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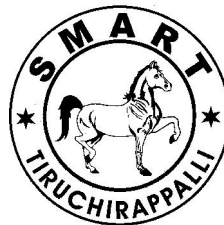
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EVOLUTION OF SERVICE QUALITY MEASUREMENT INSTRUMENT – A RETRO ANALYSIS

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ABSTRACT

This article endeavors to examine the framework and related issues of different service quality instruments developed over time. The extant literature in respect of service quality applicable to various industries are reassessed and comprehensive tables indicating the critical dimensions used in service quality instruments and conceptualized in different global contexts are presented. The invaluable contributions made to the SERVQUAL literature in the 21st century are also examined. The implications of these standardized models to academia and service industry in particular are clearly outlined.

Key Words: Service Quality Instruments, critical dimensions, reassessment.

Introduction

The last two decades have witnessed great changes in the business environment, with quality consistently being considered as one of management's top-most competitive priorities and a prerequisite for sustenance and growth. The quest for quality improvement has become a highly desired objective in today's intensely competitive global market place. Quality management has been reckoned as the prime mover for enhanced business performance (Corbett et al., 1998). In today's world of fierce competition, rendering quality service is a key for subsistence and success (Parasuraman et al., 1985 & 1988; Reichheld & Sasser, 1990; Zeithaml et al., 1990. Cronin and Taylor (1992, 1994), Teas (1993,1994), Berry et al.(1983,1985,1990,1994 & 2001) and Zeithaml et al. (1996). They have noted that the cardinal accent of both academia and business focused essentially on ascertaining the customers' perceptions of service quality and subsequently

contriving strategies to meet and surmount customer expectancies. Service companies are beginning to grasp the verities behind what their manufacturing counterparts learned in the past few decades that quality does not improve unless it is measured.

Theoretical Background

Service quality is the function of perceptions, expectations and performance. Early writing on the topic of service quality, defines service quality as a comparison of what customers feel a service provider should offer (i.e. their expectations) with how the provider actually performs (Gronroos 1982, Lehtinen and Lehtinen 1982, Sasser, Olsen, and Wyckoff 1978). According to Lewis and Booms (1983), "service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis". Parasuraman et al, (1985) defines service quality as perceived by

customers, as the degree and directions of discrepancy between customers' service perceptions and expectations. It is also defined as difference between "technical quality" (what is delivered) and "functional quality" (how it is delivered), and as "process quality" (judged during the service) and "output quality" (judged after the service) (Gronroos, 1983 and Lehtinen, 1983).

Quality of service directly helps in defensive and offensive marketing i.e. customer retention and increase of sales, and free advertising through word of mouth. Too much newness can do more harm than good. Some of the problems are communication gap, service proliferation and complexity, improper selection and training of service workers and short-run view of the business. If a company gives a quality service, they can survive and run over any kind of crunch situation. For example, Singaporean Airlines in spite of various vicissitudes in airline industry, still stands as a king because of the service they have provided which the customers value much (Sandra and Lovelock, 1991).

The concept of liberalization and globalization opened the market to intense competition throughout the world. Today the customers are not ready to buy a product based on its physical characteristics, brand name, or price alone. The purchase is made mostly on customer's perception of quality attached to a product (Clement, 2005). This customer-focused definition of quality is said to have grown out of the service marketing literature (Gronroos, 1983, Parasuraman et al., 1985). In other words, we can rightly say that quality is the vital aspect of a product.

Evolution of Service Quality Measurement Instruments

In the tough competitive milieu, measurement of service quality has increasingly created an interest among the service providers and the scholars alike because service quality

is being used to position their respective products in the market place (Brown & Swartz 1989).

Various important Service Quality Measurement Instruments in a chronological order are as follows:

1. The Nordic Model (Gronroos 1984),
2. The SERVQUAL Model (Parasuraman, Zeithaml, and Berry 1985),
3. The SERVQUAL Model (Parasuraman, Zeithaml, and Berry