%5-7	Mean	Rank	%5-7	Mean	Rank	%5-7	Mean	Rank	%5-7
Panel 2: Benefits**												
Customer satisfaction	5.77	1	87.6	5.82	2	91.4	5.50	2	91.2	6.00	1	80.3
Output quality	5.57	2	77.1	6.01	1	85.6	6.00	1	92.0	4.70	7	53.7
Customer responsiveness rate	5.43	3	84.8	5.53	5	89.5	5.01	3	74.7	5.75	2	90.2
Sales growth	5.22	4	72.7	5.82	3	92.0	4.64	5	58.3	5.20	4	67.7
Order fulfillment	5.02	5	65.7	4.94	9	63.1	4.84	4	66.4	5.30	3	67.8
On time delivery	4.68	6	63.7	5.63	4	85.2	3.62	11	39.5	4.78	6	66.6
Productivity	4.60	7	68.5	5.47	7	85.3	4.26	6	62.1	4.00	8	58.0
Inventory level/ cost	4.45	8	52.0	4.60	10	55.4	3.95	7	45.0	4.80	5	55.6
Cost of new product development	4.37	9	59.0	5.43	8	70.5	3.90	10	53.2	3.79	9	53.1
Logistics and transportation cost	4.35	10	55.03	5.51	6	88.5	3.94	8	40.2	3.60	11	37.3
Market penetration	3.86	11	40.0	4.10	12	42.1	3.92	9	40.4	3.55	12	37.0
Handel unexpected challenges	3.60	12	40.6	4.14	11	43.0	3.50	12	40.6	3.12	13	38.2
Cost of purchased item	3.57	13	34.0	3.75	14	39.1	3.30	13	32.7	3.67	10	30.0
Product innovation lead time	3.45	14	38.7	4.02	13	40.7	3.21	14	35.5	3.12	14	40.1

suspicious of the types of change instigated by SCM and avoid such change whenever possible. As a form of strategic alliance (Monczka *et al.*, 1998), strategic SCC succeeds and fails by their managerial ability to utilize their collective resources. Management leadership is a leading force in providing SCM related training for all employees (Saraph *et al.*, 1989; Kaynak, 2003). Soltani, (2005) also stated, management in supply chain considered a major driver of effective supplier and customer collaboration.

Sharing data and information between supply chain members play a vital role to create and maintain a strong collaboration. The survey reveals that, lack of willingness to sharing data and information as an inter-firm rivalry barrier creates vulnerability to effective SCC, which it ranks four to supplier collaboration (88.2, mean = 5.92) and three to customer collaboration (87.5, mean = 5.90). Other important interfirm rivalry barriers include incompatible SCM plan and lack of sharing risks and rewards which are taking rank seven and nine in combined respectively.

Benefits of Supply Chain Collaboration

Collaboration in supply chain is generally perceived as beneficial for all members (Sander and Jan, 2009). However, various literatures have acknowledged type of collaboration and benefits of that are differ from sector to sector and even market to market (Kouvelis and Milner, 2002; Olsen and Ellram, 1997). Identifying and quantifying the expected benefits is a critical part of any cost / benefits analysis. In our survey, each collaboration area identified a different top-rated benefit (Table V). “customer satisfaction” is identified as a main benefit of all three types of internal collaboration (91.4 percent, mean = 5.82), supplier collaboration (91.2 percent, mean = 5.50) and customer collaboration (80.3 percent, mean = 6.00) while “output quality” was identified as the greatest benefit of internal collaboration (85.6 percent, mean = 6.01) and supplier collaboration (92.0 percent, mean = 6.00), but very interestingly, this benefit is seventh main important rank customer of collaboration (53.7, mean 4.70). Collaboration with customers has been emphasized by different authors as a key to the success of any organization (Sabath and Fontanella, 2002; McCarthy and Golicic, 2002) in order to reduce costs and increase profitability by solidifying customer’s order fulfillment and customer loyalty. Likewise our survey result reveals, close collaboration with customer improves the “customer responsiveness rate” (90.2 percent, mean = 5.75) as well as

“customer’s order fulfillment (67.8, mean = 5.30), overall, the most prevalent benefits identified by one functional collaboration were viewed by other functional areas as relatively less important. In looking back at survey ranking as a whole, it is note worthy that “customer satisfaction” is the primary benefit of supply chain collaboration in SMEs. It must be noted, however, that customer satisfaction was the first most mentioned benefit resulting from SCC, managers, should carefully analyze their company’s specific position to verify that the other benefits like “reduction of purchased item cost” and “product innovation lead time” can be achieved. Finally SCC benefits can be classified into two main categories: customer focus and company focus (Table VI).

Conclusion and Further Research Directions

Collaboration is a very broad and encompassing term and when it is put in the context of the supply chain it needs yet further clarification (Barrat, 2004). The complex nature of supply chains add difficulties in the elements involved in the concept of supply chain collaboration. The literature review undertaken, although not exhaustive served as a comprehensive base for understanding and developing a framework for identifying barriers and benefits of Supply Chain Collaboration. Part of this overall empirical framework was further explored in the context of the SMEs in an effort to understand the concept of barriers and benefits of SCC in a specific context of SMEs.

The potential benefits for collaborative supply chains are compelling. However, barriers to success can be daunting. Understanding these barriers can lead to designing bridges as solution to allow companies obtain SCC benefits. Managers must keep in mind the following three points, regarding the barriers and benefits: first, almost all managers recognized that, lack of SCM teams, lack of clear alliance guidelines lack of SCM training and lack of top management support are the major barriers to successful SCC. Very interestingly, all of these issues belong to the managerial complexity factors.

As results show people issue – such as culture, a version to change, lack of well trained employee and unavailability of specialize SCM team are more intractable and considered as main causes of barriers to supply chain collaboration. One potential reason for this may be that managers of SMEs still have not recognized the necessity of implementation of SCC, which continuously integrates all members of a chain, in

Table VI - Top Ten Barriers and Benefits to Supply Chain Collaboration

Barriers	Benefits
<p><i>Managerial complexity</i></p> <ul style="list-style-type: none"> ✓ Lack of SCM team ✓ Lack of clear alliance guidelines ✓ Lack of SCM training ✓ Lack of top management support ✓ Poor financial support 	<p><i>Customer focus</i></p> <ul style="list-style-type: none"> ✓ Customer satisfaction ✓ Customer responsiveness rate ✓ Shorter order fulfillment ✓ On-time delivery
<p><i>Inter firm rivalry</i></p> <ul style="list-style-type: none"> ✓ Lack willingness to share data and information ✓ Incompatible SCN plan ✓ Lack of willingness to share risks and rewards ✓ Inconsistent logistics and transportation ✓ Inadequate information system 	<p><i>Company focus</i></p> <ul style="list-style-type: none"> ✓ Out-pot quality ✓ Sales growth ✓ Productivity ✓ Inventory level/cost ✓ Cost of new product development ✓ Logistics and transportation cost

accordance with their structural features in order to maintain their existence in regional, national and even international completion markets. Therefore, managers in SMEs should not overlook these barriers when designing remedies to see problems as Kaynak (2003); Ahire and Dreyfus, (2000) found in their survey that management leadership is the main driving force behind initiating a change towards concentrating a firm's efforts on mobilizing human resources in an integrated manner with providing SCM related training for all employees.

Second, although cost reduction is a prime motivator to strategic supply chain collaboration, (Sabat and Fontanella, 2002) customer satisfaction is perceived as more enduring by managers therefore, cost reduction should be brought to the fore as the leading goal for SCC. But our finding shows that cost reduction was considered as eight (inventory level and cost) and also thirteen (cost of purchased item) benefits of SCC in SMEs. Finally, regardless of functional nature of collaboration, manager should believe that SCC can help their companies thrive in today's intensely competitive market place and change their attitudes toward implementation of strategic collaboration with upstream supplier and downstream customers to gain move and more benefits.

This study, has certain limitation. The first limitation of this research lies into data collection. Although extensive efforts

were taken to ensure the validity of the responses from the key informants, there is still room to improve the rigorosity of the study. Supply chain integration involves different parties both internally and externally, may have different perceptions of their collaboration practices. Therefore, dyadic or triadic data collection from different parties in a supply chain may generate more significant results by comparing and contrasting the responses from various practices, which we collected data from manager's of SME's only.

The second limitation deals with geographical obligation, that, data collected from two states in India, therefore we should carefully interpret the findings. Moreover, since size of the enterprises is not taken into consideration in most of the studies on supply chain collaboration, there is no sufficient research on to what extent SCC fits to SMEs and whether it is right to implement exactly the same SCC, which is implemented on big enterprises, on SMEs, therefore, it is a good opportunity for researchers to investigate that to what extent SMEs fit to supply chain applications.

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Sustainable Supply Chains: 3 BL and QFD Approach

Mohd. Nishat Faisal and Asif Akhtar

Abstract

Today, there is a demand that supply chains must be explicitly extended to handle the by-products leading to the adoption of sustainable practices in supply chains. Integrating triple bottom line (3BL) and Quality Function Deployment (QFD) approaches, this research presents a framework to correlate the sustainability dimensions and the enablers of sustainability in a supply chain. The proposed model is evaluated for supply chains from small and medium enterprises segment. The results indicate that the model can be effectively used to develop a quantitative measure of sustainability, and for benchmarking supply chains' performance on sustainability dimension.

Key words:

Supply Chain, Quality, Sustainability, Triple Bottom Line.



Mohd. Nishat Faisal, Assistant Professor, Department of Management and Marketing, College of Business and Economics, Qatar University, P.O.Box: 2713, Doha, Qatar, Email: nishat786@qu.edu.qa



Asif Akhtar, Assistant Professor, Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh, U. P., India-202002, Email: asifakh@gmail.com

The World Commission on Environment and Development (WCED) defined sustainable development as: "Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987; Hart and Milstein, 2003). Today, it has been recognized that sustainability programmes have the potential to make a significant positive impact on supply chain practice (Auroi, 2003) and thus with the advent of environmental and societal concerns, supply chain management has to be redefined.

A sustainable enterprise is one that contributes to sustainable development by simultaneously delivering economic, social and environmental benefits or what has been termed "the triple bottom line" (Norman and MacDonald, 2004). The economic, social and environmental benefits achieved when adopting socially responsible behaviours go beyond the boundaries of a single firm and involve wider communities. To be effective in terms of sustainability, companies need all firms in their supply chain to adopt sustainable practices which require a greater

understanding of the complex relationships among economic, social, and environmental parameters. This knowledge of complex relationships is important, as the task is not only to manage social and environmental impacts but also to maintain profitability (Linton et al., 2007; Matos and Hall, 2007; Seuring and Muller, 2008).

The importance of sustainability criteria to measure and report supply chain performance has increased in today's competitive and social environment (Vasileiou and Morris, 2006). Different legislations and regulations in most developed countries have made the manufacturers accountable for their products, throughout their entire useful life and beyond (Olugu et al., 2010). Sustainable supply chain paradigm thus differs from mainstream supply chain management, as it involves the recognition of stakeholders within and beyond the supply chain (Hall and Matos, 2010). In the context of stakeholders, Roberts (2003) emphasizes that the actions of NGOs can erode the reputation of the dominant supply chain member responsible for environmental and social problems. As companies begin to confront global competition for resources and stricter environmental regulations, the focus is now on how to address environmental challenges while maintaining competitiveness (Kleindorfer et al., 2005).

Sustainable practices in the supply chain can also help in improving the overall brand image of the firm. For example, McDonald's decision to raise the price of tomatoes not only had an impact on the pay received by workers growing potatoes, but also brought good publicity to the company adding to the brand image. On the other hand issues like accusation of the use of child labour by suppliers in the manufacture of soccer balls resulted in negative publicity for Nike and consequently eroded brand image. To improve its sustainability performance, Nespresso launched in 2003 the "Nespresso AAA Sustainable Quality Programme." According to the firm, the program represented an "effort to secure highest quality coffee while promoting environmental, social and economic sustainability along the entire value chain, from the farmer to the consumer"(Alvarez et al., 2010). One of the key areas that sustainable supply chains would impact, is environment. When a company adopts sustainable practices, there is a positive impact on the environment. For example, lately companies are rethinking their strategy to outsource all the manufacturing to China. This rethink is because of the potential impacts of outsourcing on environment relative to cost savings due to cheap labour.

Though, many papers have appeared that have discussed the environmental impact of the supply chain operations while some have discussed the explicit need to integrate social dimension in the supply chain, few have considered the issue at a broader level, consisting of three components: the natural environment, society, and economic performance. To fill this gap, the present study proposes a framework to consider the dimensions of sustainability and relate them to the drivers of sustainability in a supply chain.

Investigating sustainability from small and medium enterprises (SMEs) is relevant for at least two reasons (Lepoutre and Heene, 2006). First, SMEs constitute a major driver of economy in developing countries and even 99 percent of the European Union (EU) businesses (Spencer, et al., 2003). Second, sustainability drivers for SMEs are significantly different from those developed for large companies, due to SME peculiarities. For example, most SMEs are directly managed by owners, are strictly linked to business partners and the local community, and lack resources and support to implement sustainable practices. Such aspects strongly affect SMEs, capability to adopt sustainable practices adopted by SMEs. Despite a large amount of literature on supply chain management, the research in the area of sustainability in small and medium enterprises (SMEs) supply chain lacks in the following ways:

- ◆ there are no models that can co-relate sustainability requirements in a supply chain and how to achieve them, i.e. with sustainability enablers,
- ◆ there are no models that can provide a quantitative measure of sustainability, and
- ◆ there are no practical models for benchmarking supply chains' performance on sustainability.

This paper addresses the above gaps. After identification of sustainability dimensions for a supply chain and enablers impacting sustainability of SMEs' supply chain, Quality Function Deployment (QFD) framework is applied.

Triple Bottom Line (3BL) Dimensions of Sustainability- "WHAT's"

Sustainability brings together the three dimensions: environmental, social, and economic, (also termed the "triple bottom line"). Today, sustainability is an integral part of

business strategy where the focus is now to leverage it for improving competitive advantage, not just as part of cost reductions for the bottom line. With a focus on core competence by the firms there is a growing trend for outsourcing, this necessitates that companies are able to influence their supply chain partners to embrace practices to improve overall sustainability of their supply chains. This is more important as in general stakeholders continue to hold branded goods firms accountable for issues relating to the production of the raw materials and goods that go into their products, whether or not they own or directly control the production processes (Roberts, 2003). The 'triple bottom line' enablers for economic, social, and economic dimensions are summarized below.

Environmental Dimension: A focus on environmental dimension in supply chains in some instances was found to be beneficial as it can reduce costs and improve organizational performance (Carter et al., 2000; Hervani and Helms, 2005), or enhance a firm's reputation (Wycherley, 1999). Environmental consciousness gives rise to green supply chain management which includes practices like reducing packaging and waste, assessing vendors on their environmental performance, developing more eco-friendly products and reducing carbon emissions associated with transport of goods (Walker et al., 2008). Greening the supply chain has numerous benefits to an organization, ranging from cost reduction, to integrating suppliers in a participative decision-making process that promotes environmental innovation (Bowen et al., 2001; Rao, 2002). This requires commitment, involvement and support of suppliers. Therefore, companies are increasingly managing their suppliers' environmental performance to ensure that the materials and equipments supplied by them are environmentally-friendly in nature and are produced using environmentally-friendly processes (Min and Galle, 1997). In addition, organizations have to motivate other actors, sometimes several tiers upstream, to comply with requirements that may be of critical importance to the focal company but not necessarily to its supplier. It must also be able to verify that its suppliers are complying with such requirements in a way that is satisfactory not only to the company but also, in many instances, to other relevant stakeholders (Kogg, 2003).

Social Dimension: A company seeking to operate in accord with the principles of sustainability or taking an ethical or citizenship approach to corporate social responsibility must consider its entire supply chain, "not just those links which

belong to its own sphere of legal responsibility" (Hutchins and Sutherland, 2008). A guiding principle of corporate social responsibility is conducting business in a way that is consistent with the morals and values of society, but "not necessarily required by law" (Carroll, 1991). Diversity in supply base, diversity in workforce, community initiatives, human rights, and health and safety of workers are major principles that relate to organizations socially responsible practices among the nine principles as defined by the Institute of Supply Management (Jacobsen, 2008). Organizations' need to consider the impact of socially irresponsible behaviour by their suppliers as consumers held the big company's brand responsible. A study by Ciliberti et al., (2008) provides some learning points for integrating CSR in SMEs' supply chains like establishing written requirements, training initiatives, long-lasting close relationships with suppliers, a continuous improvement philosophy and soliciting the help of NGOs or local networks of supporting organizations to address problems in monitoring second-tier suppliers and retrieving information on working conditions and local laws in developing countries.

Economic Dimension: Relating to economic dimension the supplier selection literature, gives prime importance to quality, delivery and net price (Weber et al., 1991). Verma and Pullman (1998) studied how managers' tradeoff among quality, cost, on-time delivery, delivery lead-time and flexibility attributes when choosing a supplier. They indicated that managers perceive quality to be most important supplier attribute, followed by on-time delivery and cost. Karpak et al. (2001) considered cost, quality and delivery reliability as vendor selection criteria. Bhutta and Huq (2002) used four criteria to evaluate suppliers: manufacturing costs, quality, technology, and service. Bayazit (2006) has also considered quality, on time delivery, price, delivery lead time and flexibility as the factors for supplier selection. Cost savings due to reduced packaging waste, ability to design for reuse and disassembly (Hart, 1995; Shrivastava, 1995), and product life extension (Linton and Jayaraman, 2005) are also considered important from sustainability point of view.

Enablers of Sustainable Supply Chain - "HOW's"

According to Merriam-Webster enabler is defined as "as one that enables another to achieve an end" where enable implies to make able; give power, means, competence, or ability to. Thus for the purpose of this research enabler is considered as a variable that enables (ability to) the attainment of sustainability in a supply chain.

Information Sharing

In general it is found that most of the tier II and tier III partners in the supply chain are small and medium enterprises (SMEs). These SMEs are likely to lack the resources required to implement sustainability standards among their own suppliers (Jorgensen and Knudsen, 2006). Thus there is an urgent need to share information regarding sustainable practices and also their relationships with financial return. By sharing information, the partners in a supply chain can be convinced that sustainability is a good idea. This is important as there are also intangibles related to sustainability that are difficult to quantify (Brown, 2009). Information sharing about supply chain inventory, production planning, and production scheduling can be leveraged to improve procurement management and material flow (Vachon and Klassen, 2006).

Strategic Planning

Integrating sustainability across the supply chains is difficult because most executives do not fully understand the issues and do not know how to devise the governance or strategies needed to adopt a more sustainable path. Walton et al (1998) suggest that environmental issues are becoming an intrinsic part of strategic planning in organizations due to stricter regulations and the demands of environmental accountability. Firms are also becoming aware of the need to develop strategies that extend their traditional corporate governance processes beyond the firm boundary to their supply chain partners (Kytte and Ruggie, 2005).

Collaborative Relationships

In recent years, firms have embraced the importance of working collaboratively with their supply chain partners to enhance their CSR/sustainability performance (Nalebuff and Brandenburger, 1996). Environmental management approaches in supply chain like product stewardship are dependent on the degree of coordination with immediate customers and/or end-consumers, along with greater interaction with suppliers when designing and developing new products (Vachon et al., 2001). Geffen and Rothenberg (2000) suggested that relations with suppliers aid the adoption and development of innovative environmental technologies. In addition, the interaction of customer and supplier staff, partnership agreements and joint research and development lead to improvements in

environmental performance. In case of Starbucks supply chain, longer-term, closer relationships with farmers are also helping to reduce supply chain risk (Lee, 2008). According to Hall (2000), for successful sustainable supply chains' knowledge transfer between supply chain members is necessary which necessitates collaborative approaches.

Competitive Advantage

A proactive environmental strategy can help a firm to gain competitive advantage through the development of supply management capabilities (Ferguson and Toktay, 2006) and would also improve the financial performance of the firm (Gonzalez-Benito and Gonzalez-Benito, 2005). To support the burgeoning population on the planet the natural resources are consumed with much faster pace and thus businesses will be required to create new strategies to ensure minimal environment impact. To achieve this end, it is highly probable that the basis for gaining competitive advantage in future would be the activities which fall under the broad realm of sustainable supply chain management (Gladwin, 1992; Schmidheiny, 1992).

Support to Partners in the SC

To change the mindset of managers in SMEs who view ecology versus economy, training has been recommended by many researchers (Bowen *et al.*, 2001; Carter and Dresner, 2001). Today large buyers are increasingly adopting a development-oriented approach in order to handle non-compliance issues through joint remediation plans rather than through negative sanctions. Such remediation plans involve transfers of technology and capacity-building initiatives in support of continuous improvement (Jamison and Murdoch, 2004). Support from focal company may also include joint planning sessions with regard to the environment, knowledge sharing activities pertaining to greener product design or process modification, and reducing waste in the logistics process (Vachon and Klassen, 2006).

Top Management Commitment

To achieve the goals of sustainability, leaders must reform, redesign, and restructure their organizations to minimize their negative impacts (Quinn and Dalton 2009). They are responsible for adopting practices that would lead to achieve the sustainability along with economic goals. They should also

act to bring changes in the organization's views of success from economic-based dimensions to a sustainability based dimensions. Thus, to ensure complete environmental excellence, top management must be totally committed (Zsidisin and Siferd, 2001; Rice, 2003). Personal commitment of individuals (including founder and owner) has been found to be positively related to green supply chain management (New *et al.*, 2000). Operational and environmental improvement has been found to be positively related to employee involvement (Hanna *et al.*, 2000). Sustainability initiatives are likely to be successful if they are supported by key company staff and other members of the supply network, and procurement staff are forward-thinking and have appropriate skills (Roberts, 2003).

Trust among Supply Chain Partners

Lengnick-Hall (1998) argued that trust, developed through effective communication, can create resources that lead to a competitive advantage. Trust is an expectation that partners will not act in an opportunistic manner even if there are short-term incentives to do so (Chiles and McMackin, 1996) and can contribute significantly to the long-term stability of an organization and its supply chain (Speckman *et al.*, 1998). The greater trust allows management to shift their attention and scarce resources away from monitoring (with relatively little value added) to other more critical aspects, such as improvement.

Engaging Stakeholders

Since environmental and social issues are intertwined, stakeholders such as NGOs who were not traditionally considered in supply chain decisions are also involved (Pagell and Wu, 2009). In some cases, the relationships with stakeholders develop into long-term partnerships, benefiting both organizations, as well as society, because of their focus on sustainability and responsibility. The concept of stakeholder engagement is viewed as both a necessity and an opportunity. To properly address sustainability, there is a need to reaching beyond the traditional boundaries of the organization to external stakeholders like the community. Thus stakeholder engagement is an opportunity to influence other organizations, such as those of their suppliers and customers, towards sustainability (Quinn and Dalton, 2009).

Vendor Certifications

Existence of models and tools for environmental consideration in supplier selection research is still emerging, while more general sustainability issues, incorporating other social sustainability dimensions into supplier selection, are quite scarce (Hutchins and Sutherland, 2008). Today companies are embedding standards in the selection and evaluation criteria of suppliers (Walton *et al.*, 1998). One prevalent approach is ISO 14001 certification, which is now required, for example, by several large automotive companies of their tier-one suppliers (Vachon and Klassen, 2006).

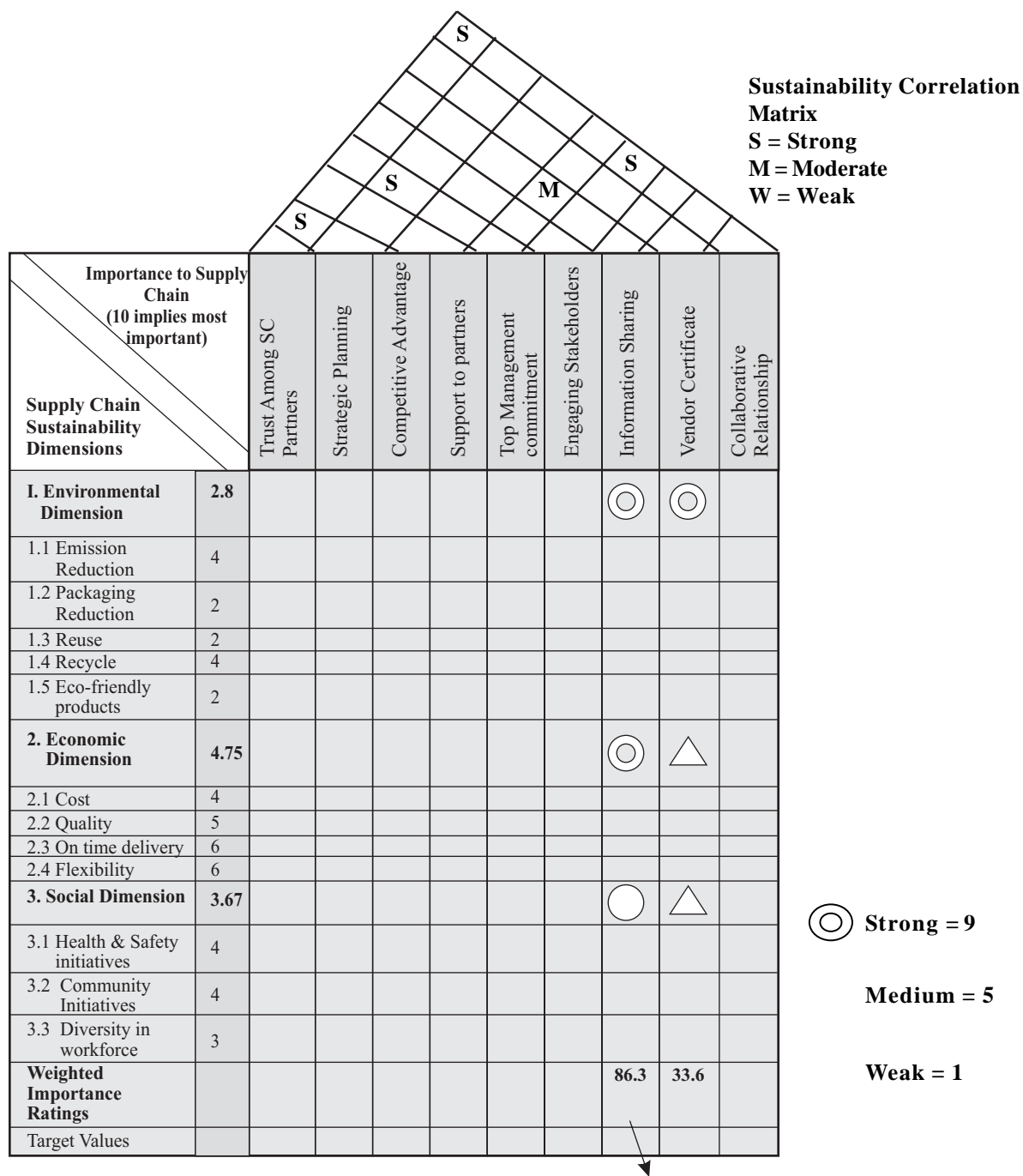
House of Quality for Supply Chain Sustainability

QFD (Quality Function Deployment) can be defined as "a system for designing a product or service based on customer demands and involving all members of the producer or supplier organization." Yoji Akao developed the concept of QFD for new product development in the late 1960s (Jiang *et al.*, 2007). It enables organizations to be proactive rather than reactive in product design. Through the structured QFD process, the design team is forced to consider what the customer wants, then identify possible ways of achieving that end rather than concentrating on technical aspects of design (Crowne and Cheng, 1996). Typically, a QFD system can be broken down into four inter-linked phases to fully deploy the customer needs phase by phase. In QFD, each phase's important outputs (HOWs), generated from the phase's inputs (WHATs), are converted into the next phase as its inputs (new WHATs). So each phase can be described by a matrix of "WHATs" and "HOWs," which is easy and convenient to deal with in practice. The four QFD phases include: Phase I to translate customer needs into product design attributes which we will call technical measures; Phase II to translate important technical measures into parts characteristics; Phase III to translate important parts characteristics into process operations; and Phase IV to translate key process operations into day to day production requirements (Chan and Wu, 2005).

The House of Quality (HOQ) For Supply Chain Sustainability

In today's competitive environment, the HOQ is a key strategic tool to aid companies in developing products that satisfy customer needs. According to Hauser and Clausing (1988), the HOQ is a kind of conceptual map that provides the means for inter-functional planning and communications. Drawing from

Figure 1: House of Quality Matrix for Supply Chain Sustainability



the standard HOQ, this paper presents a modified HOQ for sustainable supply chain known as sustainable supply chain HOQ (SSC-HOQ). The six elements of the SSC-HOQ shown in Figure 1 can be described as follows.

Sustainable Supply Chain Dimensions (WHATs)

In a standard HOQ they are known as voice of the customer, customer attributes customer requirements or demanded quality. In this case, these are the various requirements under the three dimensions as derived from triple bottom-line approach. They form the initial input for the HOQ and highlight the variables from a supply chain perspective that should be paid attention to. In case of product design, customer needs are usually collected by focus groups or individual interviews which should be expressed in customers' own phrases. For SSC-HOQ presented in this paper, these variables are the result of a comprehensive literature review coupled with discussion with supply chain experts.

PTRs (HOWs) or Sustainability Enablers

In a standard HOQ, product technical requirements (PTRs) also known as design requirements, product features, engineering attributes, engineering characteristics or substitute quality characteristics. They describe the product in the language of the engineer; therefore, are sometimes referred to as the voice of the company. The PTRs are used to determine how well the company satisfies the customer needs. Customer needs tell the company 'what to do' while the PTRs tell 'how to do it.' In our case PTR's are the sustainability enablers. These variables define the supply chain's capability to improve sustainability. For the purpose of this research, these variables are identified by exhaustive literature review and discussion with experts.

Relative Importance of Supply Chain Sustainability Dimensions

There are three dimensions of sustainability and each one of them has several their sub-variables and thus too many to deal with simultaneously, and so they must be rated. This rating reflects the requirements of the stakeholders in driving the supply chain's efforts towards sustainability. This leads to a trade off among various supply chain sustainability dimensions, and the supply chain managers should start to improve on the most important variables and slowly move to others which are relatively ranked lower. The relative

importance can be determined, by using 5-, 7- or 9-point scales. For determining relative importance of sustainability dimensions AHP/ANP scale (Saaty, 1980; 1996) can also be used. Relative importance of sustainability can be obtained by discussion with various stakeholders. For example, with a growing awareness about environmental degradation and its impact on societies many local communities would be looking forward towards organization's commitment towards environment while for some other community (like many underdeveloped parts of the country) social commitment of the organization might be more important. In this research, the sustainability dimensions are rated for two supply chains. One is from a small and medium enterprises cluster in India with buyers outside the country and suppliers within the country. The other supply chain is a fresh food supply chain for a company that can be categorized as a medium size organization, operating in Gulf. Various sustainability sub-categories as enunciated in are ranked with the help of a discussion with various stakeholders, all the sub-categories of sustainability are considered for ranking on a scale of 1-10 scale where 10 indicates most important (Figure 1). Then the major categories relative values are calculated by taking the average of values of all the sub-categories under that category.

Relationships between WHATs and HOWs

The relationship matrix indicates how much each of the sustainability enabler affects each sustainability requirement. The relations can either be presented in numbers or symbols. In this paper, we have used symbols to denote the relationship between WHATs and HOWs. In the present research we have three categories, strong, medium and weak and the corresponding values as 9, 5 and 1. These values are used to calculate weighted importance ratings for each of the sustainability enabler. For example the weighted importance rating for information sharing among supply chain partners is 86.3 while for vendor certifications is 33.6. This implies that to improve supply chain sustainability, supply chain managers perceive that it is more important to improve information sharing among supply chain partners rather than focusing on vendor certifications.

Inner Dependence among the Sustainability Enablers

The SSC-HOQ's roof matrix is used to specify the various sustainability enablers that have to be improved collaterally, providing a basis to calculate to what extent a change in one

variable will affect other variables. In our case also, sustainability enablers have inner dependence among them. An effort to improve one variable may have a positive influence on some other variable or there might be a negative effect on another variable. This correlation facilitates to understand trade-offs among variables.

Overall Priorities of the Sustainability Enablers and Additional Goals

Here the results obtained from preceding steps are used to calculate a final rank order of sustainability enablers' ratings. These metrics help in determining priorities and directions for improvement, as well as providing an objective means of assuring that requirements have been met.

A structured communication device, the SSC-HOQ, is developed using the six elements mentioned above. SSC-HOQ would serve as a valuable resource for supply chain managers to understand the priority of various dimensions of sustainability, their relationships with sustainability enablers and would help to formulate better policies to manage sustainability in a supply chain. Better understanding of supply chain sustainability and their relationships with sustainability enablers facilitate developing policies to transform the supply chain into a more sustainable entity so as to not only meet the legislative and regulatory requirements but also create a competitive advantage using sustainable supply chain.

Conclusions

QFD has been in existence for over four decades, and apart from its conventional use in product design it is also used in many other applications. This research utilizes the QFD approach to relate triple bottom-line dimensions of sustainability and sustainability enablers for a supply chain. The advantage of using house of quality matrix for supply chain sustainability are that it helps to prioritize sustainability enablers for a supply chain which would facilitate the supply chain managers to develop suitable strategies to improve supply chain performance on sustainability dimension accordingly. The research also provides a weighted value for the supply chain sustainability enablers. This is of extreme importance as out of so many variables that could impact the supply chain sustainability, it can be gauged which of the variables are more important for the supply chain under consideration. Lastly, the proposed SSC-HOQ also presents the inner dependence

among various enablers of supply chain sustainability. It is expected that the proposed methodology would provide the supply chain managers a tool to improve sustainability in supply chains.

To achieve sustainability supply chain managers should develop long term relationships with their suppliers' majority of which are in SMEs category. They need to get these SMEs more involved in sustainability efforts. It is now imperative for large organizations to monitor their suppliers' performance, but they do need to provide their suppliers the training support. To enforce sustainability practices, they may have direct visits to these SMEs or should involve local NGOs that can help them in providing information regarding local legal frameworks and the existing conditions in these SMEs. In the beginning majority of the SMEs would find adoption of sustainable practices taking a part of their profits. In this transition phase, the role of the large organization is much wider in the form of support to these SMEs. These large organizations should facilitate transfer of best practices from their suppliers globally; there should also be some visits by these SMEs to the plants which already have adopted sustainable practices and frequent visits by the representatives of these large organizations to develop a broad understanding of sustainability by these SMEs.

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Entrepreneurial Orientation: Performance Level

Astha Sharma and Sumita Dave

A b s t r a c t

This study aims to investigate the relationship between Entrepreneurial Orientation and performance of the firm. The sample consisting of 319 paddy processing units was selected through convenience sampling. Regression analysis reveals that there is a strong impact of EO on firm performance. Among the three dimensions of EO, Risk taking ability, innovativeness, and pro-activeness, risking taking ability is found to play the most important role in the performance of the firm.

Key words:

Entrepreneurial Orientation, Risk-taking Ability, Pro-activeness, and Performance.



Astha Sharma, Faculty and Research Scholar, Faculty of Management Studies, (Formerly known as SSMV), SSGI, Junwaani, Bhilai, Distt. Durg, Chattisgarh, Email: astha29.s@gmail.com



Dr. Sumita Dave, Sr. Associate Professor and HOD, Faculty of Management Studies, SSGI, Junwaani, Bhilai, Distt. Durg, Chattisgarh, Email: sumitadave@rediffmail.com

Chhattisgarh is a state plenty of natural and mineral resources. Its natural diversity and rich soil has given it an edge to the state. The agricultural produce is sufficient for the local population. But value addition and export of such agro products is very less in this area. Traditional methods and old technologies have reduced the pace of industrialization here. Total number of agro-processing units and technology used as compared to the units at Punjab, Haryana, U.P. and West Bengal is very less. There are around 800 paddy mills (Udyam Se Pragati, 2004-2005) in the state which are still running traditionally. Government and Business houses are unable to tap the real profit from paddy processing. Every two third of the registered units die within five years of its operation, leading to a huge loss to the economy (CSIDC, 2007). Traditional methods, old techniques, lack of awareness and entrepreneurship are found to be the major cause of this decline.

Development of entrepreneurship is the best solution for removing all such lacunas. As Entrepreneurship is an essential feature of high performing firms (Peters and Waterman, 1982).

For both start-up ventures and existing firms, entrepreneurship carried on in the pursuit of business opportunities spurs business expansion, technological processes and wealth creation (Lumpkin and Dess, 1996).

Entrepreneurship has been characterized by a number of researchers as a combination of innovativeness, risk taking ability and pro-activeness. These three dimensions have been adopted in most previous studies to define entrepreneurship (Lumpkin and Dess 1996; Covin and Slevin 1989; Lee and Peterson 2000; Kreiser et al. 2002; Tarabishy et al. 2005, Miller, 1983).

However the clear description of EO is given by Lumpkin and Dess as well as Covin and Slevin, where they have defined EO separately. Covin and Slevin, (1989) labelled the concept of EO as the entrepreneurial strategic posture of a firm and stated that firms are entrepreneurial if they are innovative, proactive and risk taking. Lumpkin and Dess (1996) described EO as the process, practice, and decision making activity that leads to new entry. It can be characterized as an entrepreneurial process that managers use to act entrepreneurially. The distinction between entrepreneurship and entrepreneurial orientation is comparable to the one made in the strategic management literature between content and process (Bourgeois, 1980). The early strategy literature equated entrepreneurship with going into business, and the basic "entrepreneurial problem" (Miles and Snow, 1978) was to address the principal question of strategy content, that is, "What business shall we enter?" The answer to this question determined a firm's domain and guided its product-market relationships and resource deployments. As the field of strategic management developed, however, the emphasis shifted to entrepreneurial processes, that is, the methods, practices, and decision-making styles managers use to act entrepreneurially. These includes such processes as experimenting with promising new technologies, being willing to seize new product-market opportunities, and having a predisposition to undertake risky ventures. That is, new entry explains what entrepreneurship consists of, and entrepreneurial orientation describes how new entry is undertaken (Lumpkin and Dess, 1996).

However studies have been conducted on entrepreneurship but there is a paucity of research in the field of food processing units. So the present research tries to identify EO's impact on Mill's performance and find out the effect of other internal

variables such as size, generation, categories and types of investment on firm performance.

In order to understand more about the dimensions and to study more about EO exhaustive literature review was done.

Literature Review

Many researchers have done their studies in the field of entrepreneurship, especially to study the relationship between entrepreneurial orientation and performance of a firm. A major contribution to the study of Entrepreneurial orientation is by Lumpkin and Dess, 1996 where they have defined Entrepreneurial Orientation (EO) as the propensity of firms to be innovative, proactive to the market place opportunities and be willing to take risk. EO is described as a Process and Entrepreneurship as the content. The entrepreneurial characteristics of a firm are characterized by risk taking, innovativeness and pro-activeness. The answer of "What makes a firm entrepreneurial?" is that "Any firm that operates with an effective combination of autonomy, innovativeness, risk taking, pro-activeness, and competitive aggressiveness is entrepreneurial" (Lumpkin and Dess, 1996).

The definition of Entrepreneur by Hisrich [1988; 1990] also integrates the three dimensions of EO, as he posited that entrepreneur is characterized as someone who demonstrates initiative and creative thinking, is able to organize social and economic mechanisms to turn resources and situations to practical account, and accepts risk and failure. In his study, four separate traits were used to define the entrepreneurial profile: innovation, risk-propensity, internal locus of control, and energy level.

Entrepreneurial firms are defined as those that are geared towards innovation in the product-market field by carrying out risky initiatives, and which are the first to develop innovations in a proactive way in an attempt to defeat their competitors (Miller, 1983, p.771).

Miller, 1983 provided a useful starting point. He suggested that an entrepreneurial firm is one that "engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch" (1983: 771). Accordingly, he used the dimensions of "innovativeness," "risk taking," and "pro-activeness" to characterize and test entrepreneurship. He

Study	EO Dimensions Used
Miller (1983)	Innovation, Proactiveness, and risk taking
Covub and Slevin (1989)	Innovation, Proactiveness, and risk taking
Covub and Slevin (1989)	Autonomy, innovativeness, risk taking proactiveness, and competitive aggressiveness
Wikilund (1999)	
Lee and Peterson (2000)	Autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness
Kreiser et al. (2002)	Innovation, Proactiveness, and risk taking
Marino et al. (2002)	Innovation, Proactiveness, and risk taking
Messeghem (2003)	Innovation, Proactiveness, and risk taking
Tarabishy et al. (2005)	Innovation, Proactiveness, and risk taking

Source: Entrepreneurial orientation and the performance of service business, Sang M. Lee & Seongbae Lim, 2008, pg-3.

studied the correlates of entrepreneurial behaviour in a sample of 52 large, diverse Canadian firms.

The Various Dimensions Studied by Researchers

All the above researchers agree that risk taking, innovativeness and pro-activeness are integral part of entrepreneurial orientation and they characterize entrepreneurship. According to early researchers; Risk taking is defined as venturing into the unknown (Baird and Thomas, 1985). Innovativeness was described as a tendency to be creative in thought and action (JPI Manual, 1994) and Pro-activeness as acting in anticipation of future problems, needs or changes (Webster's Ninth New Collegiate dictionary, 1991). These three dimensions are described in the further sections of literature review.

Miller's (1983) original framework has been widely adopted by numerous empirical studies on EO and its impact on the organization. When it comes to the relationships among dimensions, Miller (1983) and Covin and Slevin (1989) adopted EO as a one-dimensional construct. They insisted that these three dimensions can be combined into a single scale. On the other hand, Lumpkin and Dess (1996) and Kreiser et al. (2002) claimed that dimensions of EO can vary independently of each other. In this study the approach of Lumpkin and Dess (1996) is adopted.

It has been revealed through research that EO is positively related to performance.

The results from many previous studies have supported the relationship between EO and firm performance (Covin and Slevin 1989; Lumpkin and Dess 1996; Becherer and Maurer 1997; Dess et al. 1997; Wikilund 1999; Lee and Peterson 2000).

Lumpkin and Dess (1996) argued that the relationship between EO and firm performance is context specific and introduced the integrative framework for exploring this relationship between EO and firm performance.

Another major finding of the study on Entrepreneurial orientation was by Kroeger in 2007. It was that EO is a combination of risk taking, pro-activeness and innovativeness and it is positively related to performance.

Becherer and Maurer (1997) investigated the relationship among EO, marketing orientation, and firm performance, and showed that EO is directly related to profit change. Dess *et al.*, (1997) examined the nature of entrepreneurially oriented strategy making and its relationships with strategy, environment, and firm performance. Covin and Slevin's (1989) study also suggested that EO is related to performance among

small firms in hostile environments. Wiklund (1999) examined the sustainability of the relationship between EO and firm performance. He analyzed the data from small Swedish firms and found a positive relationship between EO and firm performance.

Tarabishy *et al.* (2005) study found the relationship between the CEO's leadership and the firm's ESP. The results from previous studies indicate that a meaningful relationship exists between EO and firm performance.

a) Innovativeness: The innovation dimension of entrepreneurial orientation (EO) reflects the propensity of the firm to engage in new ideas and creative processes that may result in new products, services or technological processes. Innovativeness can include pursuing novel and creative solutions to challenges and opportunities facing the firm (Wiklund, 1999).

Schumpeter (1934, 1942) was among the first to emphasize the role of innovation in the entrepreneurial process. He outlined an economic process of "creative destruction," by which wealth was created when existing market structures were disrupted by the introduction of new goods or services that shifted resources away from existing firms and caused new firms to grow. The key to this cycle of activity was entrepreneurship: the competitive entry of innovative "new combinations" that propelled the dynamic evolution of the economy (Schumpeter, 1934). Thus "innovativeness" became an important factor used to characterize entrepreneurship. Some researchers have posited innovation as the foremost among all the traits that comprise entrepreneurial profile, they have argued that value creation is the fundamental role of entrepreneurs in a free market system and hence defined entrepreneurs as individuals who exploit market opportunity through technical and/or organizational innovation. Carland, Hoy, Bolton, and Carland observe that "the entrepreneur is characterized principally by innovative behaviour" [Hoy, Boulton, and Carland, 1984:358]. Innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state of the art (Kimberly, 1981).

In the broadest sense, innovativeness may occur along a continuum from a simple willingness to either try a new product line or experiment with a new advertising venue, to a passionate commitment to master the latest in new products or technological advances.

The Jackson Personality Inventory Manual (JPI) defines innovativeness as a tendency to be creative in thought and action. Adjectives on the instrument used to describe entrepreneurs which highly correlate with innovativeness include imaginative, inventive, enterprising, original, resourceful, and farsighted [Jackson, 1994]. A high score on the JPI innovativeness scale indicates a preference for novel solutions to problems and an appreciation for original ideas. Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes.

b) Risk taking: Cantillon (1734), who was the first to formally use the term entrepreneurship, argued that the principal factor that separated entrepreneurs from hired employees was the uncertainty and riskiness of self-employment. Risk has various meanings, depending on the context in which it is applied. In the context of strategy, Baird and Thomas identified three types of strategic risk: (a) "venturing into the unknown," (b) "committing a relatively large portion of assets," and (c) "borrowing heavily" (1985: 231-232). Many have argued that the act of venture creation necessarily includes some level of personal financial and psychological risk. A number of researchers have found empirical evidence in support of the view of entrepreneur as risk-taker. Begley and Boyd (1987), for example, found that business founders scored significantly higher than non-founders on risk-taking propensity. Thus entrepreneurs are generally characterized as moderate risk takers (Begley and Boyd, 1987).

Empirically, the positive impact of EO on firm performance and growth has been supported by several studies and in a Meta analysis. Rauch *et al.*, (2004) found that the risk-taking dimension is positively related to performance, even if significantly smaller than other aspects of EO.

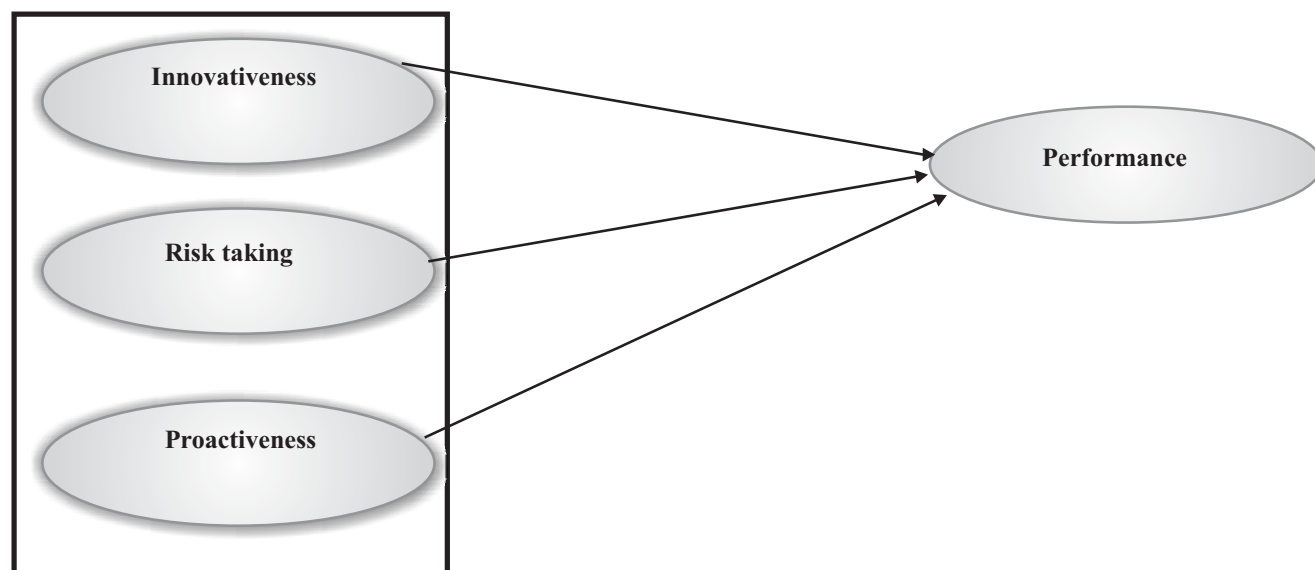
Pro-activeness

Taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets also has become associated with entrepreneurship. This characteristic of entrepreneurship is often referred to as pro-activeness. The term pro-activeness is defined in Webster's Ninth New Collegiate Dictionary (1991: 937) as "acting in anticipation of future problems, needs or changes."

Lieberman and Montgomery (1988) emphasized the importance of first-mover advantage as the best strategy for capitalizing on a market opportunity. By exploiting asymmetries in the marketplace, the first mover can capture unusually high profits and get a head start on establishing brand recognition. Thus, taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets also has become associated with entrepreneurship. Venkatraman, who suggested that pro-activeness, refers to processes aimed at anticipating and acting on future needs by “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle” (1989a: 949). A proactive firm is a leader rather than a follower, because it has the will and foresight to seize new opportunities, even if it is not always the first to do so. Pro-activeness refers to how a firm relates to market opportunities, in the process of new entry. It does so by seizing initiative and acting opportunistically in order to “shape the environment,” that is, to influence trends and, perhaps, even create demand.

Research Methodology

The purpose of this study is to identify the impact of EO on the performance of small scale family owned enterprises of the firm. Fig.1 represents the model.



Entrepreneurial Orientation

Sampling Frame: Small and Medium Scale Family Owned Business of Chhattisgarh.

Sample Size: 319 Paddy Processing Units

Sampling Design: Convenience sampling is used to collect data from Small Scale Family business (FOB) in Chhattisgarh.

Sample: Paddy Processing Units

Sample element: Owners

Research Instrument – Structured Questionnaire constructed on likert scale (1-7 was administered to entrepreneurs of small family enterprises operating in Chhattisgarh.

Analytical Tools- Regression analysis was done to analyze data.

Hypothesis-

H₁: EO has a significant impact on performance.

H_{1a}: Risk taking has a significant impact on performance of firm.

H_{1b}: Innovativeness has a significant impact on performance of the firm.

H_{1c}: Proactiveness has a significant impact on performance of the firm.

A Study of Relationship between Entrepreneurial Orientation and Firm Performance

Analysis and Interpretation

The correlation between performance, entrepreneurial orientation, generation, size the firm, category, investment and type was studied. Majority of the ventures belong to the small and medium categories and were the type of sole proprietorship. Investment pattern was self and bank. The firms were from 1st, 2nd and 3rd generations. Performance was measured on the basis of the owner’s judgement about their firms as compared to past years. Average of sales, growth and profit was taken as performance of the firm and denoted as Pm in further study. Three dimensions innovativeness, pro-activeness and risk taking ability (rtgm) are measured with three questions for each constructed in likert scale (1-7). Mean of the three dimensions were taken as Entrepreneurial Orientation (EO). The questionnaire is derived from Wiklund *et al.*, 2007 and changed for the study.

In further study to find out the most significant impact of a particular dimension, a multiple regression was done with

performance as dependent variable and innovativeness, pro-activeness and innovativeness as independent variable.

Regression analysis was done to identify the impact of EO on performance.

From table 3, column 3 it is clear that EO is showing high correlation with performance (0.781).

The model summary reveals that R² is 0.611 which shows that 61.1 percent of variance in performance is explained by EO which is a significant figure.

Anova table shows that a significant positive relationship exists between EO and performance, because significance level is 0.00<0.05. The Durbin Watson is 1.310.

Since, there is a significant impact of EO and performance, therefore hypothesis H₁ is accepted.

The regression equation from coefficients table is:

$$\text{Performance} = +2.779 + 0.238\text{EO}$$

Value of Beta is 0.781

Dependent Variable Performance (Pm) Statistics	Model		E0	Risk taking ability (rtgm)	G ₁
	Variables in Equation				
Multiple R			0.781	0.784	0.555
R Square			0.611	0.614	0.308
Adjusted R Square			0.607	0.610	0.301
Standard Error			0.8210199	0.81733902	1.09439.56
Durbin-watson			1.310		1.691
Df	Regression Residual		1 98	1 98	1 98
Sum of squares	Regression Residual		103.559 66.059	104.141 65.476	52.243 117375
F			153.631	155.871	43.619
Sig.			0.00	0.00	.000
Coefficients	Unstandardized Coefficients				
	B	Constant	2.779	2.852	3.843
variable			0.238	0.184	1.610
	Std Error	Constant	0.147	0.141	0.129
		variable		0.019	0.015
Standardized coefficient	Beta		0.781	0.784	0.555
	Sig		0.00	0.00	0.00

When the variables; gen, investment and category are taken only gen shows high correlation with performance. Thus taking EO and gen (GEN) as independent variables further multiple regression was done to study their relationship with performance, table 4 and table 5 show that the model is significant at 95 percent, because significant Value is $0.00 < 0.05$. The R value is 0.798, R^2 is 0.637, and adjusted R^2 is 0.630.

The regression equation is:

$$\text{Performance} = +3.883 (\text{Constt.}) + 0.203\text{EO} - 0.496\text{GEN}$$

The coefficients table reveals that GEN (0.009) and EO (0.00) has an impact on performance which was posited by the earlier researchers so it is proved here also.

Therefore to study further, firms were separated into first, second and third generations and regression was done keeping performance as dependent variable.

Gen is showing a negative relationship with performance of the firm.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798 ^a	.637	.630	.79659

a. Predictors: (Constant), gen, EO

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.883	.438		8.865	.000
	EO	.203	.023	.665	8.840	.000
	gen	-.496	.186	-.200	-2.665	.009

a. Dependent Variable: PERFORMANCE

The correlation of performance with generation is highest and positive in the first generation, after that it becomes lesser. Since gen is correlated with performance of the firm, it was further analyzed and the results of correlation describes that **G₁ shows highest correlation with the performance (Pm)**.

Multiple regression reveals - R^2 is 0.308, adjusted R^2 is 0.301, while R is 0.555.

$Pm = 3.843 + 1.610(G_1)$, so it reveals that the first generation firms have more focus on Performance as compared to second and third generation firms. When all the generations (a cumulative) are considered it shows a negative relationship with performance, it can be interpreted as the generations pass the performance declines. Second and third generation have a poor/weak relationship with performance.

To test the hypothesis H_{1a} , H_{1b} , H_{1c} stepwise regression analysis was done, while considering the dimensions of EO separately, it is found that the equation becomes:

$$\text{Performance} = +2.852 + 0.184\text{Rtgm. (Table 3, Col.4)}$$

It was found that risk taking has strong impact on performance.

From the above, it can be interpreted that there is a **significant impact of risk taking on the performance** of firms rather than innovative and pro-activeness. So, H_{1a} is accepted, H_{1b} and H_{1c} are rejected.

Discussion of Results

Through analysis it can be easily understood that there is a significant relationship between Entrepreneurial orientation and performance. While studying each dimension separately

the significance of risk taking is found to be highest for better performance. First generation is more serious to establish them in the market, this can be one of the reasons for the strong positive relationship between first generation and performance. As the owner strives more for sustainability when he starts a new venture he tries to generate more profit, sales and attain growth and therefore he and his firm performs well. However the results depicts that this correlation reduces as the generations passes. The reasons can be the absence of right successor, the dedication of the successors or because of prioritising expansion, diversification strategies instead of strictly keeping an eye on increasing sales or profit, which leads to decrease in performance of the established venture.

Suggestions

To achieve sustainability in performance the owner must devise management techniques. However SMEs have resource constraints, but there are examples where such firms have excelled. The silicon-valley is a real example of this. Paddy processing units cannot exactly follow the same models as them, but Entrepreneurial orientation can be developed by proper training. Government must promote new ideas, latest technology adaptation by entrepreneurs. Regular training programmes including examples (cases) of entrepreneurs from foreign countries and different states of our own country as well as self revelation by some successful entrepreneurs can be a useful remedy for development of such units. Separate sessions about new techniques, processes, technologies related to the area will generate awareness in entrepreneurs; stimulate curiosity; provoke innovativeness and enhance their competitiveness.

Besides this, the owner in order to achieve sustainability must have clear vision for the firm. He should plan and develop appropriate strategies.

Limitations

The researcher has collected data from the owners of paddy processing units. These units are still very traditional and labour intensive. Very few owners are well educated; however each one of them wants their children to be highly educated. While taking their response it was very difficult to explain the questions, it was converted into easier language and then the questionnaire was filled. It was difficult for the researcher to convince them to fill the questionnaire as they are not aware of the importance of research, lack of time and could

not understand the benefit. So, they were explained everything from the scratch and then the motive was fulfilled.

Conclusion

Thus analysis reveals that there is a strong relationship between entrepreneurial orientation and performance of the paddy mills. This emphasizes the importance of developing EO of Small and Medium family owned enterprises. A higher EO of firm will result in better performance. Risk taking has highest impact on the performance as compared to innovativeness and pro-activeness of paddy processing units. Thus, an entrepreneur should be a risk taker for the growth of his firm. The study also reveals that as the family business moves to the next generation the performance declines.

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Working Capital Management: Impact of Profitability

Vivek U. Pimplapure and Pushparaj P. Kulkarni

A b s t r a c t

Working capital management is very vital aspect in financial management of a business. A firm can be very profitable, but if this is not rendered into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. For this study various statistical tools such as correlation and multiple regressions are used. The study comes to conclusion that the increase in the profitability of the company is less than the proportion to decrease in working capital.

Key words:

Multiple Regression, Working Capital Leverage, ROI.



Dr. Vivek U. Pimplapure, Dr. Ambedkar Institute of Management Studies and Research, Deeksha Bhoomi, Nagpur
e-mail: vivek_pimplapure@rediffmail.com



Prof. Pushparaj P. Kulkarni, Dr. Ambedkar Institute of Management Studies and Research, Deeksha Bhoomi, Nagpur
e-mail: pushparajkk@gmail.com

While the performance levels of business organization have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on survival and growth of business organization. The management of working capital is important to the financial health of businesses of all sizes. The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way.

A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a trade-off between these two

objectives of the firms. One objective should not be at cost of the other because both have their importance. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care about liquidity, we may face the problem of insolvency or bankruptcy. For these reasons working capital management should be given proper consideration and will ultimately affect the profitability of the firm.

This discussion of the importance of working capital management, its different components and its effects on profitability leads us to the problem statement which we will be analyzing.

This research is focusing on working capital management and its effects on profitability for a Bharat Petroleum Corporation Ltd.

Objectives of the Study

The main objectives are:

- To establish a relationship between Working Capital Management and Profitability over a period of five years from 2005-06 to 2009-10.
- To find out the effects of different components of working capital management on profitability.
- To Study a relationship between the objectives of liquidity and profitability of the Bharat Petroleum Corporation Ltd.
- To draw conclusion about relationship of working capital management and profitability of Bharat Petroleum Corporation Ltd.
- To ascertain the working capital leverage (WCL) for examining the sensitivity of ROI to changes in the level of working capital of the company.

Data Source

The study is mainly based on secondary sources of information. The required data have been collected from published Annual Reports of the BPCL. And also from the published Annual Reports of the Public Enterprise Survey

by the Ministry of Petroleum, Govt. of India over the period of five years i.e. 2005-06 to 2009-10. For collecting relevant data for the purpose of conducting this study internet surfing has also been made for obtaining the requisite and latest information. Editing, classification and tabulation of the financial data collected from the above mentioned sources have been done as per requirement of the study.

Methodology of Study

For the analysis of data some important ratios relating to working capital management and the ratios which are significant to measures of profitability have been calculated on the basis of data available of the Bharat Petroleum Corporation Ltd. (BPCL). The ratios which have been applied for highlighting the efficiency of working capital management are Current Ratio (CR), Quick Ratio (QR), Current Assets to Total Assets Ratio (CATAR), Current Assets to Sales Ratio (CASR), Working Capital Turnover Ratio (WCTR), Inventory Turnover Ratio (ITR), Debtors Turnover Ratio (DTR) and Cash Turnover Ratio (CTR) and the measure of profitability which has been selected is Return on Investment (ROI). For measuring the degree of relationship between the working capital management and the profitability Pearson's simple correlation coefficient have been applied taking into account their degree. For judging the joint influence of the selected measures relating to working capital management on the profitability, multiple correlation analysis has been applied. In order to assess the joint effect of the selected measures of working capital management on the profitability, multiple regression analysis has been used. Further to examine whether the computed values of correlation coefficients, partial regression coefficients are statistically significant or not, 't' test has been used and whether the multiple correlation coefficient (R) is statistically significant or not, 'F' test has been used. In addition to this, to judge the effectiveness or the reliability of this relationship the multiple coefficient of determination (denoted by R²) has been used and it is defined as the ratio of explained variation to the total variation of the dependent variable (ROI). For measuring the sensitivity of ROI to changes in the level of working capital, working capital leverage (WCL) has been computed.

Findings of the Study

Analysis of Correlation between the selected ratios relating to Working Capital Management and the measure of Profitability: In Table - I, an attempt has been made to measure the impact of working capital on profitability by computing Karl Pearson's correlation coefficients between ROI and the selected measures relating to the working capital management. Table - I shows that the correlation coefficient between ROI and CR is (-) 0.34 which indicates that there is a negative association between the profitability and the current ratio of the company and the correlation coefficient is found to be statistically significant both at

five percent and one percent levels respectively. This significant correlation coefficient implies that there is significant association between ROI and CR of the company during the study period. It is observed from Table - I that the correlation coefficient between ROI and LR during the period under study is negative and is calculated at (-) 0.40 which is found to be statistically significant both at five percent and one percent levels respectively. It also reveals that there is a negative relationship between the ROI and QR. It is evident from these two ratios that the higher the company's margin of safety to the short-term creditors, the lower is the profitability of the company.

Table - I: Simple Correlation Analysis between selected ratios relating to Working Capital Management and Return on Investment of BPCL Ltd.

	2005-06	2006-07	2007-08	2008-09	2009-10	Correlation Coefficient (r)	Calculated value of t
CR	1.38	1.18	1.28	1.15	1.23	-0.34	0.62
LR	0.71	0.87	0.79	0.99	1.17	-0.48	0.94
CATAR	0.71	0.52	0.79	0.70	0.77	-0.37	0.68
CASR	0.21	0.13	0.19	0.15	0.18	-0.39	0.73
WCTR	17.44	51.95	23.93	51.25	29.62	0.51	1.03
ITR	9.99	19.65	10.39	11.15	8.35	0.43	0.82
DTR	45.15	94.04	68.51	63.58	57.40	0.35	0.65
CTR	351.14	303.64	114.61	111.76	153.49	-0.07	0.12
ROI (%)	7.22	8.72	8.44	10.82	3.08		

It is highlighted from Table - I that the coefficient of correlation between ROI and CATAR during the study period is (-) 0.10. It implies that there is a negative correlation between the profitability of the company and the ratio of current assets to total assets. The coefficient of correlation is found to be statistically significant both

at five percent and one percent levels during the study period. It is evident from these two ratios that the greater the CATAR, the lower the profitability of the company. The computed value of correlation coefficient between ROI and CATAR under study conforms to the accepted principle.

Table - I exhibits that the coefficient of correlation between ROI and CASR during the period under study is (-) 0.27 which is also found to be statistically significant both at five percent and one percent levels respectively. It indicates a lower degree of negative association between the two variables. Generally speaking, the lower the current assets to sales ratio (CASR), the greater the efficiency of the employment of working capital and larger is the scope of profitability and vice-versa. The calculated value of correlation coefficient between CASR and ROI conforms to this principle. It is seen from Table - I that the correlation coefficient between ROI and WCTR is 0.12 which implies that there is a positive relationship between these two variables. The calculated value of correlation coefficient is found to be statistically significant both at five percent and one percent levels of significance respectively. It is an accepted principle that the faster the working capital turnover ratio (WCTR), the slower is the relative investment and greater is the profitability of the company. The computed value of correlation coefficient between ROI and WCTR under study conforms to this accepted principle. It is observed from Table - I that the correlation coefficients between ROI and ITR is positive and is computed at 0.33 during the period under study. The coefficient is found to

be statistically significant at five percent and one percent levels. The most acceptable principle is that the higher the ITR, the greater is the efficiency of inventory management and the larger is the scope of profitability. The computed value of correlation coefficient between ROI and ITR under study conforms to the accepted principle. Table - I highlights that the correlation coefficient between ROI and DTR is positive and is computed at 0.20 during the period under study. It is found to be statistically significant at five percent and one percent levels respectively. The study of the relationship between the profitability (ROI) and the receivable management (DTR) conforms to the generally accepted rule that the faster the DTR, the lower is the relative investment in receivable and the higher is the profitability. Lastly, the correlation coefficient between ROI and CTR shows (from Table - I) a negative association of (-) 0.60 which is found to be statistically insignificant at five percent and one percent levels of significance respectively. The more acceptable principle is that higher the CTR, the more will be the efficiency of cash management and the larger will be the scope of improving capital productivity. The study of correlation coefficients between ROI and CTR reveals that the computed value of correlation coefficient does not conform to this acceptable principle.

Table – II: Correlation Matrix of BPCL for the study period from 2005-06 to 2009-10

Ratios	ROI	CR	QR	CATAR	CASR	WCTR	ITR	DTR	CTR
ROI	1								
CR	-0.34	1							
QR	-0.48	-0.60	1						
CATAR	-0.37	0.38	0.18	1					
CASR	-0.39	0.88	-0.33	0.76	1				
WCTR	0.51	-0.93	0.36	-0.66	0.61	1			
ITR	0.43	-0.44	-0.22	-0.95	0.69	0.67	1		
DTR	0.35	-0.65	0.03	-0.73	0.80	0.71	0.89	1	
CTR	-0.07	0.47	-0.52	-0.60	0.64	-0.16	0.44	0.02	1

Table – III: Analysis of Multiple Correlations and Multiple Regression of BPCL for the period from 2005-06 to 2009-10 (Multiple Regression Equation: $ROI = b_0 + b_1.CR + b_2.WCTR$)

Variables	B0	B1	B2
Regression Coefficient	-41.50	32.19	0.26
Standard Error	63.45	44.38	0.25
Calculated value of 't'	-0.65	0.73	1.03
Significant 't'	0.00	0.01	0.02

Regression Statistics

Multiple R	0.64
R Square	0.41
Adjusted R Square	-0.17
Standard Error	3.10
Observations	5

Residual Output

Observation	Predicted ROI	Residuals
1	7.48	-0.26
2	10.07	-1.35
3	5.96	2.48
4	8.92	1.90
5	5.84	-2.76

Analysis of Multiple Correlation and Multiple Regression

The combined impact of the selected measures relating to working capital management on the profitability of the BPCL has been studied in Table - III. While fitting the regression equation, ROI has been taken as the dependent variable and CR and WCTR have been considered as the independent or explanatory variables. The multiple regression equation which has been fitted in this study is: $ROI = b_0 + b_1.CR + b_2.WCTR$ where b_0 is the constant, b_1 and b_2 are the respective partial regression coefficients.

In order to select the independent variables in this analysis, the Correlation Matrix has been constructed in Table - II which represents the correlation coefficient between the

independent variables. It is observed from Table - II that there is a very high degree of correlation between CR and WCTR (0.89), between CATAR and ITR (-0.95), and between CR and WCTR (-0.93). This high degree of correlation indicates that there is an existence of multi co linearity because multi co linearity refers to the existence of high correlation between the independent variables. Theoretically we know when two independent variables are highly correlated they basically convey the same information and logically only one of the two variables could be used in the regression equation. For this purpose QR, CATAR, CASR, ITR, DTR and CTR have not taken into account while fitting the regression line (i.e. the regression equation of ROI on CR and WCTR).

Table - III shows the detailed results of the multiple correlation coefficient (R), multiple coefficient of determination (R^2) and

the regression coefficients of ROI on CR and WCTR showing the strength of relationship between dependent variable (ROI) and all the independent variables (CR and WCTR) taken together and the impact of these five independent variables on the profitability of the BPCL during the study period from 2005-06 to 2009-10. It is observed from Table - III (the multiple regression equation of $ROI = -41.60 + 32.19 CR + 0.26 WCTR$) that when CR is increased by one unit (keeping WCTR remain constant), the ROI is increased by 23.04 units and this positive impact of CR on the profitability is found to be statistically significant at one percent and five percent levels. While for one unit increase in WCTR (other independent variable held constant) the ROI is reduced by 8.89 units and the negative influence of WCTR on the profitability of the company under study is statistically significant both at one percent and five percent levels.

It is exhibited from Table - III that the multiple correlation coefficient of ROI on CR and WCTR for the study period from 2005-06 to 2009-10 is 0.64. It reveals that the profitability of the company is highly influenced by the selected indicators of working capital management i.e. CR

and WCTR. This multiple correlation coefficient is found to be statistically significant at one percent level and also five percent level. It indicates that the joint influence of the selected measures relating to working capital management on the profitability has been satisfactory during the study period. It is also evident from Table - III that the multiple coefficient of determination (R^2) is 0.41 which interprets that the 96.8 percent of the total variation in ROI is explained jointly by the variation in the CR and WCTR.

Analysis of Working Capital Leverage

In order to assess the impact of the level of working capital on the profitability of Bharat Petroleum Corporation Ltd., under study the working capital leverage (WCL) for the period from 2005-06 to 2009-10 has been computed. It measures the sensitivity of return on investment (ROI) due to changes in the level of current assets (CA). The higher the degree of WCL, the greater is the risk and vice versa. But at the same time, it increases the possibility of higher return on investment. The formula used for measuring the WCL is given below:
 $WCL = CA / (TA + DCA)$

**Table – IV: Analysis of Working Capital Leverage (WCL) of BPCL Ltd
For the study period from 2005-06 to 2009-10**

Year	2005-06	2006-07	2007-08	2008-09	2009-10
CA	24,883.94	17,275.18	20,971.33	14,841.40	13,528.98
TA	35,281.91	33,299.52	26,699.22	21,102.78	17,513.02
DCA	0	-7608.76	3642.15	-6129.93	-1312.42
WCL	0.71	0.67	0.69	0.99	0.84

An assumption has been made while calculating the WCL that the change in current assets investment in the previous year will be maintained in the current year also. The WCL of the BPCL under study for the period from 2005-06 to 2009-10 is depicted in Table - IV. It is observed from Table - IV that the WCL of BPCL is fluctuated during the study period. It is highest (i.e. 0.99) in the year 2008-09 indicating that the maximum sensitivity of ROI due to changes in the level of

investment in current assets during the period under study. In the year 2006-07, the WCL of BPCL is found lowest which is computed at 0.67 showing the least responsiveness of ROI for variability of the level of investment in current assets. Therefore, the variability in the level of investment in current assets is more helpful in the 2002-03 and least supportive in the year 2004-05 for improving the profitability of the company under study. The Table - IV also reveals that the

values of WCL in all the years under study are less than one (1). It signifies that in all the years under study, the increase in the rate of return on investment is less than the proportion to decrease in the level of working capital investment i.e. level of investment in current assets.

Conclusion

The study of correlation analysis reveals both positive and negative coefficients. Out of eight ratios relating to working capital management selected during the period under study, in case of three ratios namely, WCTR, ITR and DTR registered positive association with the selected profitability ratio (ROI) and the remaining ratios like CR, QR, CATAR, CASR and CTR witnessed negative association with the selected profitability ratio. All these eight selected ratios have no significant association with the profitability ratio. The study of multiple regression analysis reveals that the slope of regression line associated with CR, and WCTR reveals both positive and negative impact of the independent variables on the profitability of the company under study. Out of two partial regression coefficients of the ROI line, of the two regression coefficients, three coefficients all are found to be statistically significant at one percent and five percent levels which signifies that there is a significant influence of these three measures of working capital management on the profitability of the company and the remaining coefficients are found to be statistically insignificant during the study period. The study of multiple coefficient of determination

(R²) reveals that forty one percent of the total variation in the profitability of the company is jointly explained by the two independent measures relating to working capital management. The study of working capital leverage (WCL) of the company under study registered a fluctuating trend during the study period. The values of WCL in all the years under study are always less than unity (i.e. less than one). Hence, it may be concluded that the increase in the profitability of the company is less than the proportion to decrease in working capital throughout the study period.

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Emotional Intelligence Competent Professionalism

Umashankar K. and Ranganatham G.

Abstract

The paper primarily deals with the compatibility of emotional intelligence with the corporate requirements. Indeed, the milestones in EI studies include the studies by Charles Darwin the origin of Sociology of Emotions in America threw much light on emotional intelligence. Besides, the two major blocks of Emotional Intelligence that form the whole essence of Emotional Mind are carefully studied, analyzed and interpreted, and the validity of emotional intelligence in building competent professionalism is well established. The psychological acrimonies or infirmities are identified in the paper and practical solutions are suggested in order overcome the emotional imbalance in the workplace.

Key words:

Emotional Intelligence (EI), Ergonomic Set Up, Automatic Thoughts, Social Emotions.



Dr. Umashankar K., Asst. Professor and Programme Manager, Dept. of English, Acharya Institute of Management and Sciences, Peenya I Stage, I Cross, Bangalore - 560058, E-mail: shankartagore@gmail.com



Dr. Ranganatham G., Professor, Dept. of Management Studies, Acharya Institute of Management and Sciences, Peenya I Stage, I Cross, Bangalore - 560058, E-mail: gangineni.ranganath@gmail.com

In this contemporaneous world of corpocracy, the corridors of Business and Information Technology are deluged with the grinding competitions. In return, the corporate companies superimpose their expectations on workforce in order to claim their existence. Simultaneously, the professionals, a part of the workforce, strive to fulfill the inordinate expectations of the ergonomic setup. In this inflated marathon of expectations, actions and accomplishments, the professionals may be victimized by the psychological infirmities like prejudiced thinking, destructive automatic thoughts, anxiety, and malicious attitude, ultimately leading to depressions. As a consequence, the untreated psychological maladies lead to the individual's emotional imbalance and finally erode one's work efficiency.

Definitions of Emotional Intelligence

According to John D. Mayer and Peter Salovey emotional intelligence (EI) is "the ability to monitor one's own and others' feelings and emotions, to discriminate among them

and to use this information to guide one's thinking and actions". Emotional Intelligence is also knit with the Social intelligence that deals with the emotional setup of one's surroundings.

The research of John D. Mayer and Peter Salovey suggest a model on emotional intelligence that suggests four different elements that effect emotional intelligence.

- the perception of emotion,
- the ability of reasoning using emotions,
- the ability to understand emotion,
- the ability to manage emotions

Importance of Emotional Intelligence

In general, emotional intelligence may be understood as moderating and strategically using intrapersonal emotions to deal with interpersonal exchange of emotions. Besides dealing with others' emotions, emotional intelligence deals with one's own regulation of emotional flow.

For an example, *if emotions are symbolic to water and flooding refers to untapped emotional flow that causes destruction. If the same water flow (emotions) is regulated and moderated; obviously, this tapped emotional flow may be used for constructive purposes.*

In this competitive edge of business and corporate world, the relationships are turning to be more delicate and fading. However, the relationships have to be retained for the continuation or betterment of the work-life balance, ergonomic relationships, personal or social relationships. Henceforth, the companies and professional are expressing their keen interest in enhancing their EQ (Emotional Quotient) for their betterment. Besides, the companies are periodically organizing workshops and seminars on emotional intelligence to improve the work efficiency of their human capital.

Review of Literature

Indeed, the need for emotional strengths in augmenting one's work efficiency has been realized and the concept of emotional management has been institutionalized in most of the sectors in this globalized corporatism. The exclusive

research or studies in emotional management may be dated back to the studies of Charles Darwin (an English anthropologist who lived between 1809 and 1882). In his work on the importance of emotional expression for survival and *second adaptation*, he says emotions as an inert remnant of the primordial bodily preparation for action. Later, the research found some scientific devaluation in terms influential emotional setup in the individuals. However, the origin of *Sociology of Emotion*, a school of thought started by American sociologists in around 1975, has thrown much light on the sociological implication in emotional expressions. Besides, Howard Gardner's (1983) work on *Frames of Mind: The Theory of Multiple Intelligences* dealing with interpersonal intelligence and intrapersonal intelligence and Wayne Payne's doctoral thesis, *A Study of Emotion: Developing Emotional Intelligence* (1985) threw much light on the importance of emotional management and its productive nature in social situations. In the span of a decade, the concept of emotional intelligence overtook the applicability of Intelligence Quotient in the management situations as the emotional intelligence has claimed its validity in terms of dealing with interpersonal related issues in the process of human engineering. Evidently, the above studies have fertilized the areas of research in emotional intelligence and their applicability in the work place.

Objectives

In the light of earlier research and studies on Emotional Intelligence, objectives of the paper are thoughtfully devised for the better understanding of the concept of Emotional Intelligence and its validity for the management professionals:

- To understand the role of emotions in ergonomic setup and
- To suggest practical solutions for emotional infirmities and its repercussions

The Major Blocks of Emotional Management or Emotional Intelligence

Intrapersonal Awareness and Interpersonal Awareness are the two major components of emotional intelligence. The intrapersonal awareness deals with self understanding

Functioning of Emotional Intelligence



Fig. 1 - Functioning of Emotional Intelligence System and Its Repurcussions

wherein the professional has to understand his/her emotional setup or structure. Besides, intrapersonal awareness attempts to understand preset emotional responses to the internal and external situations. In brief, this aspect of human understanding deals with understanding ones' emotions before they reciprocate emotions with others.

Interpersonal Awareness deals with the social setup of one's surroundings and the individuals involved in such social setup. The name itself implies the interplay of emotions among two or more individuals. In this stage of emotional reciprocity, a serious professional has to be inquisitively or observant.

A Story of Two Horses

Just up the road from a home is a field, with two horses in it. From a distance, each horse looks like any other horse. But if you get a closer look you will notice something quite interesting...

One of the horses is blind.

His owner has chosen not to have him put down, but has made him a safe and comfortable barn to live in. If you stand nearby and listen, you will hear the sound of a bell. It comes from a smaller horse in the field. Attached to the horse's halter is a small, copper-colored bell. It lets the blind friend know where the other horse is, so that he can follow.

As you stand and watch these two friends, you'll see that the horse with the bell is always checking on the blind horse, and that the blind horse will listen for the bell and then slowly walk to where the other horse is, trusting he will not be led astray.

When the horse with the bell returns to the shelter of the barn each evening, he will stop occasionally to look back, making sure that the blind friend isn't too far behind to hear the bell.

Intrapersonal Intelligence and its Components

As discussed earlier, intrapersonal intelligence deals with the better understanding of oneself and integrating the diversified thought process. At large, intrapersonal

intelligence refers to the identification of one’s emotional setup and its repercussions on the self consciousness or behavioural responses. There are many factors that augment intrapersonal intelligence that are reflected in the Figure 2.

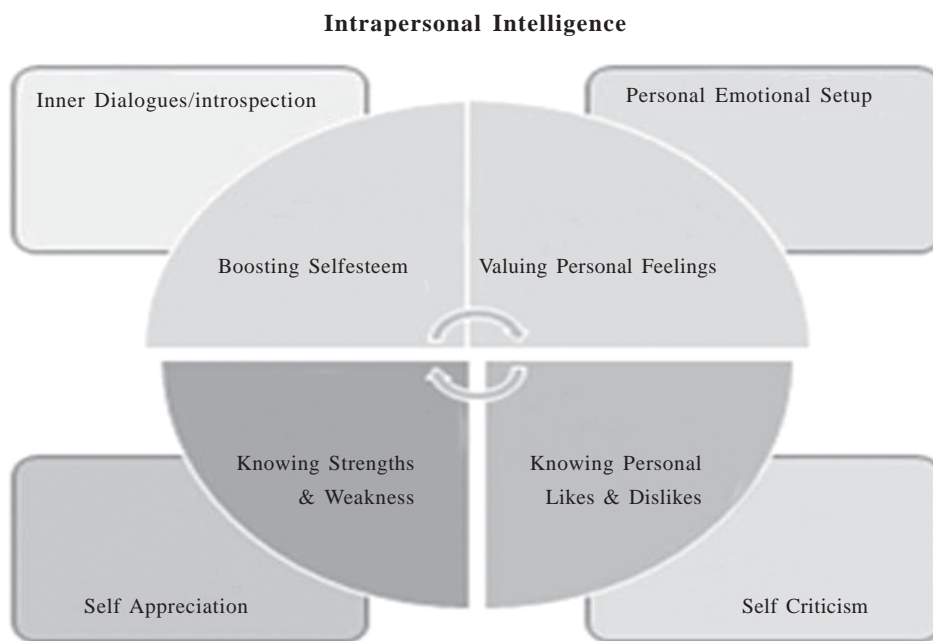


Fig. 2 Intrapersonal Intelligence and Its Components

Introspection/Inner dialogues and Its Influence on Individual’s Emotional Setup

This term refers to creeping deeper and deeper into the realms of one’s emotions that are intrinsically lying within. In addition, it suggests investigating observantly the fabric and the anatomical structures of diversified emotions. Subsequently, dissecting the emotions into various groups based on their productive, unproductive and destructive features.

This process of analyzing, classifying, adopting and eliminating one’s emotions demands self time, wherein, a person can meditate over the inner happenings. Indeed, the professional diligently sparing some calculated time to understand oneself and the emotions’ implications on

overall physical and psychological responses to the external factors is very much important.

Personal Emotional Setup and Its Contribution in analyzing Emotional Intelligence

Indeed, introspection into one’s inner dialogues will obviously lead to the better understanding of personal emotional setup. It is a revealed fact that most of the individuals don’t attempt to understand their emotional matrix. Therefore, such individual might not be able to tame the excessive emotional progressions in their mind. In contrast, the moderation of emotional flow may be achieved if the professionals are considerate enough in understanding their emotional setup.

Boosting Self Esteem and Its Positive Implications on Work Productivity

Boosting self esteem constitutes one of the primary factors that motivate a professional to accomplish greater tasks. In order to understand the concept Boosting Self esteem, it is better to define self esteem in terms of psychologists. Layman defines self esteem as the way a person measure’s his overall worth and this can be attributed to *the sum total of his own gifts and abilities versus his perceived failures.*

In general, self esteem may be defined as a realistic respect for or favorable impression of oneself; self-respect.

Self esteem is a key factor that defines greatness of a professional. Moreover, it is this factor that acts as a driving force to face any kind of imperative or complex situations. Contrastingly, a person with low self esteem may hamper the professionals’ self dignity. Gradually, this leads to the deterioration of one’s productive energy.

Therefore, it is very much advisable for a professional to incorporate healthy practices for boosting self esteem that are very reflected in Figure 3.

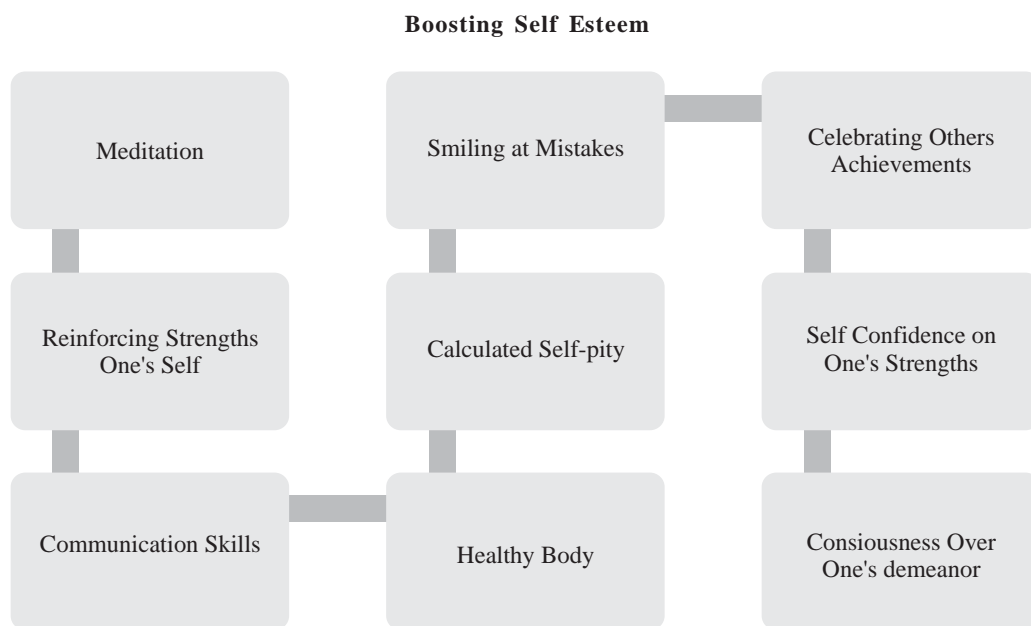


Fig. 3 - Suggestions to Boost Self Esteem

Valuing Personal Feelings and augmenting one’s Emotional Intelligence

Personal feelings are spontaneous and may subject to change from time to time. Indeed, suppression of such intrusive feelings or thoughts (obsessive-compulsive disorder) might lead to many harmful repercussions. Gradually, the professional might suffer from drastic behavioural changes that may harm his/her professional reputation.

For an example: A person who has some bitter experiences of past wishes to abandon such experiences and insists upon the same frequently to suppress such memories. In such conditions, such frequent attempts to suppress such bitter experiences might lead to anxiety and aggressive behaviour. Hence, there should not be any frequent attempts to suppress the memories; instead, one can value and adopt positive set of mind towards any bitter memories without recollecting them that may consequently disappear from

one's mind. In fact, it is the law of mind to fade the memory with any intensity if it is not recollected.

Self Motivation and Emotional Stability

Self motivation acts as a self driving force to accomplish the given responsibilities. Self motivation is characterized by intuitive inducement or stimulant.

In fact, motivation emerges through intrinsic and extrinsic agents. Intrinsic agents like inner dialogues and enforcements within. Besides, confidence about one's strengths and ability to overcome weaknesses may also be a good source of motivation. The extrinsic agents like role models, peer group; physical surroundings etc... contribute much to augment motivation factors.

It is an evident fact that the extrinsic motivating factors might not be relied much up on since, is subject to availability.

Therefore, a true professional tries to derive the essence of motivation within. A few of intrinsic agents of motivation are reflected in Fig. 4.

Strengths and Weaknesses; Self Assessment of One's Own Strengths and Weaknesses

Strengths and weakness collectively forms the skill matrix of a professional and decide the efficiency of such professional. In fact, knowing about one's own strengths crystallizes one's confidence and weaknesses open the doors of perfectionism. Knowing personal likes and dislikes: Knowing one's likes and dislikes build a cordial rapport within and it avoids friction in life. It is vividly observed that most of the people choose the careers that they are not interested in or it may be any other social or personal commitments. In such cases, the professional may compromise in terms of qualitative outputs in their commitments.



Fig. 4 - Self Motivating Factors

Moreover, it is inevitable to understand the history of likes and dislikes of oneself. Subsequently, the validity and unprejudiced nature of those likes and dislikes have to be analyzed. Later, those likes and dislikes have to be prioritized to achieve the valid purpose.

Self Appreciation, a Psychological Device to Balance Personal Emotional Setup

Self appreciation is a device by which one can neutralize self conflicts or contradictions. Indeed, self appreciation refers to valuing ourselves.

For an example: If you give on charity some desirable amount of money or help to the needy, a kind of appreciation comes within for helping the person in need. Such kind of appreciation cures many psychological infirmities. In addition, self appreciation boosts one's energy level to act further.

Self Criticism and the Validation of one's Actions

Self criticism is a psychological tool to evaluate one's performance. In addition, it reprimands oneself for the prejudiced or inefficient actions. It is the self criticism that gauges the value of our actions. Moreover, self criticism also acts motivating tools that keep the track of a professional intact and avoid the alienation. The following quote justifies the true nature of self criticism.

I have offended God and mankind because my work didn't reach the quality it should have. - Leonardo da Vinci

Interpersonal Intelligence and Its Components

Interpersonal Awareness deals with the emotional interactions between two or more persons in an organized structure. Obviously, the relationships are built up or pulled down during the period of these interactions. Hence, a serious professional has to be observantly conscious over these interactions. In this juncture, he/she must be vigilant in evaluating the correspondence of emotions among the people. Wherein, a professional has to lubricate the friction among the emotions (if there are any) in order to avoid the conflict or deterioration of relationships.

In order to serve the purpose of harmonious and productive relationships, the following features have to be incorporated: Constructive Criticism or Anger: Constructive criticism and anger are two inevitable and situational psychological tools to move the people from their areas of unconscious tenacity, non deliberative mistakes or unintentional lethargy. Frank A. Clark, a renowned writer, says "*Criticism, like rain, should be gentle enough to nourish a man's growth without destroying his roots.*" Mr. Clark's conceptions of constructive criticism are much legitimate enough to be practiced in this current corporate world. Literally speaking, anger is a short term madness that immediately adds fuel to the deterioration of flaming relationships. Therefore, a professional has to be conscious about anger management. One should be aware of the following questions before they moderately release their anger:

- What is the reason for my anger?
- Why should I be angry?
- Where should I be angry?
- When should I be angry?
- Which is the channel to express my anger?
- Who is the recipient of my anger?
- How will be the reception of my anger?

Indeed, the interpersonal intelligence is a key tool through which the professional of top management or lower management may build amicable relationships in their organizational setup. The figure below reflects upon the various components of Interpersonal Intelligence.

Admiration for others: Admiration is a nourishing fuel that increases the productivity of relationships and work efficiency among the professionals. Thomas Mann, a renowned English writer and novelist, says, "I have always been an admirer. I regard the gift of admiration as indispensable if one is to amount to something; I don't know where I would be without it." The stated quote is very much reflective on the efficacy of admiration on others.

Understanding Social Emotions: Social emotions are very much intrinsic to the cultural background of a particular place or people. Most of the times, cross cultural and social interactions of emotions might lead to the aberrations of relationships.

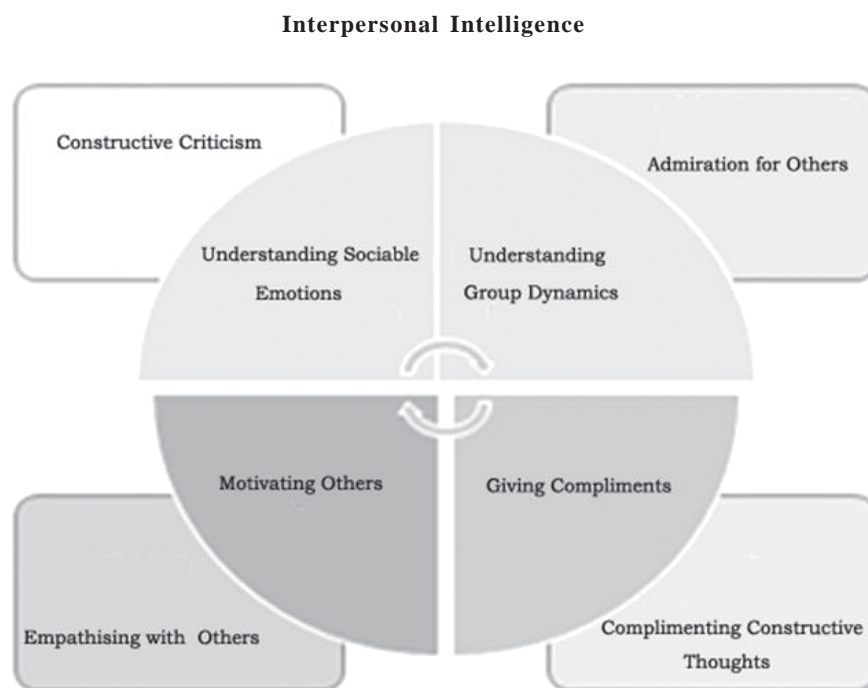


Fig. 5 - Interpersonal Intelligence and Its Components

For an example: the perceptions, notion, emotional likes and dislikes, emotional preferences are very much based on the influences of external world. Indeed, the way a person perceives other people are very much based on their interaction, dress etiquette, habitual actions and relationships. In this way, a person builds a kind of objective emotions in oneself through which the relationships are constructed or destroyed. Besides, language barriers are much contributive to the worsening of relationships because the emotions with particular social or cultural context might not be expressed effectively in the alien languages. Therefore, understanding of social emotions focuses much on the emotional responses of the social surroundings to the professional's behavioral responses is much valued and considered.

Following are the factors influenced by the social or cultural context that may hamper in the better understanding of social emotions:

- ◆ Multiethnic cultural backgrounds
- ◆ Diversified perceptions
- ◆ Multifarious personal likes and dislikes

- ◆ Emotional sensitivity and sensibility
- ◆ Subjective thoughts/emotions
- ◆ Objective thoughts/emotions

Understanding Group Dynamics: The corporate achievements are knit with the group efforts are but not purely an individual effort. Aristotle says "Man is a Social Animal." In fact, a person can never work in isolation nor exist in isolation. The human being always craves to be in association with others. The professional or business tasks may not be accomplished by an individual effort but there should be a collective effort to complete the tasks. Hence, a professional has to be observant in understanding the group dynamics.

Motivating Others: The motivational factors may be subjective or objective. The objective motivating factors include like in the salaries, additional monetary or other incentives and promotions whereas subjective motivating factors include conveying compliments, complimentary interaction of a senior with a junior, sharing good-will of the employers, felicitations etc...

Indeed, in most of the situations the practical constraints might not permit a manager to extend his/her objective motivation. Hence, a professional with excellent magnanimous personality trait can influence others thorough his soft edged conversations. In this regard, subjective motivational factors are of much importance to influence the people around.

Empathizing: The dictionary of psychology defines empathy as an ability to understand and feel what another person is feeling, not in a physical sense, but in an emotional sense. The expression “*put yourself in someone else’s shoes*” is actually a description of empathy. Therapists are usually trained to be more empathetic so that they can have more of an appreciation for what their clients are experiencing. This helps them understand their client’s situation, perspective, and problems much better. For an example: a mock interview was conducted for one of the students of MBA in one of the esteemed institutions of India. Wherein, the interviewer posed a question to the interviewee “Assume yourself as a manager and how will you deal with a person who was regular to his job and he was perfect in discharging his responsibilities. Contrastingly, he became quite unpunctual and deficient in work efficiency? The reply of the candidate was apathetic that the panel members were astonished. In reply, he said “I would fire such employee?”

The above interview conversation is very much reflective on the apathetic behaviour of a prospective manager. Instead of trying to understand the gradual decline of employee’s work efficiency, it is a corporate sin to take extreme actions against the accused. It is psychologically proved that empathy may prove to be itself an effective psychological tool to enhance the work efficiency among the employees and it also helps the employees to build a strong sense of belongingness towards their company.

Appreciating Others’ Emotions: A good professional is one who thinks that his personal emotions and the emotions of others are the two faces of the same coin. Hence, a true professional knows how to respect and consider even others’ emotions in a formal or an in formal setup of a company.

Destructive Emotions: The professional has to be observant and discriminating among the constructive and destructive emotions as these emotions may renovate or destroy the relationships. Obviously, a working ambience is a web of relationships that is knit with the emotional filaments. If the emotional affiliations are slackened, it may result in the chaotic emotional interactions and finally lead to the malfunctioning of interpersonal relationships. Therefore, a professional has to analyze and scrutinize the emotions that

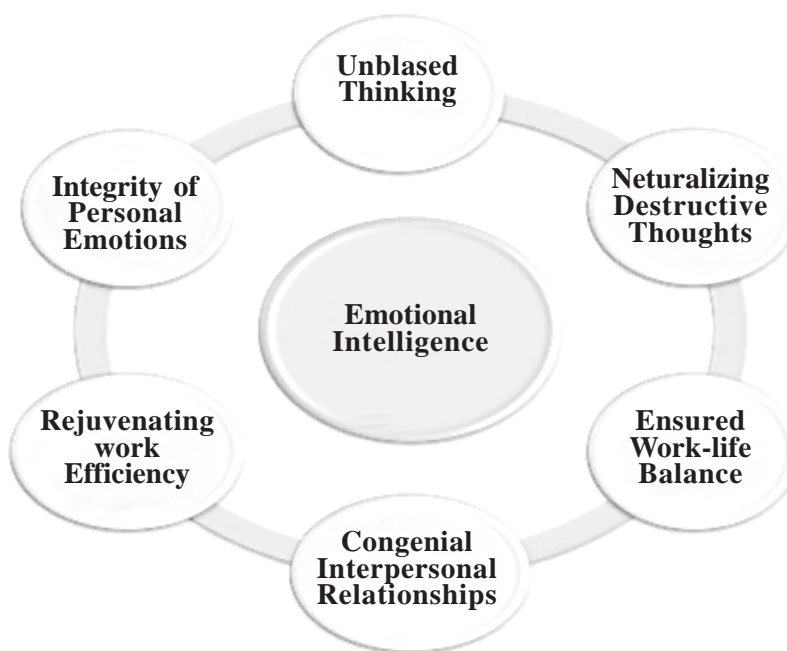


Fig. 6 - Emotional Intelligence and Its Positive Implications

Positive Emotions Pay

One day, a poor boy who was selling goods from door to door to pay his way through school, found he had only one thin dime left, and he was hungry.

He decided he would ask for a meal at the next house. However, he lost his nerve when a lovely young woman opened the door. Instead of a meal he asked for a drink of water. She thought he looked hungry so brought him a large glass of milk. He drank it slowly, and then asked, "How much do I owe you?"

"You don't owe me anything," she replied "Mother has taught us never to accept payment for a kindness." He said... "Then I thank you from my heart."

As Howard Kelly left that house, he not only felt; stronger physically, but his faith in God and man was strong also.
He had been ready to give up and quit.

Years later that young woman became critically ill. The local doctors were baffled. They finally sent her to the big city, where they called in specialists to study her rare disease. Dr. Howard Kelly was called in for the consultation. When he heard the name of the town she came from, a strange light filled his eyes.

Immediately he rose and went down the hall of the hospital to her room. Dressed in his doctor's gown he went in to see her. He recognized her at once. He went back to the consultation room determined to do his best to save her life. From that day he gave special attention to the case.

After a long struggle, the battle was won. Dr. Kelly requested the business office to pass the final bill to him for approval. He looked at it, and then wrote something on the edge and the bill was sent to her room. She feared to open it, for she was sure it would take the rest of her life to pay for it all. Finally, she looked, and something caught her attention on the side as she read these words.....

"Paid in full with one glass of milk." (Signed) Dr. Howard Kelly.

Tears of joy flooded her eyes as her happy heart prayed: "Thank You, GOD, which your love has spread abroad through human hearts and hands."

contaminate healthy relationships. In addition, the automatic thoughts give rise to most of the destructive emotions.

Conclusion

The study and the observations in this paper have proved that emotional intelligence may be an effective tool in dealing with social or ergonomic complexities. With special reference to the corporate ambience, wherein, the professionals from top management to lower management are exhausted by the perennial responsibilities, the researcher had a conceptual study on emotional intelligence and its compatibility with the requirements of the corporate portals.

Emotional Intelligence helps in various dimensions of intrapersonal and interpersonal emotional flow like perception appraisal, expression of emotions, emotional facilitation of thinking, employing emotional knowledge and reflective regulation of emotions to ensure the intellectual and emotional growth.

It is an evident fact that corporate or business professionals in this globalised world are stressed out and they need immediate psychological attention. Particularly, the emotional frictions or acrimonies are to be treated in order to ensure the personality of positivism among the professionals. Moreover, the tools of emotional intelligence will energize the professionals' matrix of hard skills and soft skills.

The above figure vividly reflects the positive implications of Emotional Intelligence. Besides, a professional with a serious concern for emotional intelligence can ensure wholistic personality development.

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Salary and Satisfaction: Private-Public Sectors in J&K

Radha Gupta

Abstract

Productivity relies on employees' satisfaction. The contented employees are the asset of the organisation. They are more likely to be creative and innovative. They help the organization change positively with time and changing market conditions. Though there are different ways to make the employees feel satisfied, providing them adequate remuneration is paramount among all of them. In this paper an attempt has been made to analyse and present a comparative picture of the satisfaction level of the employees working in both public and private sector enterprises in Jammu and Kashmir.

Key words:

Climate Survey, Utmost, Boosting Perks, Contended, Optimum, Employee Satisfaction.



Dr. Radha Gupta, Assistant Professor, Department of Management Studies, Baba Ghulam shs Badshah University Rajouri, Jammu & Kashmir, E-Mail: radhagupta200@rediffmail.com

Better performance, more productivity and high profit, these are the outcome of employee's commitment and dedication toward work. Employees are more devoted when they feel contented and satisfied with reward which they get from the employers. If organizations understand what satisfies people and try to establish parity between effort and reward, they have at their command the most powerful tool for dealing with them to get them achieve extraordinary results. So, an endeavour to improve employee satisfaction leads to an improvement in the quality of products or services, customer satisfaction, a competitive advantage, increased market share and improved profit.

Review of Literature

'Solaced and Satisfied' employees can make the organisation 'Strong and Successful.' Though there are numerous parameters for making them feel contented and satisfied but at least a serious attempt to establish a parity between efforts and rewards and giving them attractive remuneration can be a good step in

this regard. Pay is one of the most important means to attract, retain and motivate employee in the organization. Therefore, employees should be motivated through proper compensation system. (George T. et al, 1990) History is witness about the fact that those organisation which consider employees simply as a cog in the administrative machinery they could not survive in the long run. (Michael J.Juius, 1979) Present era is knowledge era, if the employees have knowledge, skill and ability they may find better avenues somewhere else. It is therefore, imperative for the employers to pay adequate attention to the compensation package of the employees. Slightest laxity in this regard may result in the loss of efficient employees to the organisation. (Dale. S. Beach, 1960) Dissatisfaction is the root cause for conflicts and disputes. They manifest in the form of strikes and lockouts. The consequences of disputes are loss of production, loss of profit and even closure of plants which can affect adversely the economy of the nation (K.Aswathappa, 1970). Robust economy of the nation as well as state depends on the strong and healthy industrial set up. Furthermore, any industry can grow if at all the human resource working in it feel part of it and be part of it for longer period. There is therefore, need to get hold of the best talent. In the present scenario employees are moving to grab the best opportunity while their employers are struggling to hold on to the best managers and workers and match the spiralling pay scales (Shefali Rekh, 1994). If adequate remuneration inclusive of perks and bonus are not paid to them, organisations will fail to activate psychological impulse of workers to channelize their behaviour towards achieving the organisational goal of maximum production with efficiency. Inadequacy in payments further affects adversely willingness as well as ability to work and both these factors are cardinal for better performance (C.N.Weaver, 1884).

Scope of the Study

The study covers only four categories of the employees working in selected public and private sector undertaking in J&K state. It does not cover undertakings operating in Kashmir division.

Objectives of the Study

- To what extent compensation policy is fair and equitable.
- To what extent fringe benefits are sufficient to motivate the employee to stay longer in the organisations.
- To analyse the relationship between employees satisfaction and their retention in the organisations
- To suggest measures to frame rational remuneration policies.

Research Methodology

Present study is based on both primary and secondary data. Primary data have been collected by conducting a survey among 325 employees. Secondary data have been collected from books, journals, newspapers periodicals industry reports, internet and published and unpublished data.

The State of Employee Satisfaction

Committed and loyal employees are the most influential factor in organization's success story. It is only dissatisfied employees who do not put their mind and heart for achievement of organizational goals. It's no surprise that companies and organizations face significant challenges in case dedicated employees leave the organizations. However, there is plenty of research to show that increased employee satisfaction and trust in leadership can positively impact the company's bottom line. In fact, the true potential of an organization can only be realized when the productivity level of all individuals and teams are fully aligned, committed and energized to successfully accomplish the goals of the organization.

Apart from achieving serious commercial goals, every company should frame policies for improving the desire of employees to stay in the relationship they have with the company. When companies understand and manage employee loyalty this is a big step toward their retention. Committed and contented employees are more likely to go "above and beyond" to meet customer needs and are highly motivated to work to the best of their ability. Both of these traits are crucial for continued customer commitment and ongoing revenue and growth for the company. In order to test whether employees are comfortable with their employers and satisfied with monetary and welfare policy etc, their responses were collected under following main heads:

1. Basic wage/salary.
2. D.A./ COLA.
3. H.R.A.
4. Medical and Other Allowances.
4. Perks.

5. Working conditions.
6. Work culture.
7. Job security and Rate of turnover etc.

Finally their views were categorised under three main headings:

1. Responses regarding wage/salary (compensation).
2. Responses regarding perks and other benefits.
3. Responses regarding job security etc.

Table 1.1 which incorporates the responses regarding remuneration shows that employees working in both the sectors are not satisfied with the wage/salary paid to them

by their employers. This is evident from the average mean scores of the responses of different categories of employees in public and private sectors. In the public sector, the average mean score of responses has been worked out at 2.19 which is far below than average on the Lickert Scale (3). Corresponding average mean score of responses of employees in private sector is worked out at 2.88 which is also lower than the average on Lickert Scale (3). Analysis of table under reference shows that the level of satisfaction of employees regarding wages/salaries in private sector which is 2.88, is little higher than their counterparts in public sector (2.19) but it is lower than the average on lickert scale.

Table1.1: Mean Score of Respondents regarding Wages/Salaries (Compensation)

Public Sector			Private Sector		
Designation	No. of Employees	Mean	Designation	No. of Employees	Mean
Officers	10	3.02	Officers	04	3.99
Supervisors	15	2.20	Supervisors	06	2.72
Clerks	60	1.78	Clerks	40	2.51
Workers	115	1.76	Workers	75	2.30
Average		2.19	Average		2.88

Table1.2: Mean Score of Respondents regarding Perks and Other Benefits

Public Sector			Private Sector		
Designation	No. of Employees	Mean	Designation	No. of Employees	Mean
Officers	10	3.01	Officers	04	3.25
Supervisors	15	2.20	Supervisors	06	2.68
Clerks	60	2.79	Clerks	40	3.01
Workers	115	1.76	Workers	75	2.99
Average		2.49	Average		3.11

Table1.2 under reference depicts the level of satisfaction of the employees regarding perks and incentives. This is apparent from the responses that neither the employees in

public sector are satisfied neither with the remuneration nor with the incentives provided to them by the management.

Contrary to this, employees in private sector are bit satisfied with the perks provided by the management. This is evident from the average mean score of all the categories of the employees in both the sectors. The average mean score of public sector employees (2.49) is lower than the average on Lickert Scale (3). But average mean score of private sector employees (3.11) is higher than the average on Lickert Scale (3) and also higher than their counterparts in public sector.

Application of Chi-Square (χ^2) Test: Chi-square test is applied in statistics to test the goodness of fit to verify the distribution of observed data with assumed theoretical distribution. It is used to study the divergence of actual and expected frequencies.

$$\text{Chi-square test } (\chi^2) = \frac{(O-E)^2}{E}$$

$$E = \text{Expected frequency} = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$$

O = Observed frequency

DF = Degree of Freedom = (R-1) (C-1) Where,

R= Row and C= Column.

For the purpose of the study, Null hypothesis that compensation of the employees is not fair and equitable has been framed.

Table 1.3: Respondents stating Compensation as Fair and Unfair

Sector	Unfair	Fair	Total Respondents
Public sector	190	10	200
Private sector	121	4	125
Total	311	14	325

Result of Chi-square Test (χ^2)

Degree of freedom	=	1
Table value at 5% level	=	3.84
Calculated value	=	0.429

Since calculated value of chi-square (0.429) is less than the table value (3.84), it is therefore concluded that remuneration policies followed by the employers in both the sector are not fair and equitable.

Though on the basis of the opinion survey it was found that private sector employees are slightly better than their counter

parts so far as the perks and other benefits are concerned. But on the whole they are not fully satisfied by non monetary benefits they are getting from their employers. However, views of the employees in this regard have been tested by framing the hypothesis that employees are not getting adequate perks and other non monetary benefits in public sector and same hypothesis has been framed for private sector.

Table-1.4: Respondents viewing perk as Inadequate and Adequate (Public Sector Enterprises)

Categories of the Employees	Inadequate	Adequate	Total
Officers and Supervisors	15	10	25
Clerks and Workers	115	60	175
Total	130	70	200

Result of Chi-square Test (χ^2)

Degree of freedom	=	1
Table value at 5% level	=	3.84
Calculated value	=	0.313

For 1 Degree of freedom and at five percent level of significance the calculated value (0.313) is less than the table value (3.84). So, it is concluded that employees are not getting adequate amount of perks and other non monetary benefit from their employers.

Hypothesis: Employees are not getting adequate perks and other non monetary benefits in private sector.

Since calculated value of chi-square (72.48) is higher than the table value (3.84), it is therefore, concluded that private sector employees are getting fair amount of non-monetary incentives.

Relationship between Rational Compensation Structure / Favourable Employee Welfare Policies and Retention of the Employees

Labour cost constitutes the most important component in the total cost of every type organisation ranging from manufacturing enterprises to even service origination. Findings of many of the researchers have shown that it is the adequate compensation package that makes employees feel as part of the organisation and helps them to stay longer. In order to analyze the relationship between compensation and employee retention, chi-square test has been applied.

Table 1.5: Respondents viewing perks as Inadequate and Adequate (Private Sector Enterprises)

Categories of the Employees	Inadequate	Adequate	Total
Officers /Supervisors	6	4	10
Clerks /Workers	115	115
Total			125

Result of Chi-square test (χ^2)

Degree of freedom	=	1
Table value at 5% level	=	3.84
Calculated value	=	72.48

Table. 1.6: Respondents stating relationship between favourable compensation policies and Job stability /Retention.

Sector	Opposing the Statement	Favouring the Statement	Total Respondents
Public sector	5	195	200
Private sector	0	125	125
Total	5	320	325

Result of Chi-square test (χ^2)

Degree of freedom	=	1
Table value at 5% level	=	3.84
Calculated value	=	1.18

Hypothesis: There is significant relationship between favourable compensation policies and employees retention.

Since calculated value of chi-square (1.18) is less than the table value (3.84), it is therefore, concluded that there is significant relationship between adequate compensation and retention of the employees.

Conclusion

Economy of the country in general and state in particular grow if at all industrial set up is healthy and robust. Industrial set up could be strong with the committed and satisfied employees. Committed employees are the most valuable asset for any of the organisation. Their belongingness and dedication toward work provide strength to the organisational set up. Loyal employees are the strong pillars for any of the organisation. It is the employees who carry and sustain the successful organisations. It is therefore, imperative that all the categories of the employee should feel contented. It could be inferred that no organisation can sustain for longer time by making contented to only policy makers or those who are at the helm of the affairs. Until and unless people working at middle levels and those who are in rank and file are not satisfied, most of the strategies can not be implemented successfully, which may be threat for existence of any undertaking. In the present study the above average mean score indicates that the satisfaction level of the employees in private sector, is better than the public sector. But other side of the coin is that supervisors and workers are in worst position and satisfaction level of these two categories of the employees can not be ignored. Present study shows that wages/salaries are not adequate to sustain the efficiency of the employees in both the sector because average mean score of the employees regarding their satisfaction level is less than the average on the Lickert Scale. Average mean score is 2.19 in case of public sector employees and 2.88 in case of private sector employees. Comparatively the public sector employees are in touching position than their counterparts in private sector.

It is apparent from the analysis of the data that private sector employees are satisfied with perks provided to them by the organisations. But the situation is altogether different in case of public sector employees as the mean score regarding the wages/salaries including perks is 2.49 which is less than the average on Lickert scale. So this is clear from the mean scores that neither the wages / salaries nor the perks suits to the need of the employees working in public sector.

Suggestions

Employees constitute the most important component in the organisation. They should be motivated by fulfilling their social and ego needs apart from physiological needs. No employee will feel motivated unless he is adequately compensated for work done by him. The organisation should have capacity to pay on the one hand and commitment to employees' welfare on the other. Because higher capacity will result into higher pay package which will enhance the satisfaction level of the employees and only satisfied employees provide their maximum efforts for the achievement of the organizational goals. Management should frame policies to provide fair and equitable benefits to all of the employees to sustain their efficiency on the one hand and growth of the organisation on the other.

It is further suggested that the remuneration should be fixed in accordance with the increase/decrease in cost of living allowance in case of public sector employees-and dearness allowance in case of private sector employees without giving trade unions any chance to exploit. The issue of Bonus as per statutory provision should be paid without any interception. Wages board ought to be constituted regularly and a fresh look should be provided at the determination of wages. The recommendations of the wages review committee could serve as a guide line for the wage fixation in the future to come. Steps should be taken to provide the welfare measures to the employees. In the absence of welfare measures, an employee seems simply as a cog in the administrative machinery. Concept of incentive scheme should be given proper regard in total organisational

set up. Incentives serve as lubricants as they gear up not only the capacity and ability to work of the employees but they also gear up the entire economic machinery.

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i10 Hyundai Chennai Customers: Satisfaction Level

M. Ganesh and K. Soundarapandiyan

A b s t r a c t

This study focuses on the post purchase behaviour of customers of Hyundai with special reference to the new variant i10 in Chennai city. The study also helps to identify the satisfaction level of customers and the effectiveness of after sales service. The sample size was taken as 150. The statistical tools such as percentage analysis, chi square analysis and multiple regression analysis were used for the analysis. The study also suggests the ways to improve the satisfaction level and after sales service of customers of i10 and gives a clear picture of the opinion of the customers towards Hyundai i10.

Key words:

Post Purchase Behaviour, Satisfaction Level, Effectiveness (after Sales Service).



Dr. M. Ganesh, Director, Holy Angels School of Business, Siruvachur, Perambalur - 621113, E-mail: ganeshm67@gmail.com



Dr. K. Soundarapandiyan, Assistant Professor, Sri Sai Ram Institute of Management Studies, Sai Leo Nagar, West Tambaram, Chennai-600044, E-mail: soundarfinance@gmail.com

The Automotive Industry directly and indirectly employs 13 million individuals in India. The industry is valued at about US\$ 35 billion contributing about 3.1 percent of India's GDP (nominal). India's cost-competitive auto components industry is the 2nd largest in the world. In addition, India's motorcycle market is also the 2nd largest in the world with annual sales of around five million units.

The high growth in the Indian economy has resulted in all major international car manufacturers entering the Indian market. General Motors, Ford, Toyota, Honda, Hyundai and others set up manufacturing plants. Rolls Royce, Bentley and Maybach are examples of the few high end automobile manufacturers which entered India in the recent years. Then in January 2008, Tata Motors launched Tata Nano, as the world's cheapest car in the passenger car segment at \$2500.

Maruti registered a 2.1 percent decline in volumes while

Hyundai's *i10* wrested the market share in the A2 segment in March 2008.

Hyundai Motor India crossed the 500,000 mark in exports. HMIL doubled its production capacity from 300,000 units to 600,000 units p.a. This has led to an increased target production of 5.3 lakh units and export to 2.12 lakh units with the *i10*, Santro, Getz and Accent models on the export list for 2008.

Some of the major characteristics of Indian Automobile sector are:

- √ Second largest two-wheeler market in the world.
- √ Fourth largest commercial vehicle market in the world.
- √ 11th largest passenger car market in the world
- √ Expected to become the world's third largest automobile market by 2030, behind only China and the US. (Source: [www.iloveindia.com/economy of India](http://www.iloveindia.com/economy_of_india)).

The passenger car industry in India has grown steadily during the last few years except during the year 2000-01 when there was negative growth due to global economic recession. Passenger car industry in India has 15 manufacturers with an installed capacity of 12,37,000 units.

Company Profile

Hyundai Motor India Limited (HMIL) is a wholly owned subsidiary of Hyundai Motor Company, South Korea and is the second largest and the fastest growing car manufacturers in India. HMIL presently markets 34 variants of passenger cars across segments.

Production

The production management processes at Hyundai Motor India are overlaid with an organization-wide implementation of manufacturing best practices like Just-in-time inventory management, Kaizen, TPM and TQM, that help in making the world's best cars in India.

HMIL has many awards in its bouquet. Hyundai's *i10* has captured the entire gamut of the most prestigious of Indian automobile awards with its distinction and performance.

Taking advantage of the demand for more small cars in the Indian auto industry, Hyundai rolled out *i10* with a powerful engine and an upscale interior. It is one of India's most popular 'B+' segment small cars. It is built to take on sub-compact segment cars such as the Chevrolet Spark, Maruti Suzuki Zen Estilo, Maruti Suzuki WagonR, and Tata Indica Xeta.

The well-equipped *i10* is an affordable small car and a perfect combination of superior technology, roomy interiors, and the stamp of reliability. It gains the confidence of car enthusiasts with its aerodynamic design, array of standard convenience and comfort features, and luxurious fittings. It comes with all elements that would please a buyer looking for a small family car at an affordable price.

Need for the Study

- ✧ Understanding of consumer negative perceptions, fears, inhibitions, and anxieties, is one of the critical aspects of consumer buying behaviour.
- ✧ Marketers also need to understand the consumer's preferences and fears, needs and perceptions thoroughly before attempting to deal with their behaviour. Here arises the need for the study.
- ✧ The study helps the Company to know about satisfaction level and preference of the customers of *i10* and the customers' expectations regarding after sales service.

Objectives of the Study

- ✧ To identify the post purchase behaviour of customers of Hyundai *i10* car.
- ✧ To identify the customers satisfaction level
- ✧ To find the effectiveness of after sales service provided to Hyundai *i10*.

Hypotheses of the Study

There is significant relation between income and factors influencing customer to buy Hyundai i10.

There is significant relation between income and people perception about i10 value.

There is significant relation between age and customer expectation.

Overall satisfaction of the customers and the factors that contribute overall satisfaction was positively contributed.

Overall satisfaction of the customers with delivery time and after sales service has positive contribution.

Review of Literature

Post-purchase behaviour involves all the consumers' activities and the experiences that follow the purchase. Usually, after making a purchase, consumers experience post-purchase dissonance. In other words, they regret their purchase decision.

The reasons for high post-purchase dissonance can be attractiveness and performance of forgone alternatives, difficult purchase decision, large number of alternatives, etc.

A high level of post-purchase dissonance is negatively related to the level of satisfaction the consumer draws out of product usage. While experiencing post-purchase dissonance, consumers become actually aware of the marketers' communication. To reduce post-purchase dissonance, consumers may sometimes even return or exchange the product. Marketers, therefore, can use these opportunities to reduce consumers' risk perception by way of good return/exchange policies and reduce their post-purchase dissonance by messages targeted at this segment of their consumers.

Post-Purchase Evaluation - Cognitive Dissonance

The final stage is the post-purchase evaluation of the decision. It is common for customers to experience concerns after making a purchase decision. This arises from a concept that is known as "cognitive dissonance."

The customer, having bought a product, may feel that an alternative would have been preferable. In these circumstances that customer will not repurchase immediately, but is likely to switch brands next time.

To manage the post-purchase stage, it is the job of the marketing team to persuade the potential customer that the product will satisfy his or her needs. Then after having made a purchase, the customer should be encouraged that he or she has made the right decision.

Post Purchase Behaviour

The post purchase behaviour and research shows that there exists a common trait amongst purchasers of products. Manufacturers of products clearly want recent consumers to feel proud of their purchase; it is therefore just as important for manufacturers to advertise for the sake of their recent purchaser so consumers feel comfortable that they own a product from a strong and reputable organization. This limits post purchase behaviour.

No two organizations can have similar set of rules for maintaining relationship. Even if on a particular occasion a situation prompted a particular behaviour, it is not necessary that a similar behavior is necessary on another occasion.

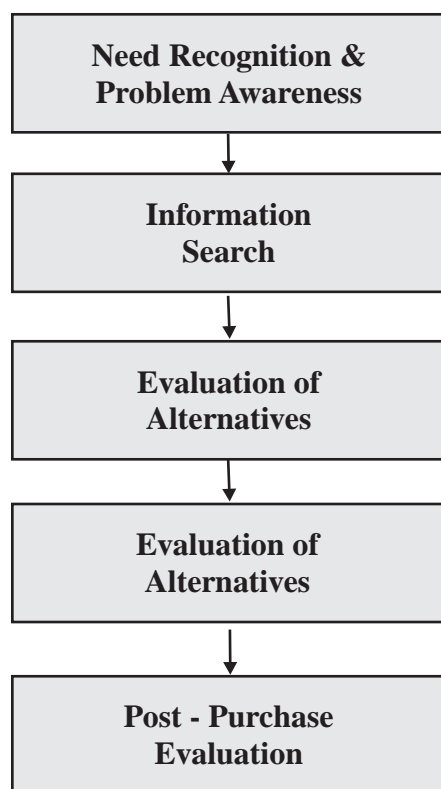
The time, place and group of person might be the same but behave in different way, though circumstances and situations might be identical. To a great extent relationship depends upon the character of contracting parties. This is thus a study of human behaviour and forms part of the behavioral science.

Customer's Expectations

Customer's expectation plays a major role in determining their post purchase behavior. If the product matches the expectations of the customer then the customer get satisfied, if it exceeds their expectation then they will be delighted likewise if the product doesn't match their then they will be dissatisfied.

How do Customers buy?

Research suggests that customers go through a five-stage decision-making process in any purchase. This is summarized in the diagram.



This model is important for anyone making marketing decisions. It forces the marketer to consider the whole buying process rather than just the purchase decision (when it may be too late for a business to influence the choice!)

The model implies that customers pass through all stages in every purchase. However, in more routine purchases, customers often skip or reverse some of the stages.

Research Methodology

The questionnaire had been administered with strict accordance without deviating from the research objectives and recording the response precisely as given in terms of measurement that one called for.

The questionnaires were circulated among the customers who came for servicing their cars in various service centers, situated in and around Chennai.

The sampling size was restricted to 150.

The sampling technique used was Simple Random Sampling.

Data Collection

In this study primary data along with some secondary data had been used to carry out the research work.

Primary data had been collected through the structured questionnaire designed specially for measuring post purchase behaviour of the customers of Hyundai i10 in Chennai City alone. Secondary data was collected from the journals, magazines, old research reports and from the companies' websites.

Tools used for the Study

Decision making scale of Likert's type, constructed and validated by investigators, has been used. The reliability of the tool is found to be 0.82. The scale consists of 17 statements with one open ended question along with personal details of the respondents.

Analysis of the Data

Descriptive (Table 1 – Table 7) and Inferential Statistics (Table 8 - Table 12) have been employed for testing the hypotheses. The data were analyzed using Percentage Analysis (Table 1 – Table 7), Analysis of Association was measured using Chi-square Test (Table 8 – Table 10), and Positive contribution of the factors was analyzed using Regression Analysis (Table 11 – Table 12). Percentage Analysis had been employed to assess the gender, age, occupation, income, factors' influence the customers to go in for Hyundai i10, factors that motivated the customers to go in for Hyundai i10 and the customers' satisfaction level towards after sales service of Hyundai i10. Chi-square test was employed to identify if there was any significant difference between income and motivating factors, income and customers' perception, income and customers' satisfaction, and age and customers' satisfaction. Regression test was employed to identify if there exists any positive contribution between the factors taken for the study as well as the delivery time with after sales service.

Limitations of the Study

- ◆ The study has been limited to the customers within Chennai city with a sample size of 150.

- ◆ The study deals only about the post purchase behaviour of customers of Hyundai i10 and not for the other variants of Hyundai.

Summary of Findings

Of the 150 respondents, 87 were male and the rest were female.

82 percent of the respondents, whose age group is 25 and above have owned Hyundai i10.

65 percent of the respondents, who, owned Hyundai i10 are, employed somewhere.

Surprisingly, 60 percent of the respondents whose income was less than ₹ five lakhs have owned this car.

The factors such as stylish, space and interior, comfort and technology have influenced 91 percent of the respondents to switch over their preference to Hyundai i10.

The motivating factors such as stylish, special features, brand image, comfort and mileage and after sales service were some of the factors, which influenced 62 percent of the respondents to prefer Hyundai i10.

94 percent of the respondents agreed that Hyundai i10 is a fuel efficient car.

All the respondents were agreed in the same line that Hyundai i10 is a spacious car.

All the respondents were agreed that Pick up of the car was excellent.

93 percent of the respondents were agreed that the said car fulfills the expectation of the customer.

100 percent of the respondents were agreed that Hyundai i10 is value for their money.

86 percent of the respondents were satisfied with after sales service.

91 percent of the respondents have recommended their close circle to go in for Hyundai i10.

Income was found as one of the motivating factors, which influence the respondents to prefer Hyundai i10.

It was found that performance, interior, gear box and suspension contributes positively towards the overall satisfaction of the customer experience with Hyundai i10.

It was found that both delivery time and after sales service contribute positively towards the overall satisfaction of customers.

Table No.1 - Classification of Respondents by Gender

Gender	No. of Respondents	Percentage
MALE	87	58
FEMALE	63	42

Table No.2 - Classification of Respondents according to Age

Age Classification	No. of Respondents	Percentage
Under 25	27	18
26 – 35	63	42
36 - 50	41	27
50 & above	19	13
Total	150	100

Table No.3 - Classification of Respondents according to the Occupation

Occupation	No. of Respondents	Percentage
Self employed	53	35
Employed	97	65
Total	150	100

Table No.4 - Classification of Respondents according to Income

Income Classification	No. of Respondents	Percentage
< 5lakhs	91	60
5 - 7lakhs	31	21
7 – 10lakhs	27	18
Above 10lakhs	1	1
Total	150	100

Table No.5 - Factors Influenced the Customers who used other Cars and switched over to Hyundai i10

Factors	No. of Respondents	Percentage
European style	31	46
Space & interior	17	25
Comfort	9	14
Technology	4	6
Others	6	9
Total	67	100

Table No.6 - Factors motivated the customers to buy Hyundai i10

Factors	No. of Respondents	Percentage
Price	12	8
Brand image	10	7
Features	29	19
After sales service	11	7
Comfort	12	8
Power steering	2	2
Mileage	13	9
Safety	0	0
Power	0	0
Space	7	4
Drivability	7	4
Word of mouth	3	2
Style	33	22

Advertisement	9	6
Brand ambassador	2	2
Availability of service outlet	0	0
Easy availability of finance	0	0
Others	0	0
Total	150	100

Table No.7 - Customers Satisfaction Level towards after Sales Service

Satisfaction Level	No. of Respondents	Percentage
Highly satisfied	37	25
Satisfied	91	61
Neither/ nor dissatisfied	22	14
Dissatisfied	0	0
Highly dissatisfied	0	0
Total	150	100

Table No.8 - Cross Tabulation of Income of the Respondents and the motivating factors

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Income * Factor	67	44.7%	83	55.3%	150	100.0%

Income * Factor Crosstabulation

Count		Factor					Total
		European style	space	comfort	technology	others	
Income	<5lakhs	31	17	2	1	6	57
	7-10 lakhs	1	1	4	3	1	10
Total		32	18	6	4	7	67

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.775 ^a	4	.000
Likelihood Ratio	21.967	4	.000
Linear-by-Linear Association	8.859	1	.003
N of Valid Cases	67		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .60.

Table No.9 - Cross Tabulation of Age of the Respondents and Satisfaction of the Customers

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
EXEPECT * Age	150	100.0%	0	.0%	150	100.0%
EXEPECT * Income	150	100.0%	0	.0%	150	100.0%

Crosstab

Count		Age				Total
		<25	26-35	36-50	50 and above	
EXEPECT	YES	26	62	40	9	137
	NO RESPONSES	1	1	1	10	13
Total		27	63	41	19	150

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.234 ^a	3	.000
Likelihood Ratio	33.913	3	.000
Linear-by-Linear Association	23.912	1	.000
N of Valid Cases	150		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.65.

Table No.10 - Cross Tabulation of Income of the Respondents and Satisfaction of the Customers

Crosstab

Count		Income				Total
		<5lakhs	5-7 lakhs	7-10 lakhs	>10 lakhs	
EXEPECT	YES	89	21	26	1	137
	NO RESPONSES	2	9	1	1	13
Total		91	30	27	2	150

Crosstab

Count		Income				Total
		<5lakhs	5-7 lakhs	7-10 lakhs	>10 lakhs	
EXEPECT	YES	89	21	26	1	137
	NO RESPONSES	2	9	1	1	13
Total		91	30	27	2	150

Table No.11 - Overall Satisfaction of the Customers and Factors that contributes to Overall Satisfaction

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	pick, design, interior, space, perfor, gear, suspensi, ac, handling, engine, creat, right, dyna, power, fuel ^a		Enter

a. All requested variables entered.

b. Dependent Variable: OVERS

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	ASS, LOS ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: OVERS

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.758	15	2.184	125.304	.000 ^a
	Residual	2.335	134	.017		
	Total	35.093	149			

a. Predictors: (Constant), pick, design, interior, space, perfor, gear, suspensi, ac, handling, engine, creat, right, dyna, power, fuel

b. Dependent Variable: OVERS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.226	.066		3.425	.001
	design	-.063	.053	-.071	-1.191	.236
	power	-.097	.070	-.186	-1.387	.168
	gear	.302	.059	.480	5.114	.000
	engine	-.134	.073	-.183	-1.840	.068
	perfor	.682	.051	.916	13.400	.000
	fuel	-.081	.084	-.153	-.964	.337
	dyna	-.092	.078	-.178	-1.176	.242
	creat	-.150	.102	-.192	-1.480	.141
	space	-.133	.047	-.169	-2.837	.005
	interior	.446	.075	.485	5.948	.000
	suspensi	.211	.042	.355	5.018	.000
	Ride	.103	.062	.181	1.667	.098
	handling	-.010	.045	-.017	-.224	.823
	ac	-.132	.054	-.211	-2.426	.017
	pick	-.070	.067	-.112	-1.037	.301

a. Dependent Variable: OVERS

SATISFACTION = 0.682 performance + 0.446 interior + 0.302 gearbox + 0.211 suspension + 0.103 ride quality - 0.063 design - 0.097 power - 0.134 engine - 0.081 fuel efficiency - 0.092 dynamic ability - 0.150 creature comfort - 0.133 space - 0.010 handling - 0.132 a/c - 0.070 pickup.

Table No.12 - Overall Satisfaction Level of the Customers with Delivery Time and After Sales Service

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	ASS, LOS ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: OVERS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718 ^a	.515	.509	.340

a. Predictors: (Constant), ASS, LOS

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.082	2	9.041	78.125	.000 ^a
	Residual	17.011	147	.116		
	Total	35.093	149			

a. Predictors: (Constant), ASS, LOS

b. Dependent Variable: OVERS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.386	.090		4.267	.000
	DT	.444	.069	.687	6.463	.000
	ASS	.028	.083	.036	.337	.737

a. Dependent Variable: OVERS

$$\text{SATISFACTION} = 0.444 \text{ delivery time} + 0.028 \text{ after sales service.}$$

Suggestions

- Some more choice of colours of car can be made available to the car pearl white, cyclus grey, quartz black, metallic midnight black, brilliant yellow etc. because the customers felt that more colours are available among the competitors.
- The price of the car is ok now but if the company reduces the price of the car, for sure it will increase the sales because nowadays cars are available at very lower price in the market from the competitors by focusing on middle income group.
- Most of the customers do not have enough time to let their car for service to the service center. In order to please the customers the company can introduce an innovative method. Through this method the company can give a centralized helpline number to their customers especially for service. So, if the customers want service to their car or they want to repair their car they can call to that number and by telling their location the company personnel can go directly to that location and they can pick the car

and service the car. Finally, the service personnel should let their car back to the place of the customer after service.

- There can be a piece of metal till the engine block so that the engine won't be affected in case of any accident as it is few inches ahead of the dash board.
- The company can increase the number of service centers in Chennai.
- The service personnel should maintain prompt delivery after servicing the cars.

Conclusion

i10 the most successful car of Hyundai motors, beats the success of santro in all aspects. On the whole the customers of Hyundai *i10* are satisfied with the car after purchase and this itself a great achievement to the company. It gives the feel of luxury to the customers and a convenience of smaller cars in the crowded area. It is the most stylish car ever manufactured by Hyundai when compared to other cars.



Physical and Core Services Quality: State Bank of India

G.S. David Sam Jayakumar and I. Narsis

A b s t r a c t

This article investigates the services quality of State Bank of India by contacting 627 Bank Customers in Urban, Semi-Urban and Rural Location of the SBI. Services Quality of SBI was classified into Physical Services Quality and Core Services Quality. This study attempts to link the Physical and Core Services Quality of SBI with the satisfaction and commitment of customers. Besides this, the authors proposed models to validate and evaluate the services quality of the bank and empirically tested the models by adopting structural equation modeling approach. The results found that the services quality of SBI gives a positive impact to the satisfaction and commitment of customers.

Key words:

Physical Services Quality, Core Services Quality, Structural Equation Modeling, Satisfaction, Commitment.



Dr. G. S. David Sam Jayakumar, Assistant Professor, Jamal Institute of Management, Tiruchirappalli-620020, South India, India, E-mail: gdsjdk77@yahoo.co.in



Dr. I. Narsis, Assistant Professor, P. G. and Research Department of Commerce, H.H. The Rajah's College, Pudukottai, Tamil Nadu, E-mail: Narsis_8@yahoo.co.in

The concept of banking was first introduced in medieval Florence in 1397. A powerful merchant family named Medici established a network of shops that allowed patrons to place money on account and withdraw the money in another city that had a Medici representative. Many powerful families and even the Church kept their money in Medici banks. This allowed rich people to travel without the need to carry large sums of money and risk robbery while travelling. Banking continued to gain popularity throughout Europe by 1700 and nearly every country in Europe had some form of established banking. Modern banking has come a very long way from those humble beginnings in Florence, England. Banking today covers the entire spectrum of finance from simple savings to credit cards and home loans. Typically, a bank generates profits from transaction fees on financial services or the interest spread on resources. It holds in trust for clients while paying them interest on the asset. Origins of the Indian banking system date back to the latter part of the eighteenth century with the establishment of the General Bank of India in the year 1786. During the nineteenth century, three presidency banks were established, that were later

amalgamated in 1920 to form the new Imperial Bank of India. The state bank of India was formed under the SBI Act in 1955 with the takeover of Imperial Bank and amalgamation of Bank of Bengal, Bank of Bombay and Bank of Madras. The government mopped up around 93 percent of the equity, leaving seven percent to private ownership. By this act the equity of RBI cannot be diluted below 55 percent. SBI enjoys a pool of best managerial talent, assured government business, a countrywide network of branches and strong brand credibility in the Indian market. It is a strong belief that without providing better service to the customers, be it at the micro level or macro level, no service industry can progress and banking industry is no exception. Banking is perhaps the only service industry where customers play a pivotal role in its development. Delivering quality service to customers is a must for success and survivals in today's competitive banking environment. Among others, provision of high quality services enhances customer retention rates, attracts new customers and increases customer satisfaction and their commitment towards the bank.

Framework of Services Quality

Service quality is concerned with the ability of an organization to meet the customer's expectations. The measure of performance is perceived as service quality. It has been argued that the quality of a service has two important components namely, technical quality – the outcome dimension of the service operations process and functional quality – the process dimension in terms of the interaction between the customer and the service provider. These two dimensions of service quality highlight the subjective nature of quality assessments. Generally clients of professional service firms such as accounting and law firms have difficulty in distinguishing between good and outstanding technical quality of the service; thus judgements are often made on the subjective basis of how the client was treated. Several experts suggest that technical and functional quality determine much of the corporate image which, in turn, can influence the customer's perceived service quality. In recent years research has been undertaken in an effort to understand the factors which influence service quality. Work by Berry and his colleagues have identified five key areas such as Tangibles, Reliability, Responsiveness, Assurance and Empathy. These dimensions represent how consumers organize information about service quality in their minds. On the basis of exploratory and

quantitative research, these five dimensions were found relevant for banking, insurance, appliance repair and maintenance, securities brokerage, long-distance telephone service, automobile repair service, and logic suggests they would be relevant for internal services as well. Sometimes customers will use all the dimensions to determine service quality perceptions, at other times not. The services dimension such as tangibles, reliability, responsiveness, assurance and empathy existed in determining the service quality provided by State Bank of India. For SBI, these dimensions were treated as sub-dimensions which call under the major two dimensions such as physical services and core services. The dimension of physical services quality includes tangibles and the core services quality includes the reliability, responsiveness, assurance and empathy.

Physical Services Quality

It is defined as the Quality of appearance of physical facilities, equipment, personnel and communication materials. All these provide the physical representations or images of the service that customers, particularly new customers, will use to evaluate quality. Service industries that emphasize tangibles in their strategies include hospitality services where the customer visits the establishment to receive the service, such as restaurants and hotels, retail stores, and entertainment companies. More specifically it comprised Modern-looking and Up-to-date equipment, Appearance of physical facilities, Appearance of employees, Visual Appeal of pamphlets and statements, Accuracy of records, Operating hours.

Core Services Quality

It is defined as the ability to perform the promised service dependably and accurately. In its broadest sense, the company delivers on its promises – promises about delivery, service provision, problem resolution and pricing. Customers want to do business with companies that keep their promises, particularly their promises about the core service attributes. This dimension emphasizes attentiveness and promptness in dealing with customer request, questions, complaints and problems. To excel on this dimension, a company must be certain to view the process of service delivery and the handling of requests from the customers' point of view rather than from the company's point of view. Core services Quality is determined by the core services namely understanding specific needs of customers, Keeping customer's best interest at heart,

Personal attention given, Individual attention given, Employee's knowledge in answering, Politeness of employees, Safety in transactions, Trustworthiness of employees, Response to customer requests, Helping attitude of employees, Promptness in performing services, Promptness in conveying information, Providing time promised services, Performing right service at first time, Interest shown in solving a problem and Keeping promises at certain time.

Measurement of Service Quality

The most relevant approach in defining and measuring service is the user-based approach. The idea that quality is subjective and will be strongly linked to the individual's needs and expectations recognizes that consumers have different criteria for judging service quality. This user-based approach equates quality with maximum levels of satisfaction. In measuring quality in this way, however, a distinction needs to be drawn between quality of service delivery and the service output, or benefit. The customer may be involved in the service production, thus impacting on the quality of the service delivery process. The actual output of the service may be judged by the customer in terms of their expectations of the outcome or benefit. The customer's overall judgement of service can be an evaluation of both the process and the outcome, compared with the customer's own expectations and desired benefits. This leads to an important idea in assessing quality from a service marketing perspective: perceived service quality. Perceived service quality represents the customer's judgement of an organization's service based on their overall experience of the service at counter. Understanding how customers arrive at their judgement- that is to say, how they decide whether or not they are satisfied with a particular service is very important for services marketing management.

Benchmarking

In order to evaluate service quality it is important to establish a firm's performance relative to its competitors. Benchmarking involves looking for the best ways to achieve competitive advantage. The company's products, service and practices are continually compared with the standards of the best competitors and identified industry leaders in other sectors. By observing and measuring the best within and outside the industry it is possible to improve the performance of the company. Benchmarking has now come to be recognized

as appropriate for any area of a company's operations. The task of creating competitive advantages involves outperforming, rather than matching, the efforts of competitors. This, together with the obvious difficulties in gaining all the information required on competitors, and their internal systems and processes, led to the adoption of a broader perspective on benchmarking. Thus benchmarking was expanded from a focus solely on competitors to a wider, but selective, focus on the products and services of top performing companies regardless of their industry sector. This broader perspective on benchmarking has been used as a major element in increasing both quality and productivity.

Customer Satisfaction

The importance of customer service for capturing business in banks has become as focus point in all stages of marketing of banking services, since almost all banks offering more or less the same products with little changes in nomenclature. Here the concept of enhancing the customer satisfaction is a pivotal point to attract more and more people to banking by a particular bank. In the present day situation, customers becoming more and more demanding, bankers have had to evolve new approaches, new and innovative products to keep pace with growing expectations. With the opening up of the economy customer satisfaction "has acquired new meaning and different dimensions" as banks are discovering more and more innovative products to meet increasing competition among themselves. In order to service the customer more efficiently and to the highest level of satisfaction, technology up gradation is an important aspect to speed up the servicing in all spheres of banking and to fulfill the customer needs. Truly the customer is the king in the present day banking, since the banks are providing tailor made services to the changing needs of customer to face the competition from the rival banks. Today the customer preferences keep on changing at a rapid speed and their demands are turned insatiable. In order to cater to the changing preferences, bankers are bound to provide the services suitable to their needs to survive in the competition. Customers are not ready to accept any delay in service today and are in need of information for instant decisions. Therefore, customer satisfaction is more important in servicing. It has become a challenging and tough job for bankers in retaining the existing customer base and winning the new customers. Otherwise sustaining in the banking business is a tough phenomenon. Bankers are in the peoples' business and it is the goal of the bankers to make the customers

happy to achieve their targets. To achieve this challenging task of customer satisfaction, bankers are turning to technology for help.

Commitment

The next task for the banker is not only to satisfy the customer but also he should trigger the attitude of the customers towards the bank. More technically, this aspect is called commitment. Commitment on the part of the customers refers to continue to do their business in the same bank for a long period. Suppose the bank increases its banking charges, then it may or may not affect the attitude of the customer about the bank, in this situation if the customer feels indifferently, this only shows the commitment of the customer to have decreased. If the customers experience a problem with the bank services, then he or she may consult the fellow customer or the bank employees. Here the emphasis is in order to make the customers commit themselves with the bank, the banker should not create any adverse situation and he should instead provide prompt services without any problem.

Review of Related Literature

In most models of client evaluations of retail banking services the focus has been on a comparative judgment of expectations versus perceived performance resulting in the two major evaluative judgements of perceived service quality and satisfaction [Murphy (1996), Smith (1992)]. Both concepts have been frequently used and measured in the retail banking services area [Lewis and Mitchell (1990), Smith (1992)]. However, it has been argued that problems of definition, delineation and conceptualization concerning these evaluative judgments still exist De Ruyter et al., (1997). Much of the confusion arises from the fact that both forms of evaluative judgements are based on comparable underlying constructs. Clients form expectations prior to their encounter with a bank (employee), they develop perceptions during the service delivery process and subsequently they compare their perceptions to their expectations in evaluating the outcome of the service encounter. While service quality and satisfaction are concepts that have a number of similar characteristic, they have points of differentiation as well, as becomes clear from major advances in the services marketing literature Patterson and Johnson (1993). In the first place, it is frequently argued that in order to form a satisfaction judgement, consumers must have experienced a service, whereas perceived service

quality is generally viewed as being not necessarily experience based. Second, it has been argued that the two concepts are determined by different antecedents. Evidence exists regarding a number of cognitive and affective processes (equity, attributions, and cost/benefit analyses) that influence satisfaction. The number of antecedents to service quality is regarded as more limited Oliver (1993). Clearly the two types of evaluative judgement are not perceived as isomorphic and increasingly treated as separate constructs in research on services. There is a growing consensus on the sequential order of service quality and satisfaction. The latter is increasingly regarded as the super ordinate construct based on conceptual work by Oliver (1993) and Rust and Oliver (1994), and empirical evidence provided by Cronin and Taylor (1992) and De Ruyter et al. (1997) Cronin and Taylor (1992) undertook an empirical test of the reciprocity between satisfaction and quality across several service industries. Using structural equation modeling, they found that service quality can be seen as a determinant of satisfaction which in turn influences purchase intentions. Lately, however, it has been suggested that, in addition to service quality and satisfaction, commitment is also an important determinant of customer patronage.

Methodology

Selection of Bank and Study Area

Among the various public sector banks in Tiruchirappalli District, State Bank of India played a major role in offering the various services for the past five decades. Hence, we motivated to identify and evaluate the quality of services in State Bank of India.

Sampling Method

It is a sample survey to measure the service quality of the State Bank of India. As per the reports of State Bank of India head office, Tiruchirappalli District, the population size of the customers as follows:

Based on the table, we adopted stratified random sampling method to select the sample respondents from the branches located in urban, semi-urban and rural area. we selected two branches from urban area (including Tiruchirappalli commercial branch and town branch), three from semi-urban area (Ariyalur, Kulithalai, Lalgudi) and two branches from Vangal, Ponparappi, Kamarajapuram. The main reason for

Location of Bank	No. of Branches	Customers Population	Percentage	Proportion(w)
Urban	13	91,000	40.24	0.4024
Semi-urban	12	69,200	30.60	0.360
Rural	19	65,900	29.16	0.2916
Total	44	2,26,100	100.00	1.00

Location of Bank	Total Sample Size (1)	Proportion (2)	Areawise Sample Size (1) x (2)
Urban	627	0.4024	252
Semi-urban	627	0.360	192
Rural	627	0.2916	183

selecting these branches for survey because of high frequency of customers and transactions occurring in these branches.

Determination of Sample Size

$$n = \left(\frac{Z}{e}\right)^2 \sum_{i=1}^3 w_i s_i^2$$

The sample size for the study was scientifically determined with the help of the following formula.

Where n is the required sample size, Z is the value (1.96) of standard normal variate at 95 percent confidence level, e is the allowable sampling error at five percent level is the population proportion for urban, semi-urban and rural area, S is the sample standard deviation of raw service quality Score calculated in the pilot study for urban (0.71880), semi-urban (0.68599) and rural (0.63724) area. Substituting the values of Z, e, W, S in the above formula, we get the required sample size as 627 and it is the lower limit which is used to evaluate the service quality of State Bank of India. The table shows the stratum or location wise sample size.

Pilot Study

A draft questionnaire was prepared in a regional language as well as in official language, for the purpose of pretesting. We randomly selected 50 customers from different areas of location of banks such as urban, semi-urban and rural. The questionnaire comprised only 22 service quality items, five satisfaction items, and four commitment items. After the

collection was over, we checked the reliability of these items and the results of the Cronbach's alpha showed that the 22-service quality items achieved reliability co-efficient of 0.878 and commitment, satisfactory items together achieved 0.658. This confirms that the service quality items attained high internal consistency of 87.8 percent followed by the satisfaction, commitment items with 65.8 percent (greater than or close to a recommended level of 0.7). Moreover Hotelling's T-Squared test was used to find the mean equivalence of the service quality, satisfaction and commitment items. The results confirm that there is significant difference in the means of the service quality items, commitment and satisfaction items at one percent level. Finally, we also verified the validity of the service quality items. At first, 22-service quality items were classified into first 11 and second 11 items randomly. Split half validity was conducted by using the common factor analysis procedure. Based on the Eigen value, we identified four different factors emerging from first 11 service quality items; this shows that the first 11 service quality items contained more information than the second 11 items regarding the service quality of the State Bank of India. Moreover, to purify the instrument, we adopted the judgmental validity procedure. After an in-depth discussion with experts and bank managers of State Bank of India, we classified the 22 service quality items into two different factors such as physical services (6) and core services (16).

Collection of Data

After the questionnaire was structured, it is used to measure the service quality of State Bank of India and its impact on customer satisfaction. The questionnaire was classified into six different parts. Part I elucidates nine personal and demographic variables of respondents. Part II and III comprised six conceptual items for physical service quality and 16 items for core service quality respectively. Similarly, parts IV and V measure the satisfaction and commitment, by raising five satisfaction items and four commitment items respectively. Moreover, we also identified and included five rational items in part VI. The authors collected data based on the location of the bank more specific in rural area; the respondents were well familiar in their regional language when compared to formal language. For this purpose the questionnaire was translated into their regional language and issued to the respondents in rural area. After the collection was over, again the questionnaire was converted into a formal structure and organized for the purpose of analysis.

Data Analysis

After data collection was over, the collected data was organized and analyzed with the help of SPSS Version 17 and SPSS AMOS Version 17. At first simple tabulation shows the position of the personal, demographic and rational background of the customers of SBI. In the next stage structural equation modeling was applied to evaluate the services quality and its impact on the satisfaction and commitment of bank customers. Moreover, resampling method was also adopted to scrutinize the services quality. The resampling strata was the location of the bank namely Urban, Semi Urban and Rural area. Finally, the services quality was evaluated on a pooled basis for the overall sample size of the study.

Personal and Demographic Profile of Bank Customers

The personal and demographic profile of bank customer includes his/her gender, age, residential area, marital status, nature of family, number of family members, occupation, qualification, etc. Among the total of 627 bank customers majority of them are males (78.3 percent). As far as their age as concern, most of them are in the age category between 20 to 40 years (64.9 percent) and the customers of SBI, are from the remote outskirts of the (Rural) City (43.7 percent). They

are married (68.3 percent) and their nature of family is nuclear (58.5 percent) majority 36.8 percent of the bank customers having four members of the family. Moreover, 28.9 percent of the customers were business men as well as self employed and 35.1 percent of them are graduates. On the other hand, 38.6 percent of them earn a monthly income between ₹ 4000 to ₹ 8000 respectively.

Rational Profile

The rational profile of customers of SBI comprised the nature of deposit account hold at present, criteria for choosing the bank, frequency of withdraws of deposits, purpose of holding the bank account. A maximum of 62.7 percent of the customers hold the saving bank accounts. 40.2 percent of them reveal that the bank was located near to their home and also 34.3 percent of them holding the bank account for the past two years. The majority of 29.2 percent in the sample size withdraws and deposits the money twice in a week at the bank. Maximum of them holding the bank account is just for savings.

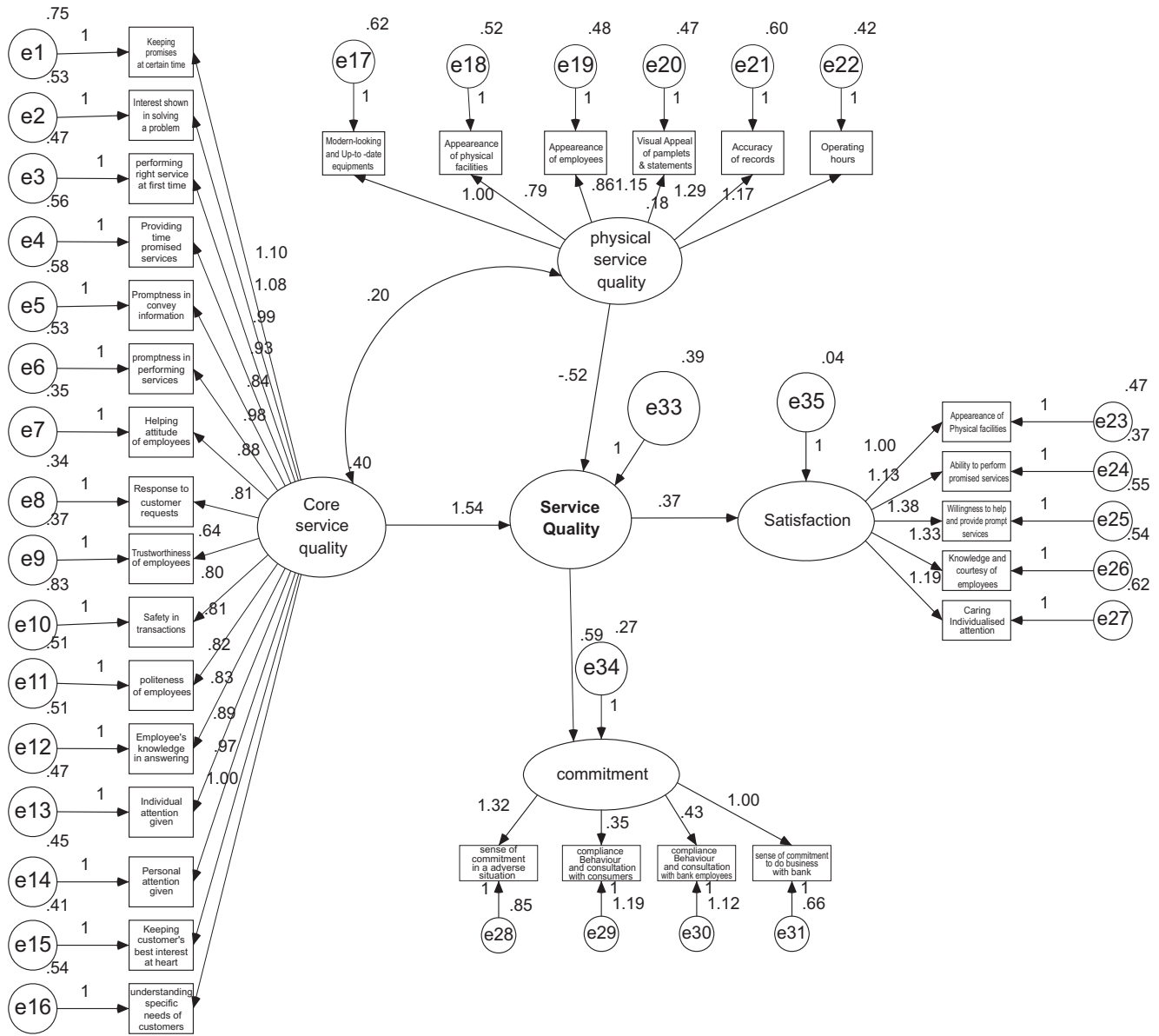
Structural Equation Modeling

In order to propose a multidimensional model for evaluating the services quality, SEM was applied and it gives a fruitful result. The result is presented on the basis of location of bank namely, Urban, Semi-Urban and Rural. Moreover, a pooled analysis was also conducted and it is illustrated with a following path diagram and interpretation.

Path Diagram-1 shows the result of the Measurement model of services quality with confirmatory factor analysis and path analysis. From the equation it is inferred that if the physical service quality changes by one unit, there will be 1.022 units increase in the appearance of physical facilities. Similarly, the physical service quality affects and increases the service indicators by achieving a path coefficient of 0.078 for the visual appeal of pamphlets and statements, 0.747 for appearance of employees, 0.571 for accuracy of records and 0.541 for operating hours respectively. Similarly, if the core services quality changes by one unit, there will be 1.098 units increase in the "keeping promises at certain time." Similarly, the core service quality contributes and increases the service indicators by attained a path coefficient of 1.075 for interest shown in solving a problem, 0.990 for performing right service at first time, 0.983 for promptness in performance services

Evaluation of Service Quality in Urban Banks and Its Impact on Satisfaction and Commitment of Bank Customers

Path Diagram - 1

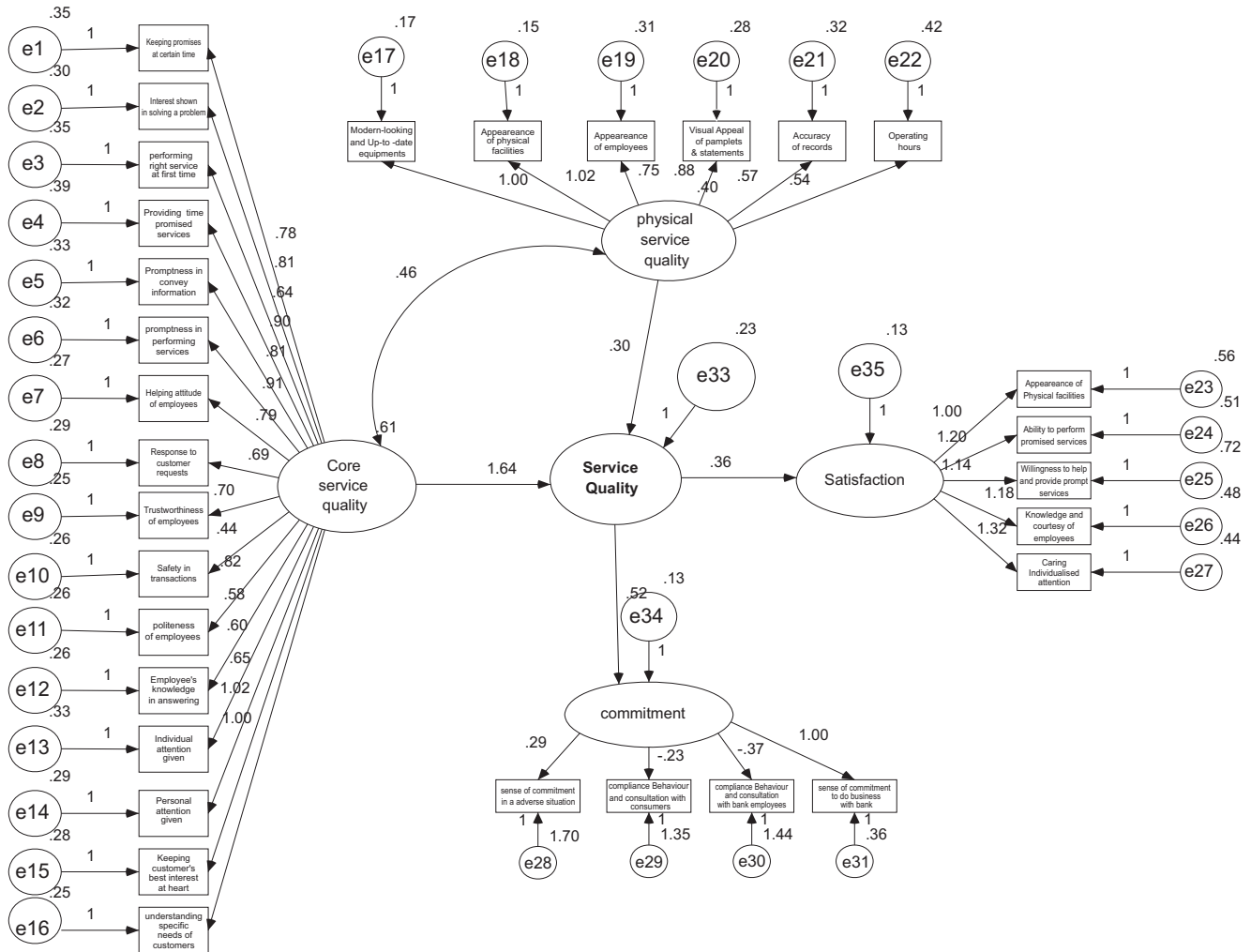


and 0.975 for keeping customers best interest at heart, etc respectively. If the State Bank of India changes the physical services quality by one unit, there will be 0.518 units decline in the overall service quality of SBI, when the core service quality is kept constant and vice versa. Moreover, the correlation coefficient of 0.734 confirms that there exists a

relationship of 73.4 percent between the physical and core services quality. Similarly, the State Bank of India changes the overall service quality by one unit, there will be 0.365 and 0.589 units increase in the satisfaction and commitment of the Bank customers. The contribution and impact of satisfaction and commitment to the various indicators was

Evaluation of Service Quality in Semi-Urban Banks and Its Impact on Satisfaction and Commitment of Bank Customers

Path Diagram 2



also identified from the path diagram. If the satisfaction of respondents changes by one unit, there will be 1.384 units increase in the satisfaction about Willingness to help and provide prompt services in the SBI. Similarly, the unobserved satisfaction of the customers' increases then it will lead to an increase in indicators by attaining a path coefficient of 1.333 for knowledge and courtesy of employees, 1.193 for caring individual attention, 1.131 for ability to perform promised services respectively. Moreover, if commitment of respondents changes by one unit there will be 1.318 units

increase in the commitment of customers in an adverse situation. Likewise, if the commitment changes, then it will lead to an increase in the path coefficient of 0.426 for consultation with bank employees and 0.350 for consultation with consumers. The result of critical ratio test confirms that the estimated path coefficient was highly significant at one percent level. In order to evaluate the model fitness, the Goodness of Fit Index (GFI =0.833 or 83.3 percent) and Adjusted Goodness of Fit Index (AGFI =0.807 or 80.7 percent) were evidence and it shows it is close to a

recommended level of one. The Root Mean Residual (RMR= 0.055) and Root Mean square error of Approximation (RMSEA =0.057) suggest that the error involved in calculating the parameter was close to a recommended level of Zero. Additionally the result of Chi-Square test is good and it shows that the fitted model is strongly recommended at one percent level. All the above said model fitness index and the test of model fitness revealed that the proposed model to evaluate the services quality of SBI was good in urban banks.

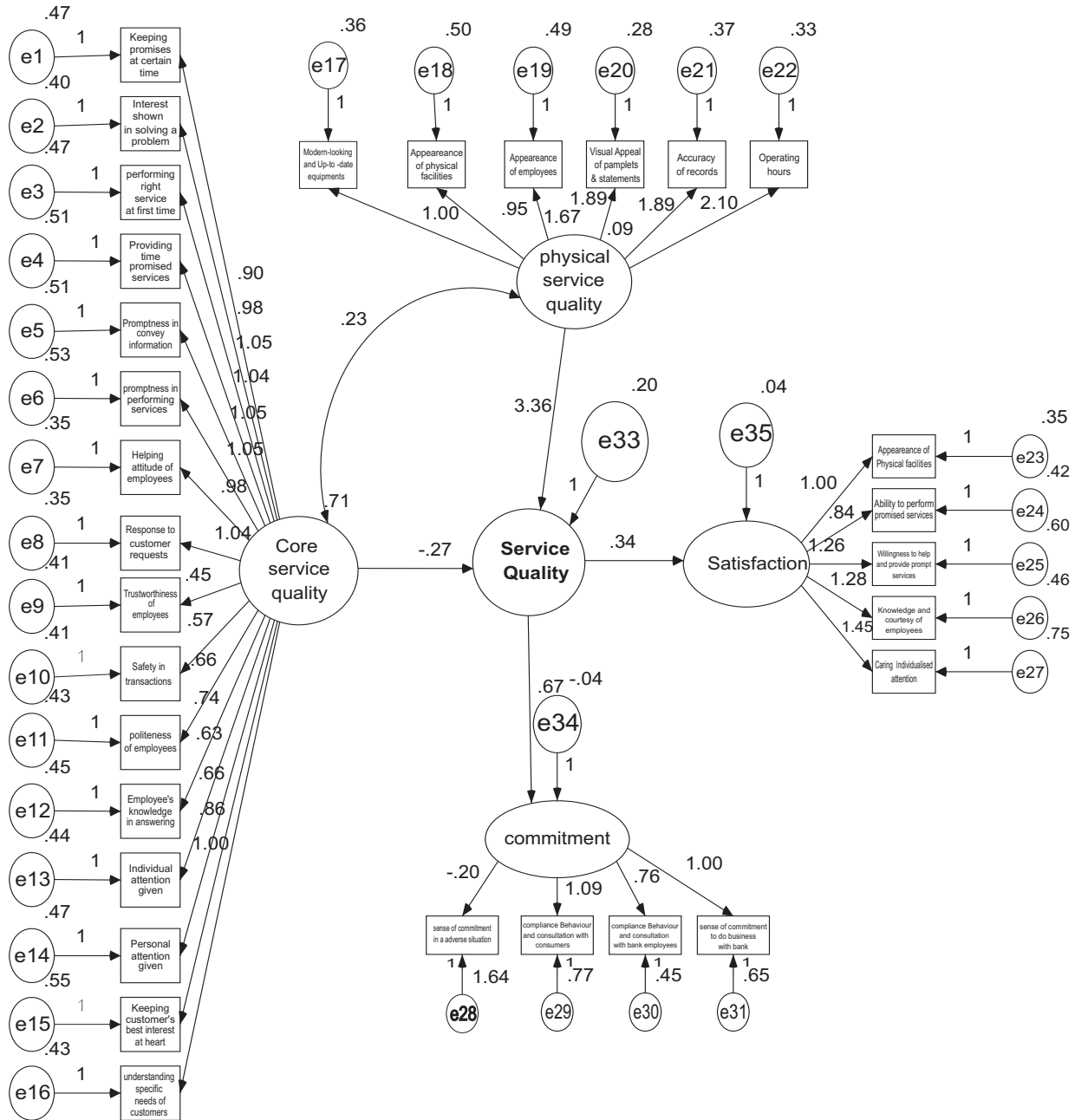
From Path Diagram-2, it is inferred that if the physical services quality changes by one unit, there will be 1.290 units increase in the accuracy of records. Similarly, the physical services quality affects and increases the service indicators by achieving a path coefficient of 1.171 for the operating hours, 1.150 for visual appeal of pamphlets and statements, 0.863 for appearance of employees and 0.787 for appearance of physical facilities respectively. Similarly, if the core services quality changes by one unit, there will be 1.023 units increase in the “keeping customer’s best interest at heart.” The core services quality contribute and increase the service indicators by attaining a path coefficient of 0.914 for promptness in performing services, 0.903 for providing time promised services, 0.816 for politeness of employees and 0.809 for interest shown in solving a problem respectively. The impact of physical and core services quality on the overall services quality provided by SBI and also its effect on the satisfaction and commitment of the customers is also visualized in the path diagram. If the State Bank of India changes the physical and core services quality by one unit, there will be 0.300 units and 1.642 units increase in the overall services quality of SBI respectively. Moreover, the correlation coefficient of 0.919 confirms that there exists a relationship of 91.9 percent between the physical and core services quality. The State Bank of India also changes its overall service quality by one unit, there will be 0.358 and 0.518 units increase in the satisfaction and commitment of the customers. The path diagram also visualizes the contribution and impact of satisfaction and commitment of the various indicators. If the satisfaction of customers changes by one unit, there will be 1.322 units increase in the satisfaction about caring individual attention, in SBI. Similarly, the unobserved satisfaction of the customers’ increases then it will lead to increase in indicators by attaining a path coefficient of 1.197 for ability to perform promised services, 1.179 for knowledge and courtesy of employees, 1.140 for willingness to help and

provide prompt services. Moreover, if commitment of customers changes by one unit there will be 0.374 and 0.229 units decline in the commitment in the consultation with bank employees and consultation with consumers respectively. Likewise if the commitment changes then it will lead to increase and attain a path coefficient of 0.285 for commitment in an adverse situation. The result of critical ratio test confirms that the estimated path coefficient was highly significant at one percent level. In order to evaluate the model fitness, the GFI (0.790 or 79 percent) and AGFI (0.757 or 75.7 percent) were evidence and it shows it is close to a recommended level of one. The RMR of 0.59 and RMSEA 0.070 suggest that the error involved in calculate the parameter was closed to a recommended level of Zero. In addition, the result of Chi-Square test is a good result that the fitted model is strongly recommended at one percent level. All the above said model fitness index and the test of model fitness revealed that the proposed model of measuring the service quality of SBI was good in Semi-urban banks.

Path diagram-3 visualizes the result of the confirmatory factor analysis with the path analysis. It is inferred that, if the physical service quality changes by one unit, there will be 2.104 units increase in the operating hours. Similarly, the physical service quality affects and increases the service indicators by achieving a path coefficient of 1.890 for the visual appeal of pamphlets and statements, 1.886 for accuracy of records, 1.672 for appearance of employees and 0.946 for appearance of physical facilities respectively. Similarly, if the core service quality changes by one unit, there will be 1.052 units increase in the “Promptness in conveying information.” Similarly, the core service quality contributes and increase the service indicators by attaining a path coefficient of 1.051 for performing right service at first time, 1.048 for promptness in performance services and 1.044 for response to customer request, respectively. The State Bank of India changed its physical service quality by one unit, there will be 3.357 units increase in the overall service quality of SBI and if SBI change the core service quality by one unit, there will be 0.274 decline in the overall service quality. Moreover, the correlation coefficient of 0.927 confirms that there exists a relationship of 92.7 percent between the physical and core service quality. The Bank changed the overall service quality by one unit, there will be 0.340 and 0.672 units increase in the satisfaction and commitment of the customers. If the satisfaction of Bank customers changes by one unit, there

Evaluation of Service Quality in Rural Banks and Its Impact on Satisfaction and Commitment of Bank Customers

Path Diagram -3



will be 1.452 units increase in the satisfaction about caring individualized attention in SBI. Similarly, the unobserved satisfaction of the customers increases then it will lead to increase in the indicators by attaining a path coefficient of

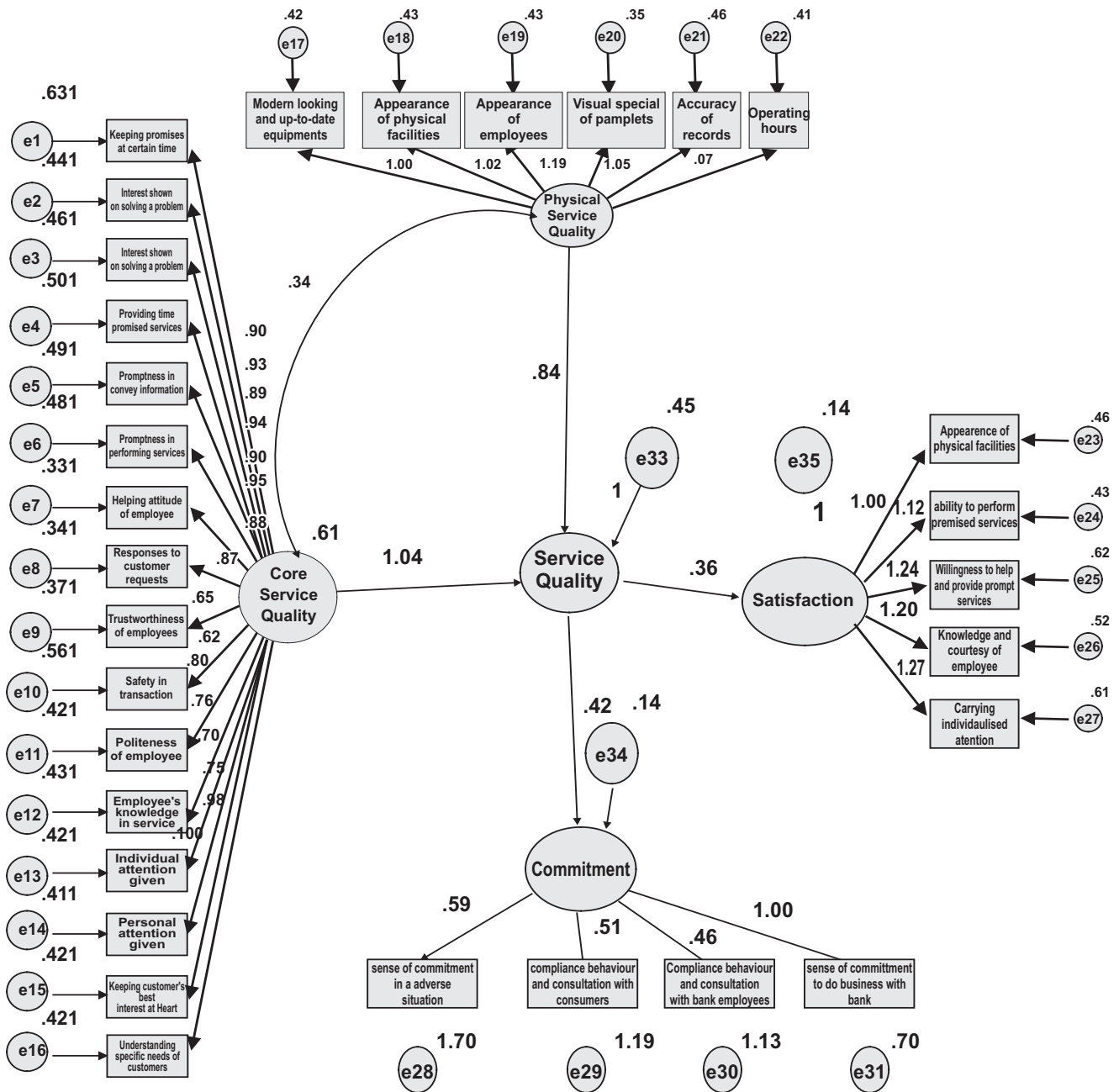
1.284 for knowledge and courtesy of employees, 1.258 for willingness to help and provide prompt services and 0.839 for ability to perform promised services. Moreover, if commitment of customers changes by one unit there will be

1.085 units increase in the score of consultation with consumers. Likewise if the commitment changes then it will lead to increase and attain a path coefficient of 0.762 for consultation with bank employees. The result of critical

ratio test confirms that the estimated path coefficient was highly significant at one percent level. In order to evaluate the model fitness, the GFI (0.791 or 79.1 percent) and AGFI (0.759 or 75.9 percent) were evidence and it shows

Pooled Analysis of Banks in Three Areas

Path Diagram-4



it is close to a recommended level of one. The RMR of 0.61 and RMSEA 0.066 suggest that the error involved in calculating the parameter was closed to a recommended level of Zero. In addition, the result of Chi-Square test is a good result that the fitted model is strongly recommended at one percent level. All the above said model fitness index and the test of model fitness revealed that the proposed model of measuring the service quality of SBI was good in rural banks.

Path Diagram-4 shows the result of the confirmatory factor analysis with the path analysis. If the physical service quality changes by one unit, there will be 1.192 units increase in perception score of visual appeal of pamphlets and statements. Similarly, the physical services quality affect and increase the service indicators by achieving a path coefficient of 1.018 for the appearance of physical facilities, 1.025 for appearance of employees, 1.054 for accuracy of records and 1.073 for operating hours respectively. Similarly, if the core service quality changes by one unit, there will be 1.051 units increase in the "promptness in conveying information" and "performing right service at first time." The core service quality contributed and increased the service indicators by attaining a path coefficient of 1.048 for promptness in performing services, 1.043 for response to customer request and 1.037 for providing time promised services respectively. The State Bank of India changed the physical service quality by one unit, there will be 3.153 units increase in the overall service quality of SBI. Moreover, the correlation coefficient of 0.926 confirms that there exists a relationship of 92.6 percent between the physical and core service quality. If the Bank changes the overall service quality by one unit, there will be 0.390 and 0.714 units increase in the satisfaction and commitment of the customers. The contribution and impact of satisfaction and commitment of the various indicators also visualize in the path diagram. If the satisfaction of Customers changes by one unit, there will be 1.414 units' increase in the satisfaction about caring individualized attention in the SBI. Similarly, the unobserved satisfaction of the respondents increases then it will lead to increase in indicators by attaining a path coefficient of 1.243 for knowledge and courtesy of employees, 1.223 for willingness to help and provide prompt services and 0.830 for ability to perform promised services. Moreover, if commitment of customers changes by one unit there will be 1.112 units' increase in the consultation with consumers. Likewise if the commitment changes, then it will

leads to increase and attain a path coefficient of 0.791 for consultation with bank employees. The result of critical ratio test confirms that the estimated path coefficient were highly significant at one percent level. In order to evaluate the model fitness, the GFI (0.791 or 79.1 percent) and AGFI (0.758 or 75.8 percent) were evidence and it shows it is close to a recommended level of one. The RMR of 0.062 and RMSEA 0.065 suggest that the error involved in calculating the parameter was closed to a recommended level of Zero. In addition, the result of Chi-Square test is good result that the fitted model is strongly recommend at one percent level. All the above said model fitness index and the test of model fitness revealed that the proposed model to measure the service quality of SBI in Tiruchirappalli District was good.

Discussion and Conclusion

We studied the service quality of SBI and its impact on customer satisfaction based on the location of bank such as urban, semi-urban, rural areas of Tiruchirappalli district. Based on the analysis we give suitable suggestions and recommendations on the following grounds.

Urban Banks

In Tiruchirappalli District, the State Bank of India established 13 branches in the urban area because the area consisted of a population above 10 lakhs. Majority of the customers are from urban area, this is greater, when compared to semi-urban and rural area. This was due to the various physical and core services provided by the SBI to its customers. As per the analysis, the physical services and core services provided by SBI were not excelled in their performance. In order to boost up and trigger the satisfaction and commitment of the customer the bank should take necessary steps and remedial measures regarding the physical services. Though the equipments were modern looking, they were not very much attracted and this would lead to non-fulfillment of customer's requirement and it creates dissatisfaction. For this purpose it should concentrate on satisfying the requirements of the customers by increasing the waiting chairs, by providing fully air-conditioned environment in all branches, supply of cool water, etc. Moreover, the appearance of employees in SBI is not up to the mark. As a bank employee he or she in a position, has to mingle with public in daily life. So the researcher suggests the appearance of employees regarding their dress ethics and neatness should improve and it will lead to an

increase in the customer satisfaction and commitment. Similarly, the visual appeal of pamphlets and statements such as DD Challan, pay in slip, withdrawal slip should be arranged, ordered and it should be highlighted in the specific place. At a certain time, handling of the transaction in the peak hours will lead to failure in clear entries in the passbook. To avoid this, the employees should make a detailed narration clearly about their transaction whether it may be withdrawal or deposit. The customers are also dissatisfied regarding the working hours of SBI. So, the researcher recommended to extending the working hours of SBI in the evening time. This will meet the requirements of the customers. As far as core service is concerned the employees should visualize the helping attitude transparently, perform the right service at the first time to attract the new customers, behave politely and show some interest in solving the problem faced by the customers. Moreover, in this area majority of the customers were low in their satisfaction and commitment. In future, to change their dissatisfaction into satisfaction and make them committed with the bank, the bank should concentrate on the services such as operating hours, appearance of employees and they should understand the specific needs of the customer. Moreover, the bank should give importance to the trustworthiness of employees and the knowledge of employees in answering the customers' enquiry will alone increase the satisfaction and commitment in future. All these above said remedial measures regarding the physical and core services will enhance the overall service quality of SBI. If the overall service quality has to shine bright in the future, then the bank will definitely satisfy their customers and attract the new customers in the coming scenario.

Semi-Urban Banks

Apart from the urban area, the SBI also started their branches in the outskirts of Tiruchirappalli District. The main reason to start the branches in this area, before nationalization of banks that there were no branches in this area. So the SBI established a cut-off of a population above two lakhs to 10 lakhs as a criterion to start 12 branches and named it as semi-urban area. Irrespective of areas, the banks' performance was purely determined by the services provided to their customers. As in the urban area, the physical services failed to satisfy the customers. In order to increase the satisfaction and commitment the banks in the semi-urban area should

concentrate on the updating of equipments, appearance of employees and maintenance of accurate records. As far as the core services are concerned the bank should motivate its employees to behave in a polite manner, to show their helping attitude, give immediate response to customer request and handle their transaction in a safer manner. Most of the customers in this area were low in their satisfaction and commitment. In order to enhance their satisfaction and commitment, the SBI branches in this area should concentrate on the appearance of physical facilities, appearance of employees, promptness in performing services and promptness in conveying the information to their customers respectively. At present and in future the customers are willing to retain and continue their commitment to the SBI. SBI may expect the new account holders from other nationalized banks in the coming future.

Rural Banks

Apart from the urban and semi-urban area, the SBI also performed their banking services in the rural areas of Tiruchirappalli District. At present the SBI established and was running 19 branches in the rural areas. The main purpose to start the SBI in rural area is to attract the farmers, giving loans and advances for agriculture purpose and to motivate the habit of thrift and savings to the rural customers. In this area also, the physical services were not excelled to trigger the satisfaction and commitment of customers. In order to curtail this, the bank should give more emphasis to maintain accuracy of records and operating hours of the bank. Though the customers of the rural area are illiterate, the employees should give a proper guidance about the transactions and explain the formalities to open a new account, about the rules and regulations, interest charged of various deposits respectively. The employees working in this area should give more importance regarding their punctuality and they should be in chairs during the operating hours of the bank. As far as the core services are concerned they should show some interest in solving customers' problem, behave in a polite manner and understand the specific needs of rural customers. Majority of the customers in this area were highly satisfied and they have high commitment to do business with the bank.

Overall Service Quality of SBI

In Tiruchirappalli District the researcher identified that the overall service quality of SBI should be enhanced by taking proper remedial measures regarding the physical and core services provided to its customers. On a priority basis, first the bank should improve the physical services and it should give emphasis to the core services also. At present, majority of the customers in Tiruchirappalli District were low in their satisfaction and commitment towards their banks. In order to increase the level of satisfaction and commitment the bank should give importance to the updating of equipments and accuracy of records. Regarding the core services it should give concentration to improve all the core services provided at present. Finally, all these remedial measures will boost and enhance the overall service quality of SBI and it will lead to increase the satisfaction and commitment of SBI customers as well as attract new customers in the coming future.

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Services Quality Dimensions: Indian Food Retailers

G.S. David Sam Jayakumar and K. Abdus Samad

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This study attempts to codify the service quality dimensions within the scope of the Organized Retailing Sector in India. This research article evaluated the services quality of major food retailers by taking important services quality dimensions like Physical Aspects, Reliability, Personal Interaction, Problem Solving and Policy. In order to measure the impact of services quality dimensions, the study examined we contacted 630 retail shoppers from major food retail stores namely Spencer's, Nilgiris, Reliance Fresh and Margin Free. The test portrayed how the services quality departed from the normality assumption.

Key words:

Food Retailing, Normality Test, Causal Approach, LAD Technique.



Dr. G. S. David Sam Jayakumar, Assistant Professor, Jamal Institute of Management, Tiruchirappalli – 620020, Tamil Nadu, E-mail: gdsjk77@yahoo.co.in



Dr. K. Abdus Samad, Director, Jamal Institute of Management, Tiruchirappalli – 620020, Tamil Nadu, E-mail: samad_74a@yahoo.com

Organized food retailing is a relatively new phenomenon in India, with small Western-style supermarkets starting to appear only since the 1980s. Most food is still sold through local wet market vendors, roadside pushcart sellers, or tiny *kirana* (grocery) stores. Although less than one per cent of food is estimated to be sold through supermarkets, this share is growing rapidly. Most supermarkets resemble the small independent operations that existed in Australian cities and towns about 20 years ago, typically occupying 275-750 square meters and carrying about 6000 stock-keeping units. Most of the supermarket developments have occurred in the south of the country in the major cities of Bangalore, Chennai and Hyderabad, as well as New Delhi and Mumbai in the north.

According to the Images-KSA Technopak India Retail Report 2005, an estimated 500 shopping malls are expected to be built by 2010 from a near-zero base in 2000, in a trend that can

benefit Australian producers by providing greater visibility and shelf space. Convenience stores are also taking off in major cities, usually in the form of Shell Shops or Food Stops attached to petrol station outlets. The format and product range is surprisingly similar to those in Australia, and they often include chilled and refrigerated sections. Market analysts estimate that the organized retail sector has been growing by nearly 30 percent year since 2000 with similar growth likely in the short-to-medium term. The sector is expected to undergo further change with prospective new domestic and global foreign entrants, and the takeover or exit of some existing participants. Global players such as Wal-Mart (US) and Carrefour (France) have indicated their plans to enter India once Indian foreign investment regulations permit.

Food Retailing in India – An Overview

Traditional local markets and small-scale retailing continue to dominate India's food retail sector. There are an estimated 12 million retail outlets, of which almost seven million sell food and grocery products. The vast majority of these are small kiosks (17 percent), general provision stores (14 percent) and grocery stores (called *kirana*; 56 percent of all rural retail outlets) run by a single trader and his family. With more than 71 percent of the population living in small villages and engaged in agriculture, most of India still does its food shopping at small-scale vendors in the local village, or at larger-scale weekly markets often serving several villages in one area, where small individual vendors trade. In the towns and cities, most consumers do their food shopping at the local neighborhood independent small retailers, kiosks and street hawkers. Servants in high income households usually undertake this task. Most cities and towns also have one (or more) large central fresh produce market where wholesalers and retailers (plus some consumers) procure their supplies for the day from individual traders.

The Food Corporation of India (FCI) has an extensive nationwide network of about 478,000 fair price shops and sells subsidized food grains and certain other staples, but since the retargeting of the Public Distribution System (PDS) in 1997 to focus on the poor, these are only available for those below the poverty line set by the government. There are also a few other chains of government-operated provisions stores, such as the Kendriya Bhandar (about 120 stores nationwide) run by the Ministry of Personnel, Grievances and Pensions and the canteen

stores (about 34 plus 3400 canteens) run by the Ministry of Defense, which are exclusively for Defense personnel. Thus the majority of food and beverage retailing in India is categorized as belonging to the unorganized sector. There is no firm data for the total value of India's annual food and beverage expenditure; however there are various calculations and estimates, such as about US\$90 billion by 2000 based on the Indian government's estimates of average urban and rural household expenditure on food and beverages, and about US\$135 billion by 2004 and growing at 4-5 percent *a* year, based on industry estimates cited by the USDA.

However it is commonly believed that less than one percent of food and beverage retail sales take place through the organised retail sector, though this share is estimated to be growing rapidly. An early form of 'supermarket' has been around in India for some time' the single-unit, smaller family-owned grocery and provisions store, now calling itself a supermarket (while others may call it a 'super-kirana') of which there are at least 5 to 20 in each city. Another form is a specific food and grocery section contained in some department stores, such as the Sahkari Bhandar department store chain, which has about 16 acres in Mumbai. However, it is only in the past decade or so that a form of supermarket akin to *a* Western-style supermarket, albeit on a smaller scale, has started to appear in India, mainly in certain cities of southern India plus in New Delhi and Mumbai

RPG's Spencer's

RPG Enterprises is not only one of the biggest, but also one of the most respected names in the industry. A US\$ 2.55 billion business conglomerate, RPG is one of the powerhouses that drive Indian Industry. With more than 20 companies, it spans seven business sectors, Retail, Technology, Entertainment, Power, Transmission, Tyres and Specialties- all under the RPG banner. With such a diverse portfolio, the fact that RPG Enterprises has had nothing but only unrivalled success in all these sectors, speak very highly of the efficiency and vision with which the company is run. Over the years RPG Enterprises has built a huge reservoir of trust and goodwill among the people of India. We at Spencer's are truly proud to be a part of the RPG family. Spencer's quality is a time-tested phrase, which has been ingrained in the minds of the Indian consumer for over 100 years now. Spencer's express is your store next door for your fresh needs at arms length. These stores are around 1000

sq. ft. in size. They are open from 7 a.m. to 9 p.m. and also provide you with home delivery. Express stores stock dairy, fruit and vegetable, bread and bread products, cut vegetables/ready to cook, fruit juices, fresh butter, fresh coffee/tea, fresh spices, fresh pickles, fresh ghee, fresh fish and meat. Spencer's Fresh stores provide you with an enjoyable and convenient shopping environment in your very own neighbourhood. These 2000 sq. ft. air-conditioned stores are well stocked with fresh food of the very best quality, such as fresh farm produce, vegetables, fruit, milk, eggs, breads and much more. With an impressive range and a clean, bright and hygienic ambience, Spencer's Fresh is far better than the regular vegetable outlets. Spencer's Fresh provides fresh, clean and tasty farm produce at lowest possible prices in the locality. The Spencer's store is your friendly neighbourhood store, which caters to your entire daily shopping needs - from regular groceries to fresh food and also weekly top-up shopping. About 4000-7000 sq. ft. in size and with a bright and friendly atmosphere, Spencer's saves the hassle of bargaining with the local Kirana shop owners.

Nilgiris

Another pioneer, the Nilgiris supermarket chain opened its first supermarket in Bangalore in 1971 and by 2005 had built a network of 30 stores, both company-owned and franchised in the states of Tamil Nadu, Andhra Pradesh, Maharashtra and Karnataka. Muthusamy Mudaliar opened a small bunk shop in Ooty. That was in 1905 and the beginning of a long story in procurement and customer satisfaction. In 1936, the shop moved to Bangalore with its registered office on Brigade Road, a small shop exactly where the huge mother store is now located. The first expansion happened when Muthusamy Mudaliar's son Chenniappan, also the chairman, established Nilgiris as a modest store carrying Nilgiris' own products, mostly dairy and bakery. Eventually, it evolved into a supermarket when Mr. Chenniappan visited the U.S. and Europe and was influenced by the old supermarket concept in the west. This chain has now blossomed to cover a vast region in South India with 26 outlets and annual sales of about ₹2300 Millions. They plan to open an additional 30 outlets in their next phase of expansion.

Margin Free

Margin Free Markets is the largest retail chain in the state of Kerala and one of the leading retail chains in India. The first

outlet of this chain started functioning on 26th January 1994 at Thiruvananthapuram. There are currently more than 275 franchisees of Margin Free Markets spread all over south India. The outlets are franchises and are not actually owned by the chain. The Consumer Protection and Guidance Society currently control margin free markets, which is a registered charitable institution that started functioning in 1993. The consumers are assured of quality, quantity and the fair price of the goods sold through the Margin Free Markets. Any retailer can upgrade his shop into a Margin Free outlet, by sending in an application to this society. If his application is accepted, he has to make the necessary investment required. The Kerala-based Margin Free discount stores, the 'pure retail' chain with arguably the largest presence in the country. The retail store chain is uniformly spread across the 240- odd Margin Free franchisees in Kerala, Tamil Nadu and Karnataka. Margin Free draws inspiration from the undying loyalty of its customers who have wholeheartedly welcomed all its growth plans in the past. Margin Free plans to open huge hypermarkets (50,000sq.ft each) in Ernakulam, Thiruvananthapuram and Kozhikode in the immediate future.

Reliance Fresh

The contribution to the Indian food retail success being done by other premier retailers like Pantaloon's Food Bazaar, Reliance Retail and Heritage@fresh are also doing innovations in the food retail sector. The Indian government has taken a cautious approach to allow Foreign Direct Investment (FDI) in food retailing (and retailing generally), with majority of foreign ownership in food retail chains not allowed, and approvals generally given on a case-by-case basis (In February 2006 the government made a small concession on FDI in retailing by announcing that up to 51 percent in retailing of "angle brand" products would be allowed). Major Indian retail groups, such as the RPG Group and the Pantaloon Group, have expressed their strong opposition to allow more foreign direct investment into Indian retailing especially majority foreign ownership. They argue that the sector is still at a very early stage of development and multinationals such as Wal-Mart would swamp local players. However, the Indian government appears to be considered some degree of liberalisation in the interests of improving efficiency in retailing and supply chains and so strengthening the integration of the Indian agrifood market, plus opening possible new avenues for Indian exports via multinational retailers.

Review of Literature

Retailing is the most dominant business in India. Though, various types of retail formats have existed in our country, food retailing plays a vital role. In this current scenario the concentration of the researchers, academicians and retail managers were diverted and expanded into scrutinizing the food retailing business. This is possible through the quality of services provided by the food retailers to each and every individual in the society. The quality of services provided by food retailers can be assessed by the pioneering work done by the experts in retail marketing. Dinesh Kumar Gauri, (2008), two powerful, highly effective strategic tools that retailers possess involves pricing and store format decisions. From the several strategic choices available for each decision, a retailer can choose any combination. We focus on two gaps in the literature. First, both decisions are specific to the consumers to whom the stores cater and the environments within which they operate, yet little academic research study them jointly. Thus, it is important to determine the joint effects of considering pricing and format decisions in a single framework. Second, do retailers, privy to findings from rich prior literature pertaining to consumer store choices related to their pricing and format preferences; actually take such information into account when making strategic choices. Ann Marie Fiore (2007), – empirically studied that shopping experience has expanded. Reflecting the integrative (experiential and utilitarian) nature of shopping experience, he aims to propose an overarching stimulus-organism-response based shopping experience framework. He offers a framework that integrates components of both the hedonic experience related consciousness-emotion-value model and the utilitarian experience-related cognition-affect-behaviour model. Tomas Palaima, et.al. (2006), recognised the value of close relationships with their customers because customer retention in intensifying competition is more and more important. He analyses services quality in the new relationship marketing paradigm. The article focused on Anglo-Australian approach to relationship marketing. This research approaches the integration of quality management, services marketing concepts and customer relationship economics are emphasized. The different services quality models are analyzed in order to determine how these models are adequate to changing relationship marketing paradigm. The adequacy of service quality GAP model, the perceived service quality model and the Gummesson 4Q model of offering quality is analyzed. The analysis reveals that service quality models and instruments

are limited to evaluation of a service episode and are static while relationship marketing paradigm requires dynamic approach which could help to assess service quality in long-term perspective along with other relationship quality dimensions. Michel Laroche (2005), indicated that consumers' evaluations of service quality in a shopping environment mediate their pleasure and purchase intention. Consumer mall shopping decision-making process is invariant across English and French Canadian consumers. Practical implications – For researchers who are interested in understanding consumer mall shopping behaviour cross-culturally, this research provides a model that can be tested in cross-cultural contexts. For mall operators and store managers attempting to improve the mall environment, product quality, and offer better service, the study provides interesting solutions. Originality/value – By incorporating service quality into consumer mall shopping decision making, this research has demonstrated that consumers' moods evoked by their perceptions of shopping mall environment and of product quality influence their purchase intentions through their perceptions of service quality. The mall shopping decision-making process of English and French Canadian consumers is universal, regardless of their cultural orientations. Dirk Morschett, et. al., (2005), developed a framework for competitive strategies in food retailing. Managers of food retail channels were surveyed in order to derive the basic dimensions of competitive advantages that companies attempt to achieve in this industry sector. In a second study based on consumers, the central dimensions of retail store perception were investigated. Both studies reveal that three basic types of competitive advantage seem to prevail in food retailing: (1) price, (2) quality (with a comprehensive set of quality-orientated instruments, including customer service), (3) convenience. We find quality leadership and price leadership to be independent factors which can be achieved without conflicting with one another. Prem Vrat, et.al., (2005), critically appraised various service quality models and identifies issues for future research based on the critical analysis of literature. The article critically examines 19 different service quality models reported in the literature. The critical review of the different service quality models is intended to derive linkage between them, and highlight the area for further research. The review of various service quality model revealed that the service quality outcome and measurement is dependent on type of service setting, situation, time, need etc factors. In addition to this even the customer's expectations towards particular services are also changing with respect to factors like time, increase in the number of encounters

with a particular service, competitive environment, etc. This article provides a rich agenda for future research in the subject. Gordon Fullerton (2005) has produced two schools of thought on the cause of customer loyalty in services industries. The service quality perspective puts forward that service quality evaluations substantially drive customer loyalty in services industries. The relationship marketing perspective puts forward that customer commitment to the service provider substantially drives customer loyalty in services industries. In addition, commitment is a complex construct with at least two forms, one based in liking and identification (affective commitment) and one based in dependence and switching costs (continuance commitment). These positions were examined in an integrated model of retail-service relationships Amy Wong and Amrik Sohal (2003). This study attempts to examine the impact of service quality dimensions on customer loyalty, on two levels of retail relationships: person-to-person (salesperson level) and person-to-firm (store level). A total of 1,261 surveys were administered to shoppers who were leaving a large chain departmental store in Victoria, Australia. The results showed that service quality is positively associated with customer loyalty, and that the relationship between the two is stronger at the company level, rather than at the interpersonal level. Specifically, among the dimensions of service quality, the most significant predictor of customer loyalty at a company level is tangibles, while the most significant predictor of customer loyalty at an interpersonal level is empathy. Further discussion and managerial implications can be drawn from these findings Valarie A. Zeithaml, Leonard L. Berry, and A. Parasuraman (1996). If service quality relates to retention of customers at the aggregate level, as other research has indicated, then evidence of its impact on customers' behavioural responses should be detectable. The authors offer a conceptual model of the impact of service quality on particular behaviors that signal whether customers remain with or defect from a company. Results from a multi company empirical study examining relationships from the model concerning customers' behavioural intentions show strong evidence of their being influence by service quality. The findings also reveal differences in the nature of the quality-intentions link across different dimensions of behavioural intentions. The authors' discussion centers on ways the results and research approach of their study can be helpful to researchers and managers. The authors respond to concerns raised by Cronin and Taylor (1992) and Teas (1993) about the SERVQUAL instrument and the perceptions-minus-

expectations specification invoked by it to operationalize services quality. After demonstrating that the validity and alleged severity of many of those concerns are questionable, they offer a set of research directions for addressing unresolved issues and adding to the understanding of service quality assessment. Ruth N. Bolton and James, H. Drew (1991). The authors develop a longitudinal model of the effect of a service change on customer attitudes about service quality. The model is estimated with data from a field experiment with three survey waves. Service changes are found to have a strong influence on customer evaluations of service quality through their effect on customer perceptions of current performance and disconfirmation. The effect of disconfirmation is longer and the effect of prior attitudes is smaller directly after the service change then in a subsequent time period. Emin Babakus, Carol C. Bienstock et al., (2004). Effects of perceived merchandise and service quality, relative to competition, on retail store performance are investigated using store traffic and revenue growth as outcome variables. A model is proposed and tested using aggregate customer data and store performance outcomes from a group of stores owned by a national retail organization. Results suggest that both service and merchandise quality exert significant influence on store performance, measured by sales growth and customer growth, and their impact is mediated by customer satisfaction. Implications of the results and future research directions are discussed. Lun Hou (2008), studied to construct a gap model for dual customer values. A basic description of customer values is given, and then the gaps between products and services in different periods for the customers and companies are analyzed based on the product or service life-cycle. The main factors that influence the perceived customer value were analyzed to define the "recognized value gap" and a gap model for the dual customer values was constructed to supply companies with a tool to analyze existing customer value gaps and improve customer relationship management.

Scope of the Study

This research article is exclusively conducted as a case study for the major food retailers in India. The human capital of food retailers in India are in a need to get a clear picture about the food retailing world. For this purpose the study focused on the in-depth issues regarding the nature and quality of services provided by the food retail stores to the Indian Customers.

Research Design

This study attempts to codify the service quality dimensions within the scope of the Organized Retailing Sector in India. It is a known fact that organized retailing is making a strong impact in many parts of India's growing economy. This research article studied the services quality of major food retailers by taking important services quality dimensions like Physical Aspects, Reliability, Personal Interaction, Problem Solving and Policy which assess the retail service users, especially the food retailers. Moreover, the study made an attempt to scrutinize the impact of services quality dimensions on the overall services quality of food retailers.

In order to measure the impact of services quality dimensions, we contacted 630 retail shoppers from major food retail stores namely Spencer's, Nilgiris, Reliance Fresh and Margin Free.

Then we issued the instrument which comprised 28 services quality items under the five dimensions to the retail shoppers. After data collection is over, the Marginal Normality and Joint Normality of Servqual were also checked by using the Shapiro Wilk Test, Mardia's Multivariate Skewness Test, Mardia's Multivariate Kurtosis Test and Henze Zirkler Test respectively. The result of the above test clearly portrays the services quality items are purely departed from the normality assumption. Hence we forced to undertake a non-parametric estimation technique to dissect the impact of services quality facet. For the purpose of estimation we utilize the causal approach of research by introducing the new technique of LAD Estimation in data analysis. We used Systat Version 12 to perform the Lad Estimation and treat the overall Services Quality as dependent variable and independent variables are items under the services quality dimensions. The results of the analysis are presented in a sequential manner.

Table 1: Shapiro Wilk Marginal Normality Test

Dimensions	Variables	Test Statistic	p- Value
Physical Aspects	Modern Equipment and Fixtures	0.723	0.000
	Physical Facilities	0.706	0.000
	Good looking Shopping Materials	0.805	0.000
	Attractive and Convenient Public Areas	0.808	0.000
	Easy Accessibility	0.817	0.000
	Easy Internal Mobility	0.813	0.000
Reliability	Promising Services	0.867	0.000
	Time Promising Services	0.876	0.000
	Doing it Right	0.865	0.000
	Supply of Right Products	0.822	0.000
	Error Free Transactions	0.821	0.000
Personal Interaction	Employees Knowledge	0.858	0.000
	Employees Confidential Behaviour	0.861	0.000
	Security in Transactions	0.777	0.000
	Performing Prompt Services	0.841	0.000
	Performing Exact Services	0.857	0.000
	Immediate Response to Customer Request	0.868	0.000
	Individual Caretaking	0.869	0.000
	Courteousness of Employees	0.869	0.000
Courteous Communication	0.870	0.000	

Problem Solving	Returns and Exchanges	0.857	0.000
	Sincerity in Problem Solving	0.859	0.000
	Handling Customer Compliance	0.857	0.000
Policy	Offering Quality Products	0.762	0.000
	Convenient Parking Facilities	0.896	0.000
	Convenient Operating Hours	0.784	0.000
	Acceptance of Credit Cards	0.775	0.000

(n = 630)

Table 2: Multivariate (Or) Joint Normality Test

Test Name	Coefficients	Test Statistic	p-value
Mardia's Skewness	103.141	10885.040	0.000
Mardia's Kurtosis	1019.543	75.016	0.000
Henze-Zirkler		1.384	0.000

(n = 630)

Table 1 shows the results of the marginal normality test named Shapiro Wilk Test. The results show all the service quality items exactly and purely departed from the univariate normality at one percent and five percent level respectively.

Moreover, Table 2 also explains the results of multivariate or Joint Normality test of the service quality items. We made an attempt to prove the multivariate normality of the items by using three battery of test namely Mardia's Skewness, Mardia's Kurtosis and Henze-Zirkler Test. The effect of the test statistic shows that the 28 service quality items are purely departed from the multivariate normality at one percent and five percent significance level respectively.

Table 3 visualizes the impact of the items of physical aspects on the overall services quality of the food retailers. The result of the LAD regression shows that the variable "Convenient public areas" gives a positive increase to the services quality of Spencer's. As far as Nilgiris, Margin Free, Reliance Fresh are concerned, the above said variable dominantly influence the overall services quality of the store. These results were extracted by using the Simplex Algorithm and the SAD is 19.382 is minimum for the Margin Free retail store. This shows the items in physical aspects accurately predict the service quality of Margin Free retail store followed by the Reliance Fresh, Nilgiris and the Spencer's.

Table 4 exhibits the impact of the substance of reliability on the overall services quality of the food retailers. The results of the LAD regression prove that the item "Doing it Right" produces a positive increase to the service quality of RPG Spencer's. As far as Nilgiris Stores, Margin Free and Reliance Fresh are concerned the above said variable governs the overall services quality of the retail format. These results were extracted by using the Simplex Algorithm and the SAD is 8.084 is least for the Margin Free retail store. This shows the proportions in Reliability accurately predict the service quality of Margin Free followed by the Reliance Fresh, Nilgiris, and the Spencer's.

Table 5 reveals the impact of the substance of personal interaction on the overall services quality of the food retailers. The results of the LAD regression prove that the item "Security in Transactions" produces a positive increase to the service effectiveness of RPG Spencer's. As far as Nilgiris Stores, Margin Free and Reliance Fresh are concerned the above said variable oversees the overall services quality of the food retail format. These results were extracted by using the Simplex Algorithm and the SAD is 4.052 is lowest for the Margin Free retail store. This confirms the proportions in personal interaction accurately envisage the service quality of Margin Free followed by the Reliance Fresh, Nilgiris and Spencer's.

Table 3: Lad Parameter Estimates – Physical Aspects

Dependent Variable : Service Quality (Y)

Independent Variables	^a Spencer’s (n=250)		^b Nilgiris (n = 143)		^c Margin Free (n=55)		^d Reliance Fresh (n=182)	
	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error
Constant	2.442	0.266	1.354	0.278	6.859	0.798	1.741	0.161
Modern Equipment and Fixtures (X ₁)	0.068	0.055	0.093	0.045	-0.194	0.141	0.046	0.022
Physical Facilities (X ₂)	-0.104	0.066	0.098	0.041	-0.467	0.146	0.102	0.021
Good Looking Shopping Materials (X ₃)	0.040	0.036	0.123	0.046	-0.194	0.116	0.055	0.024
Attractive and Convenient Public Areas (X ₄)	0.215	0.045	0.138	0.041	0.146	0.123	0.176	0.022
Easy Accessibility (X ₅)	0.074	0.042	0.078	0.046	-0.131	0.171	0.148	0.018
Easy Internal Mobility (X ₆)	0.004	0.040	0.076	0.044	-0.152	0.122	0.074	0.020

Method: LAD Regression

Algorithm: Simplex

^a SAD : 45.797

^b SAD : 30.573

^c SAD : 19.382

^d SAD : 21.608

$$\hat{Y} = 2.442+0.068X_1 - 0.104X_2+ 0.040X_3+0.215X_4+0.074X_5+0.004X_6 \text{----- (1)}$$

$$\hat{Y} = 1.354+ 0.093X_1 +0.098X_2+0.123X_3+0.138X_4+0.078X_5+0.076X_6 \text{----- (2)}$$

$$\hat{Y} = 6.859-0.194 X_1 - 0.467X_2- 0.194X_3+0.146X_4-0.131X_5-0.152X_6 \text{----- (3)}$$

$$\hat{Y} = 1.741+0.046X_1 + 0.102X_2+ 0.055X_3+0.176X_4+0.148X_5+0.074X_6 \text{----- (4)}$$

\hat{Y} is the estimated service quality score.

Table 6 exposes the impact of the essence of problem solving on the overall services quality of the food retailers. The consequences of the LAD regression prove that the dimension “Handling Customer Compliance” produces a positive increase

to the service effectiveness of Margin Free. As far as Reliance Fresh, RPG Spencer’s and Nilgiris are concerned the above said variable oversees the overall services quality of the food retail venture. These results haul out by using the Simplex

Table 4: Lad Parameter Estimates – Reliability

Dependent Variable: Service Quality (Y)

Independent Variables	^a Spencer’s (n=250)		^b Nilgiris (n = 143)		^c Margin Free (n=55)		^d Reliance Fresh (n=182)	
	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error
Constant	2.071	0.094	1.587	0.187	2.983	0.153	1.919	0.153
Promising Services(X ₁)	0.120	0.015	0.158	0.032	0.132	0.035	0.152	0.023
Time Promising services(X ₂)	0.121	0.012	0.128	0.032	0.012	0.037	0.063	0.020
Doing it Right(X ₃)	0.163	0.015	0.088	0.033	-0.039	0.041	0.089	0.022
Supply of Right Products(X ₄)	0.080	0.014	0.153	0.028	-0.042	0.032	0.115	0.021
Error Free Transactions(X ₅)	0.005	0.016	0.055	0.029	0.049	0.031	0.137	0.019

Method : LAD Regression

Algorithm: Simplex

- ^a SAD : 31.557
- ^b SAD : 28.829
- ^c SAD : 8.084
- ^d SAD : 18.998

$$\hat{Y} = 2.071 + 0.120X_1 + 0.121X_2 + 0.163X_3 + 0.080X_4 + 0.005X_5 \text{ ----- (1)}$$

$$\hat{Y} = 1.587 + 0.158X_1 + 0.128X_2 + 0.088X_3 + 0.153X_4 + 0.055X_5 \text{ ----- (2)}$$

$$\hat{Y} = 2.983 + 0.132X_1 + 0.012X_2 - 0.039X_3 - 0.042X_4 + 0.049X_5 \text{ ----- (3)}$$

$$\hat{Y} = 1.919 + 0.152X_1 + 0.063X_2 + 0.089X_3 + 0.115X_4 + 0.137X_5 \text{ ----- (4)}$$

\hat{Y} is the estimated service quality score.

Algorithm and the SAD is 8.556 is lowest for the Margin Free retail store. This confirms the proportions in problem solving accurately foresee the service quality of Margin Free pursued by the Reliance Fresh, Nilgiris and Spencer’s.

Table 7 examines the impact of the policy on the overall services quality of the food retailers. The consequences of the LAD regression prove that the element “Acceptance of Credit Cards” produces a positive increase to the service quality of Nilgiris. As far as Spencer’s, Reliance Fresh and Margin Free are concerned the above said variable oversees the overall services

quality of the food retail venture. These results illustrate by using the Simplex Algorithm and the SAD is 9.010 is minimum for the Margin Free Super Markets. This confirms the proportions in policy accurately predict the service quality of Margin Free pursued by the Reliance Fresh, Nilgiris and Spencer’s.

Findings and Implications

The results found that the majority of the Services Quality Dimensions gives a positive impact on the overall Services

Table 5: Lad Parameter Estimates – Personal Interaction

Dependent Variable : Service Quality (Y)

Independent Variables	^a Spencer's (n=250)		^b Nilgiris (n = 143)		^c Margin Free (n=55)		^d Reliance Fresh (n=182)	
	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error
Constant	1.276	0.123	1.252	0.104	1.198	0.179	1.204	0.170
Employees Knowledge (X ₁)	-0.006	0.032	0.135	0.015	0.131	0.035	0.073	0.019
Employees confidential Behaviour (X ₂)	0.046	0.032	0.087	0.014	0.132	0.041	0.080	0.018
Security in transactions(X ₃)	0.166	0.020	0.020	0.018	0.124	0.041	0.087	0.021
Performing prompt services (X ₄)	0.072	0.020	0.075	0.023	0.058	0.045	0.088	0.021
Performing exact services (X ₅)	0.069	0.023	0.038	0.018	-0.048	0.042	0.080	0.017
Immediate response to customer request (X ₆)	0.133	0.030	0.112	0.023	0.076	0.049	0.068	0.020
Individual caretaking (X ₇)	0.060	0.023	0.057	0.021	0.104	0.040	0.082	0.018
Courteousness of employees(X ₈)	0.088	0.031	0.048	0.021	0.002	0.043	0.077	0.019
Courteous communication (X ₉)	0.059	0.026	0.096	0.021	0.065	0.041	0.082	0.019

Method : LAD Regression

Algorithm: Simplex

^a SAD : 25.610

^b SAD : 18.705

^c SAD : 4.052

^d SAD : 17.041

$$\hat{Y} = 1.276 - 0.006X_1 + 0.046X_2 + 0.166X_3 + 0.072X_4 + 0.069X_5 + 0.133X_6 + 0.060X_7 + 0.088X_8 + 0.059X_9 \text{----- (1)}$$

$$\hat{Y} = 1.252 + 0.135X_1 + 0.087X_2 + 0.020X_3 + 0.075X_4 + 0.038X_5 + 0.112X_6 + 0.057X_7 + 0.048X_8 + 0.096X_9 \text{----- (2)}$$

$$\hat{Y} = 1.198 + 0.131X_1 + 0.132X_2 + 0.124X_3 + 0.058X_4 - 0.048X_5 + 0.076X_6 + 0.104X_7 + 0.002X_8 + 0.065X_9 \text{----- (3)}$$

$$\hat{Y} = 1.204 - 0.073X_1 + 0.080X_2 + 0.087X_3 + 0.088X_4 + 0.080X_5 + 0.068X_6 + 0.082X_7 + 0.077X_8 + 0.082X_9 \text{----- (4)}$$

\hat{Y} is the estimated service quality score.

Table 6: Lad Parameter Estimates – Problem Solving

Dependent Variable : Service Quality(Y)

Independent Variables	^a Spencer's (n=250)		^b Nilgiris (n = 143)		^c Margin Free (n=55)		^d Reliance Fresh (n=182)	
	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error
Constant	2.481	0.130	2.284	0.101	1.758	0.190	2.852	0.194
Returns and Exchanges (X ₁)	0.056	0.028	0.173	0.031	0.185	0.057	0.037	0.034
Sincerity in Problem Solving(X ₂)	0.142	0.040	0.136	0.033	0.097	0.056	0.185	0.029
Handling Customer Compliance (X ₃)	0.173	0.038	0.111	0.031	0.231	0.054	0.111	0.031

Method : LAD Regression

Algorithm: Simplex

^a SAD : 39.022

^b SAD : 26.264

^c SAD : 8.556

^d SAD : 26.288

$$\hat{Y} = 2.481 + 0.056X_1 + 0.142X_2 + 0.173X_3 \text{----- (1)}$$

$$\hat{Y} = 2.284 + 0.173X_1 + 0.136X_2 + 0.111X_3 \text{----- (2)}$$

$$\hat{Y} = 1.758 + 0.185X_1 + 0.097X_2 + 0.231X_3 \text{----- (3)}$$

$$\hat{Y} = 2.852 + 0.037X_1 + 0.185X_2 + 0.111X_3 \text{----- (4)}$$

\hat{Y} is the estimated service quality score.

Quality of major food retailers. The result extracted from the study is fruitful and helps to take the major managerial initiatives for improving food retail service quality.

Spencer's

Spencer's is the leading food retailer having a dozen of retail outlets all over the Chennai City. The customers who came to this retail outlet are very modern and also they are potential to this store. They perceive Spencer's in five different dimensions. Based on this dimension the researcher recommends some suggestions to enhance the services quality of the retail outlet.

Physical Aspect - The customers of Spencer's identified the elements of physical aspects which declined the quality of services provided by the store. Whenever customers entered the store, their eyes always looked for the equipments and fixtures and the availability of physical and storage facilities etc. In this regard, the managers of Spencer's should enhance the equipment and fixtures, physical facilities by providing a modern look and a high-tech look to the customers. They should convert the old model of storage facilities into new modernised storage facilities to store the food products vegetables, fruits and other perishable products. Moreover, the managers should give due care to the conversion of old model chillers.

Table 7: Lad Parameter Estimates – Policy

Dependent Variable: Service Quality (Y)

Independent Variables	^a Spencer's (n=250)		^b Nilgiris (n = 143)		^c Margin Free (n=55)		^d Reliance Fresh (n=182)	
	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error	Coefficients	Standard Error
Constant	2.889	0.161	1.999	0.307	3.246	0.351	2.815	0.225
Offering Quality Products(X ₁)	0.037	0.033	0.037	0.048	0.148	0.044	0.074	0.036
Convenient Parking Facilities (X ₂)	0.074	0.024	0.136	0.047	0.019	0.032	0.037	0.021
Convenient Operating Hours (X ₃)	0.037	0.036	0.037	0.055	0.028	0.048	0.111	0.032
Acceptance of Credit Cards (X ₄)	0.037	0.026	0.272	0.048	-0.106	0.057	0.111	0.031

Method: LAD Regression

Algorithm: Simplex

^a SAD : 42.878

^b SAD : 33.719

^c SAD : 9.010

^d SAD : 28.824

$$\hat{Y} = 2.889 + 0.037X_1 + 0.074X_2 + 0.037X_3 + 0.037X_4 \text{----- (1)}$$

$$\hat{Y} = 1.999 + 0.037X_1 + 0.136X_2 + 0.037X_3 + 0.272X_4 \text{----- (2)}$$

$$\hat{Y} = 3.246 + 0.148X_1 + 0.019X_2 + 0.028X_3 - 0.106X_4 \text{----- (3)}$$

$$\hat{Y} = 2.815 + 0.074X_1 + 0.037X_2 + 0.111X_3 + 0.111X_4 \text{----- (4)}$$

\hat{Y} is the estimated service quality score.

Reliability - The second dimension is the reliability of retail store. Reliability refers to the services which have to be done at the right moment based on the retail shoppers' expectations. The promised services have to be executed at the accurate time. The retail store must supply the suitable goods in order to fulfill the demand of the customer. Here the customers find that the nature of the store has to improve. First of all, the Spencer's retail segment has to be completely systemised by adopting advanced system software which would execute the services to customers at the right duration. Therefore, it leads to speedy and error free transactions. More importance is to use modernized billing system like POSIFLEX. It will reduce the burden for billing in charge during the peak hours. Electronic Point of Sale (E-POS) is to be introduced among the Spencer's

retail outlets. Finally, these kinds of measures would automatically make better the services quality of the store.

Personal Interaction - More specifically personal interaction in Spencer's refers to the knowledge of the employees in this store, their behaviour and services performed by them in a perfect, prompt and exact manner to their customers. The customers of Spencer's point out some negatives and they are also dissatisfied about the personal interaction of employees. The store administrator of Spencer's should immediately give due care to trigger and boost this dimension. This boosting process should be taken in different elements of personal interaction. At first, the manager in charge should give and conduct training programmes for their employees. The training

programmes should be segregated and organised for the newly recruited employees as well as for the existing employees also. The training module should include the contents such as, personality traits, managing skills, guidance to customers, individual caretaking, courteous communication and how to do exact services.

Problem Solving - This element is the core for the services criteria, because, the customers problems and issues have to be dealt with due care. Possible solutions must be given to customers' grievance. The section supervisors of the food retail chain must give stress to the sincerity in problem solving. Similarly, the retail shoppers issues in Spencer's have been executed through the tool called as Yours View Matter (YVM). The customers' problems, which have been taken by the store managers is sent to the corporate office for redressal.

Policy - Finally, the retail services quality is also determined by the facet policy. Here policy means the retailers have to offer quality food and grocery brands to its buyers. Nowadays, the buyers are more aware about what they are going to purchase. The store comparison is also conducted by few end users. Here, in Spencer's own credit cards should be mentioned in the store name itself which has to be introduced. Own gift vouchers are a favourable element to be introduced by Spencer's. Another core issue is the convenient parking facilities. Car-parking facilities are an inadequate feature in the store, because of the location congestion which is blockade for the customer traffic flow. The store management has to arrange for parking facilities in the underground areas which will have customer resource magnetism towards the store. For this, the managers should plan before establishing the retail outlets in the heart of the cities.

Nilgiris

Physical Aspects - The buyers of Nilgiris identified certain elements which decrease the nature and services quality offered by the food retail chain. When a customer visits the food retail chain he perceives the store environment and physical facilities of the store. Here, the buyers find that the level of anticipation is not upto the class. Therefore, the managers of the store must focus in improving the services of the retail chain. For efficient store performance the management has to introduce amazing retail solution in order to fulfill the wants of the end-users. They have to establish exclusive design which is a complement

to the décor of the store. They have to fit open coolers for buyers to take the materials from the freezers. They can install large high contrast LCD display to see weight in kilograms of the products. They can set up high speed slide out printer for the printing purposes. To advise more proper retail security, Sensormatic is an American brand which provides integrated retail security solutions to meet the safety, inventory control and security challenges faced in the present retail scenario. This nature of high-tech equipments will adorn the quality of the food retail store.

Reliability - examines the steadfastness of the retail chain through contributing a guaranteed service assurance done by the retail store. Reliability also refers to carry out each and every transaction with dedication and commitment. If a good has been determined to supply in a particular date it has to be done with faithfulness to reach the end-users level of delight. The human resource of this food retail chain can introduce proactive retail software called ETP V5. It gives a support to handle proactive decisions that makes a difference between success and failure. These kinds of retail services will create resoluteness in the mindset of the customers for a right product decision.

Personal Interaction - is the appraisal of the employee's performance in the food and grocery retail channel. This factor also reviews the behavioural attitude of the employees. They have to answer to the queries of the customer's in a well mannered way. The bay is clear and employees are advised to stock the materials in lean time and refill if required. In this retail store the employees who are in the billing section receive the products from the customer, execute the transactions and finally give away the purchase products with the right hand only and not through the two hands. Here the employees are given training on the soft skills. The retail managers while recruiting the candidate must look for enthusiasm and learning tendency of the human resource. These areas in the personal interaction dimension must be given due care by this retail store and should be followed to become a lead retailer in this segment.

Problem Solving - The next aspect in evaluating the service quality is the problem solving. From this store customers reaction we find that they are lacking in the element such as returns and exchanges, sincerity in problem solving and handling customer compliance. Also, the patrons believe that the nature

of the retail store doesn't match the prospect at a certain level. Here the store manager and supervisors should be trained and empowered in handling the customers' tough issues brought by them. The employees must be very sincere in tackling the problems noticed by the customer and it should be taken for elucidation to the superiors.

Policy - To conclude, the services quality is also powered by the façade policy. The retailers should offer branded products. In the present retail scenario, many food retailers are increasing at a rapid pace. In Nilgiris, the patrons have identified the elements such as convenient parking facilities and acceptance of credit cards being weighed at a destitute status. This under privileged nature has to be completely changed. So for this, acceptance of the premier credit card companies is to be taken under consideration. Food coupons should also be introduced to the buyers. This depressed condition should be given due care by the store management. Sodex, is also like a coupon introduced by this food retailer for purchasing the products but it is under the disadvantaged profile. Vehicle parking is also to be streamlined to create centre of attraction for the posh customers' attention.

Margin Free

Physical Aspects – The regular patrons of this store identified that the physical aspects factor lessened the services quality rendered by them. However, the customers find that the ambience of the store has to be improved by providing a comfy environment. The Margin Free chain store has to be made more accessible near the residential apartments. The store has to be modernised with adequate shopping devices such as trolleys, shopping materials, attractive packages etc.

Reliability - The next feature which elicits the services quality of the retail store is reliability. It refers to the timely services obtainable to the customers. At this juncture we find that the expectations are not fulfilled according to the customers' preferences. The services are not executed at the right time because of derisory man power. The delivery staff which are available in this retail store are only few. In a day, these delivery staff carries out twenty to thirty transactions only. Here the managers of the store have to increase the man power ratio to a higher extent, which is a possible solution to reach more number of customers.

Personal Interaction - Claims about how effectively do the employees of the store interacting with its end-users. In these retail stores the sales executives are not well qualified, for that reason they are not in a position to respond what the customers' desires because they are qualified at higher secondary level only. Here the managers have to go for highly skilled sales persons who provide exact services to its customers. The store managers have to explain the objectives and aims of the corporate retail environment and customisation concepts to be fed to its supervisory staff. As well as the store administration of Margin Free must devise an ideal compensation plan in which more focus has to be made, because the pay package level is poor.

Problem Solving - Refers to how the managers provide possible retail solutions to its end-users. Problem solving facet is one of the important determining causes, because the issues have to be carefully solved. At this point, the returns and exchanges of the products have not fulfilled the customers' anticipation level. More queries should be raised in this feature. The company gives replacements for only few items. So, this has to be raised over in future by offering more replacements for the goods purchased. The other important component which is insufficient is handling customer compliance. The store managers must take adequate steps through receiving a compliant letter from the customers. Complaint letters lodged by the customers have to be collected and produced by the sales officer or the marketing managers in the monthly meeting arranged by the store board. These measures will upgrade the quality of the retail corporate.

Policy

Aspect scrutinizes the operating success of retail store. It refers to the quality of products offered. In the present scenario, the customers are more time conscious. In Margin Free, the end-users perceive that the expectations are not fulfilled to their maximum extent because of the present working hours of the store. The operating hours of the store has to be increased upto 10:00 p.m. Specified parking for the stores have to be arranged near the store itself for its customers. More membership cards have to be issued to the regular customers which is absent in most of Margin Free outlets. They can also affix colours to the membership holders which could be easily differentiated among the customers.

Reliance Fresh

Physical Aspects - The retail shoppers of Reliance Fresh have identified that certain physical aspects have not been satisfied according to the shopper's expectations. The customers find that the requirements have not been matched. Here in Reliance Fresh, the physical facilities of the store provide more inadequacy to the customers. Basically, in the retail outlets the store ambience deprives the service quality component. The store is not so modernised when compared with its competitors. The store should be made air-conditioned and this will improve its status consciousness.

Reliability - This variation examines about the doing the right to the customers what they want. It is a vital correlation between the respondents of the retail store and the store administration. Here we find that the more gap that exists in the availability of merchandise and customer management. The promised service has not been done properly to the customers at the right situation. There are more pit falls in executing the transactions to the ideal customers. The delivery of the right products has not been done significantly because of the lesser number of delivery staffs. So, therefore the time promised services can't reach the end-users at the right moment.

Personal Interaction - Pursuing the third factor is the personal interaction which makes an assessment regarding the man power potential of the food retailers. The retail patrons of Reliance Fresh find that more improvement must be done for the human resource in the selling skills. Persuasive Selling Skills (PSS) programme has to be given exposure for the employees. In the retail store, the behaviour of employees also decreases the morale of the customers. They are not promptly responded according to the situation arises. So, the management has to arrange Executive Development Programme (EDP).

Problem Solving is one of the core dimensions for the retail store. Here in Reliance Fresh the customer complaints have not been solved in proper manner according to the customer's expectations. Crisis exists in the number of checkout counters. Increase in the checkout counters would carry out the work in a easy manner. The store managers must take action for customer complaints through the customer problems and clearance cell. They can also plan for online customer solutions which would be more adequate. The problems must reach the corporate office for further clearances. Extensive care should be given for the

complete replacement of the products if damaged. Brand card should be introduced to explain the Kilograms of the product mentioned. POLICY - Pursuing the final variation is the policy of the retail store. This element reviews about offering quality products, convenient parking facilities, operating hours and acceptance of credit cards. In Reliance Fresh, the patrons have assessed that the products offered are inferior when compared with other retailers. Few retailers and manufactures sell the products in their own brand name itself. The price mechanism of Reliance Fresh is good at certain level but the quality component is weakened. So, this element has to be given more concentration by the retail managers. Imported food items such as meat, chicken, pork etc sold by other competitive food retailers is deficient in this retail chain and specific actions should be taken care of. These products will improve the superiority of the retail brand name. Improvement has to be done through providing private parking facilities which will attract more buyers. Reliance Fresh can also launch the co-branded cards through having the tie-up with the financial companies. This also comes under the credit card nature. To conclude, the store has to consider these elements which would upgrade the performance of the food retailer.

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Dynamics of Retention: Practices and Strategies

Ananthan B.R. and Sudheendra Rao L.N.

Abstract

This paper highlights the critical need to investigate the dynamics of employee retention practices and strategies and systems followed in MNCs and Indian firms. Using a structured self completing questionnaire having almost similarity in items for both employees and management with special reference to specific retention strategies and their adaptability, the data has been collected on 550 respondents (335 employees and 215 management). Results revealed that employees had higher scores on total retention strategies, management/organizational strategies, reward and recognition strategies, employee benefit strategies, and employee ideas and suggestion strategies. However, no difference was observed between Indian and MNCs on various retention strategies. Implications of the study have been highlighted in the discussion section.

Key words:

HR, Reward, recognition, retention, Indian & MNC Firms



Prof. B. R. Ananthan, Vice Chancellor, Rani Channamma University, Belgaum, Karnataka, Email: brananthan@yahoo.co.in



Sudheendra Rao L.N., Assistant Professor, Sagar Business Academy, Dayananda Sagar Institutions, Shavige Malleshwara Hills, Kumraswamy Layout, Bangalore - 560078, Karnataka, Email: sudheendraraoln@gmail.com

India is emerging as a super power, slated to be among the world's five largest economies and viewed by international investors, business conglomerates and tertiary education providers as a land of opportunity. Human resources (HR) are the backbone of an organization (Gerhart and Milkovich 1990, Pfeffer 1998). Moreover, the continuing prosperity of a firm is likely to be enhanced by employees who hold attitudes, value and expectations that are closely aligned with the corporate vision (Borman and Motwidlo 1993, Spector 1997, Cable and Parsons 2001, Feldman 2003). Clearly, hiring capable people is an attractive point of departure in the process, but building and sustaining a committed workforce is more likely to be facilitated by the employment of sophisticated human resource management (HRM) infrastructures (Schuler and Jackson 1987). Arguably, HRM policies and practices can be strategically designed and installed to promote desirable employee outcomes, which include the enhancement of the in role

and extra role behaviours of employees. Yet, despite such costly investments, corporations are continually searching for techniques to improve and cement the linkage between employees and their organizations. Holtbrügge, Friedmann and Puck (2010) observed that foreign firms in India currently face two major challenges in human resource management (HRM): personnel recruitment and retention. For this study, we assessed and tested various employee retention strategies.

Weak employee organizational linkages are often displayed as the phenomenon of turnover. Indeed, people are likely to job hop to obtain better monetary rewards and career development opportunities. However, traditional approaches that rely heavily on competitive monetary rewards often have limited success in staff retention and job motivation in the long run. This limitation has brought practitioners to consider, along with the facilitation of sophisticated HRM infrastructures, other techniques to enhance employee attachment towards their organization (i.e., person organization fit selection approach, performance based incentives, extension of the attractive executive perks to all employees). With proper implementation, these techniques often facilitate a more committed workforce. This effect can be achieved through the enhancement of in role (i.e., organizational commitment) and extra role (i.e., organizational citizenship) behaviours (Allen and Meyer 1990, Organ 1990). The form of organizational attachment and in role behaviour, the organizational commitment that psychologically characterizes an employee's relationship with the organization for which he or she works, has implications for whether or not an employee will choose to remain with the organization. Past research (Allen and Meyer 1990) found that organizations with strong employee attachment, or organizational commitment, tend to have lower turnover or intention to leave than would those with weak employee attachment. Organizational citizenship behaviour (OCB), a form of extra role behaviour and reciprocation of fair treatment by employees (Colye-Shapiro, Kessler and Purcell 2004), is considered as part of work related activities performed by employees that contribute to organizational prosperity, and yet, are beyond the regular scope of job descriptions and contractual sanctions or incentives (Organ 1990). Past work found fair management of the reward distribution

and procedures in an organization would foster employees' intention to display OCB (Organ and Konovsky 1989), and further enhance the employees' intention to stay with the current firm (Carsten and Spector 1987).

This study covered the vision and mission, the philosophy and policies of the Indian and MNC organizations perceptions by employees and management, particularly with reference to employee retention strategies.

Methodology of the Study

This study is basically an exploratory one since no study on this subject has been conducted in India. The study adapted the descriptive-analytical study design using the survey method. The study was conducted in Bengaluru covering all leading Indian and MNCs employing at least 500 people. The study covered both the managements and the employees for necessary data. The respondents from among the employees were selected using stratified random sampling method. A total of 550 respondents participated in the study of which 215 were from management side and remaining 335 were employees. They were selected from nine major MNCs and Indian organizations in Bengaluru.

Tools Used

The data for the study was collected using the structured questionnaire. The questionnaires were prepared specifically for the study and pre-tested for their validity and reliability. The questionnaire consisted of 93 statements on various retention strategies-management/organizational strategies (28), orientation strategies (9), communication effectiveness strategies (13), training and development strategies (7), reward and recognition strategies (11), employee benefit strategies (18) and lastly employee ideas and suggestion strategies (8). Each item is followed by a five point rating scale (Likert's Scale)-Strongly agree, agree, can't say, disagree and strongly disagree.

Prior permission was obtained from the concerned heads and data collection was done in one session by asking the respondents to tick one of the options for each statement, which he/she thinks appropriate. Later, the data were

Table 1: Mean Scores of Respondents (Employees and Management) Working in Indian and MNC's on Different Components of ERS and Results of MANOVA

Group	Nature of Organization	N	Management / Organizational Strategies		Orientation		Communication Effectiveness Strategies		Training and development Strategies	
			Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Employees	Indian	70	108.73	14.55	36.24	4.92	46.91	6.91	28.01	3.55
	MNC	265	109.66	14.36	36.77	5.28	47.23	7.11	28.07	4.18
	Total	335	109.47	14.38	36.66	5.20	47.16	7.06	28.06	4.05
Management	Indian	34	103.62	11.57	36.09	4.74	46.06	7.80	26.74	4.47
	MNC	181	106.93	15.36	36.31	4.80	46.81	6.54	27.74	3.59
	Total	215	106.40	14.85	36.28	4.78	46.69	6.74	27.58	3.75
Total	Indian	104	107.06	13.80	36.19	4.84	46.63	7.19	27.60	3.90
	MNC	446	108.55	14.82	36.58	5.09	47.06	6.88	27.94	3.95
	Total	550	108.27	14.63	36.51	5.04	46.98	6.93	27.87	3.94
Group			F=5.468; P=.020		F=.271; P=.603		F=.640; P=.424		F=3.162; P=.076	
Organization			F=1.600; P=.206		F=.416; P=.519		F=.443; P=.506		F=1.376; P=.241	
Interaction (Group* Organization)			F=.503; P=.478		F=.065; P=.799		F=.073; P=.787		F=1.095; P=.296	

scrutinized, checked, and a master chart was prepared and fed to computer using SPSS for windows. Multivariate ANOVA was employed to find out the difference between employees and management as well as Indian and MNC's on various retention strategies including interaction effects.

Results

Table 1 presents mean retention strategy scores of employees and management on various strategies by respondents in Indian and MNCs and results of MANOVA.

Management / Organizational Strategies

Employees and management differed significantly (F=5.468; P=.020) in their mean scores on management/organizational strategies, where employees had significantly higher scores (mean 109.47) than management (mean 106.40). Between Indian and MNCs no difference

was observed (F=1.60; P=.206) and the interaction between groups and organization was also found to be non-significant (F=.503; P=.478).

Orientation Strategies

In orientation strategies, employees and management had statistically similar scores where F value of .271 showed no difference between them (P=.603). Between Indian and MNCs no difference was observed (F=.416 P=.519) and the interaction between groups and organization was also found to be non-significant (F=.065; P=.799).

Communication Effectiveness Strategies

Employees and management did not differ significantly (F=5.468; P=.020) in their mean scores on communication effectiveness strategies (F=.640; P=.424). Between Indian and MNCs no difference was observed (F=.443; P=.506) and the interaction between groups and organization was also found to be non-significant (F=.073; P=.787).

Table 1 cont'd - Mean Scores of Respondents (Employees and Management) Working in Indian and MNC's on Different Components of ERS and Results of MANOVA

Group	Nature of organization	N	Reward and Recognition Strategies		Employee Benefit Strategies		Employee Ideas and Suggestion Strategies		Total	
			Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Employees	Indian	70	36.81	6.13	67.04	11.34	31.03	5.05	354.79	40.46
	MNC	265	37.32	6.77	66.82	11.28	30.35	5.67	356.22	40.28
	Total	335	37.21	6.64	66.87	11.28	30.49	5.54	355.92	40.26
Management	Indian	34	33.32	7.47	62.06	11.14	28.41	5.02	336.29	34.19
	MNC	181	35.28	7.71	65.16	11.56	29.69	5.68	347.91	41.03
	Total	215	34.97	7.69	64.67	11.52	29.48	5.59	346.07	40.18
Total	Indian	104	35.67	6.77	65.41	11.46	30.17	5.16	348.74	39.33
	MNC	446	36.49	7.23	66.15	11.41	30.08	5.68	352.85	40.75
	Total	550	36.34	7.14	66.01	11.41	30.10	5.58	352.07	40.48
Group	F=11.587; P=.001		F=6.436; P=.011		F=6.574; P=.011		F=8.380; P=.004			
Organization	F=2.287; P=.131		F=1.208; P=.272		F=.216; P=.642		F=1.987; P=.159			
Interaction (Group*Nature of Orgn)			F=.791; P=.374		F=1.613; P=.205		F=2.322; P=.128		F=1.210; P=.128	

Training and Development Strategies

As far as the training and development strategies are considered, again employees and management had statistically similar scores where F value of 3.162 showed no difference between them (P=.076). Between Indian and MNCs no difference was observed (F=1.376; P=.241) and the interaction between groups and organization was found to be non-significant (F=1.095; P=.296).

Reward and Recognition Strategies

Employees and management differed significantly (F=5.468; P=.020) in their mean scores on reward and recognition strategies, where employees had significantly higher scores (mean 37.21) than management (mean 34.97). Between Indian and MNCs no difference was observed (F=2.287; P=.131) and the interaction between groups and organization was also found to be non-significant (F=.791; P=.374).

Employee Benefit Strategies

In employee benefit strategies, a significant difference was observed between employees and management (F=6.436; P=.011), where employees had significantly higher scores than management (means 66.87 and 64.67 respectively). Between Indian and MNCs no difference was observed (F=.1.208; P=.272) and the interaction between groups and organization was also found to be non-significant (F=1.613; P=.205).

Employee Ideas and Suggestion Strategies

Employees and management differed significantly (F=5.468; P=.020) in their mean scores on in this strategies, where employees had significantly higher scores (mean 30.49) than management (mean 29.48). Between Indian and MNCs no difference was observed (F=0.216; P=.642) and the interaction between groups and organization was also found to be non-significant (F=2.322; P=.128).

Total Scores on Retention Strategies

In total scores, ANOVA revealed a significant difference between mean scores of employees and management ($F=8.380$; $P=.004$). The mean values clearly revealed that employees had higher total scores compared to management (means 355.92 and 346.07 respectively). When Indian firms were compared with MNCs, a non-significant difference was observed between them ($F=1.987$; $P=.159$) indicating a similarity in their mean scores. The interaction between groups and nature of organization was also found to be non-significant ($F=1.210$; $P=.128$), where the pattern of scores were similar for Indian and MNCs irrespective of the groups they belong to.

Discussion

Main findings of the present study:

- ◆ On the whole, perception of the employees over total retention strategies was significantly higher than respondents from management side.
- ◆ In few of the specific strategies- management/organizational strategies, reward and recognition strategies, employee benefit strategies, and employee ideas and suggestion strategies employees had higher scores than the management
- ◆ MNC's and Indian organizations had similar levels of perceptions regarding various employee retention strategies.

The growing concern to maintain a committed workforce capable of fulfilling corporate exigencies has led corporations to continually search for techniques to improve employee retention. The research findings of this study reveal that the employee expectations are higher than organizational expectancies. Their continuing effort and the concurrent deployment of well integrated and sophisticated HRM infrastructures corroborate the notion that compensation packages, although important, have limited success in staff motivation and retention. In sum, while Western HRM practices are widely adopted

in India in varying degrees, the country origin of the specific MNC is still an important factor that shaped the platforms to determine how a firm can strategically foster staff retention and enhance employee organizational linkage.

The deployment of the sophisticated techniques of complementary HR practices that well integrate individual and organizational needs may, therefore, prove to be an effective approach to the increase employee retention and job motivation. Organizational prosperity can be achieved through the combination of assessment and a close match of work values in staff selection, competitive performance based pay packages, customized fringe benefits, developmental and cross functional training, fair and transparent PA, and performance based promotion. If the local companies intend to create a competitive edge through a more committed workforce, they may be encouraged to consider refocusing on training.

The challenges of staff retention and job motivation that have plagued various organizations in India and other countries resulted in forming various retention strategies. The firms are facing aggressive competition to attract and retain talented cadres. Until the pool of company cadre sufficiently meets the corporate search for talented workforces, the key implication for practitioners is to proactively cement and strengthen the employee organizational link through the implementation and improvement of HR practices, in order to attract new talented cadres while retaining high performing employees.

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Reviewed by Prof. K. J. Paulose,
Dean, SCMS-COCHIN, Prathap
Nagar, Muttom, Aluva-683106,
Ernakulam, Kerala, Email: kjpaulose
@scmsgroup.org

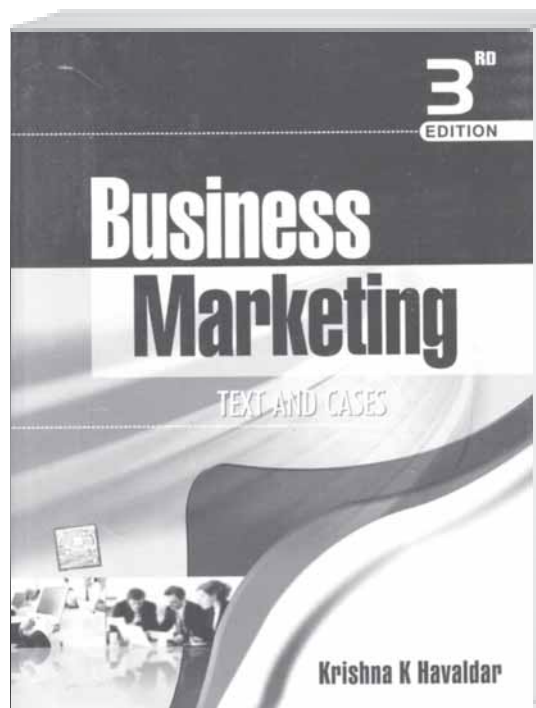


Book Title : *Business Marketing Text and Cases*
Authors : Krishna K. Havaladar
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Publisher : Tata McGraw-Hills Education Private Ltd., New Delhi.

It was just over a decade ago that Business marketing (aka B to B Marketing or Industrial Marketing) started emerging as a distinct discipline, both in theory and practice, in the Indian business scenario. The subject has yet to find its place as a separate course in the curricula of a majority of B-schools in the country. Even in institutes where it is taught as a specific course, it is normally included among the electives. This is apparently the reason why one does not find many books on the subject, by Indian authors.

Among the few books of commendable standards that have been published in the country on the topic, *Business Marketing* by Prof. Krishna K. Havaladar is unquestionably one of the most outstanding. The book's popularity is evidenced by the fact that within just a decade of its first publication it has gone into six reprints of the first edition and nine reprints of the second edition.

It is the third edition published in 2010 that is presently under review. As the author rightly claims in the preface to this edition, the coverage of the book has been expanded to include topical concepts such as outsourcing, global logistics, e-commerce and CRM. The book obviously is targeted at the Academia, and does more than adequate justice to that objective.



The author, an Electrical Engineering graduate, holds a post graduate degree in Business Administration from IIM, Ahmedabad. He has a number of case studies and other publications to his credit. During his corporate career spanning over three decades, he has worked in various senior capacities as Marketing Manager, General Manager and Vice President with major engineering firms in the country. In the academic field, he has served as Professor, Dean and Principal of a number of reputed B-Schools. The wisdom, both theoretical and practical, that he has so gained finds its reflection throughout the pages of the book under review.

The book is divided into 15 chapters. The first four chapters cover theoretical issues such as the nature of Business Marketing and its Environment, Organizational Buying Behaviour and Buyer-Seller Relationships. Chapters five through thirteen deal with strategic aspects such as Marketing Intelligence, Targeting and Positioning, Branding, Distribution, Personal Selling, Pricing, Marketing Communication, and Marketing Planning and Control. Chapters 14 and 15 cover Electronic Commerce and International Business Marketing, respectively.

While the coverage of the text is more than adequate for the intended purpose of B-School teaching/learning, what makes the book outstanding is its presentation. The book follows a

chapter scheme which is both systematic and logical. It is amply illustrated with over 85 *figures* and 75 *tables*. Each chapter ends with a *summary*, *key terms*, *conceptual questions*, *objective questions*, *application questions*, and *reference notes*. There is at least one case study included in every chapter.

Moreover, there are 22 integrated cases at the end of the Text, supported by a Case-Chapter Selection matrix which both faculty and students of B-Schools will find quite useful. There is also a *comprehensive glossary of Terms*. The book is supplemented by an instruction manual with PPTs. The book is a '*must-read*' for those involved in B-School teaching and learning. It will also be quite beneficial as a guide to practising managers in the field.



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Reviewed by Prof. P.C. Pillai,
Group Director, SCMS-COCHIN,
Prathap Nagar, Muttom, Aluva-
683106, Ernakulam, Kerala, Email:
pcpillai@scmsgroup.org



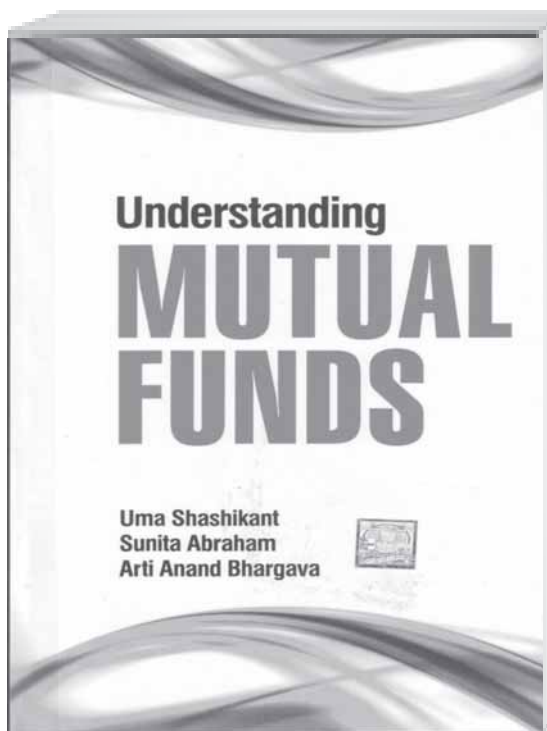
Book Title : *Understanding Mutual Funds*
Authors : Uma Shashikant, Sunita Abraham, and
Arti Anand Bhargava
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New Delhi.

The Mutual Fund Industry is making rapid strides in the Indian capital market arena. From a single player in 1964, viz., UTI there are 40 fund houses competing in the market today. Together they manage over ₹7,50,000/- crores in assets and offer over 850 mutual fund products. Besides Public sector funds, private as well as foreign funds also operate in the Indian Market.

A Mutual fund by definition is a collective investment vehicle, where investor's money is pooled and invested as per pre-specified investment objectives. The benefits accrue to the contributors of the pool. There is thus mutuality in the contribution and the benefit. The advantages of a Mutual fund are many. The professional management, enjoying the benefits of research and analysis and the resultant expertise on their process-driven approach to investing is something individual investors will not be able to match.

The Indian Mutual funds are fairly well-regulated. The 'irrational exuberance' often displayed in the stock market operations and the resultant scams on several occasions, have underscored the need to put in place reasonable regulatory and control mechanisms in the functioning of the mutual funds. Apart from mandatory registration and the like, adequate disclosure norms are also prescribed to enable the investors to make informed choices in investments.

Although growing rapidly, the Indian mutual funds are still not among the top investment choices of Indian households. There is thus an opportunity for a greater and more spectacular growth by enlarging geographical spread and improving penetration into the saving habits of retail investors. It is in this backdrop of steady performance and potential for huge growth of the Indian mutual fund industry that Shri Uma



Shashikant, Sunita Abraham and Arti Anand Bhargava have brought out a small, compact and concise book on mutual funds titled *Understanding Mutual Funds*.

The book is divided into 11 chapters.

The chapter one, **Concepts and Role of a Mutual Fund** deals with the relevant concepts, the slew of products, the genesis and evolution of mutual funds in India and gives, in detail, the definitions, type of funds, product features, comparison of funds etc. For an entry level student or operative the chapter provides a thorough introduction in to the basics.

Fund Structure and Constituents: Being a relatively late entrant in the financial services sector, the organizational and legal structure of mutual funds and its various constituents are not widely known. The chapter two provides a peep into the whole scheme on a full view at a glance mode. The examples provided to illustrate the points are simple and effective.

Legal and Regulatory Environment: The mutual funds industry in India, it is widely accepted, is well-regulated with adequate checks for the operating inter-mediaries, with enough provision for mandatory registration and stringent disclosure norms. The multitude of scams that have erupted time and again in the capital market operations have perhaps prompted the regulators to be forwarned and forthright in their prescriptions for this relatively nascent industry. The chapter three also deals with investor rights, service standards as well as obligations and legal protections available for the funds.

In chapter four, the offer document is the primary source of information for an investor to make an informed decision on his investment. It also serves as the legal basis for a contracted relationship between the investor and the fund. Yet, the awareness on its importance among the investor public is still not pronounced. Although devoid of great details, the contents provide an over-view of the relevant and significant components of the offer document and may generate enough curiosity in students and readers to look for more information. The chapter on **Fund Distribution and Sales Practices** is essentially intended for those engaged in sales and distribution of mutual fund products. However, the notes on sales

practices and Sebi's advertisement code are also aimed at investor education.

The issues discussed in the chapter, **Accounting, Valuation and Taxation** are of interest to the different segments of the target group of readers. While the NAV computation and the impact of entry load, exit load etc on the resultant price of units are of universal interest, the modus operandi for time stamping and the details of calculating scheme expenses etc may appear to be more relevant for the practitioners. The notes on tax aspects with lucid examples, however, will appeal to all concerned.

The chapter, **Investor Services** is broadly divided into two sections: one dealing with investment related transactions and the other with investment options. Although the descriptions, perhaps, are in capsule form, they are sufficient for a preliminary understanding of the issues at hand.

Risk, Return and Performance of Funds: As stated elsewhere in the Review Notes, the Book is primarily conceived in the form of a hand book for practising sales staff engaged in Mutual Fund Business and is not offered as a detailed study and reference material. The contents in the chapter, in itself, as the caption would indicate, can easily be the subject matter of hefty volumes. Nevertheless, the attempt made here is to provide an introduction into the various concepts, calculations and ratio analyses which are relevant for any investor or practitioner. The simple manner in which the concepts are explained and the way the calculations are illustrated with examples, even the least initiated in the subject may find it extremely useful.

The chapters, **(i) Mutual Fund Scheme Selection: (ii) Selecting the Right Investment Products and (iii) Financial Planning and Model Portfolios** as the captions indicate, deal with inter related activities such as scheme selection, products selection and financial planning which ultimately lead to organizing one's finances in the most efficient manner. The three basic criteria applicable to all these activities are: risk, return and investing horizon. The chapter on Scheme Selection analyses the comparative advantages and attendant risk on various fund schemes in relation to the investor needs and individual attributes. The chapter on selecting the Right Investment Products details classification of assets into physical and financial assets and

examines the features of individual assets and compares their advantages and disadvantages. The chapter on Financial Planning, apart from discussing the need for and steps in financial planning also elaborates on the concepts of Life Cycle Approach and Wealth Cycle Approach to financial planning as well as Risk Profiling and Asset Allocation as suggested tools for successful financial planning.

Admittedly, the book is designed more as a study material for sales staff engaged in sales and distribution of mutual fund products for whom the MISM-MFD examination is mandatory. It is also aimed at improving their functional competence. Nevertheless, with the lucidity in style, clarity in presentation, thoroughness in content selection and the

judicious use of examples to illustrate points, the book could be of immense benefit to investors, students and practitioners who seek an introduction into the concept and conduct of mutual fund business.

A notable limitation of the book is that it is confined to Indian experience only. While the mutual fund industry is in the process of evolving in India, it has reached commanding heights in the West. Therefore, for a more meaningful and deeper understanding and insight into mutual funds, as a concept and also as an industry, one needs to delve into the related experiences and illustrations from the west. The book may easily be the catalyst for those seeking more information and advanced learning to look for other sources.



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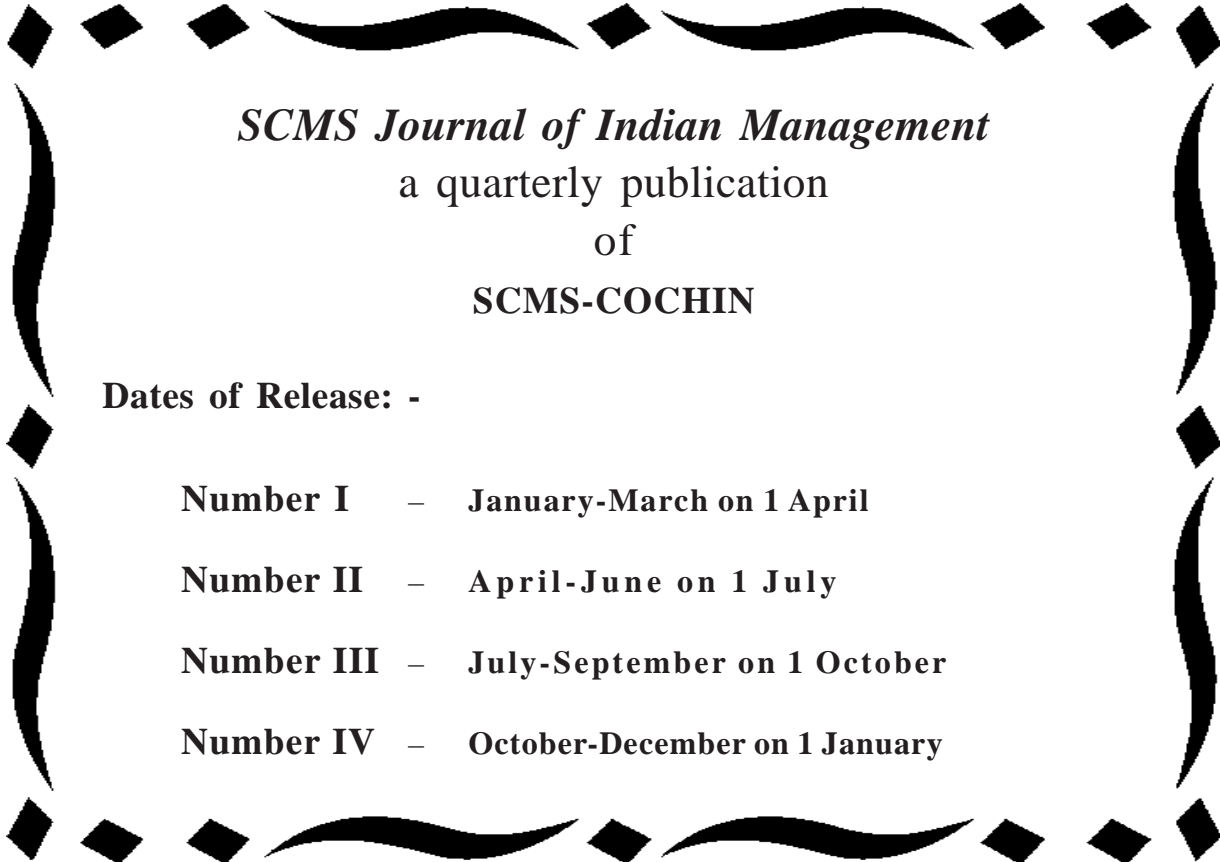
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Muttom, Aluva-683 106, Kochi, Kerala, India

Ph: 91-484-262 3803 / 262 3804 / 262 3885 / 262 3887 Fax: 91-484-262 3855

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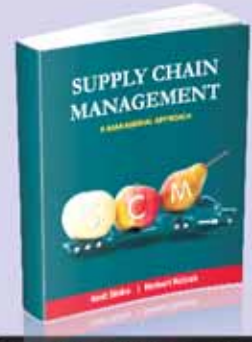
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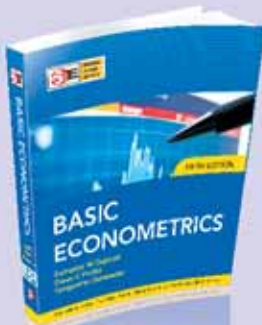
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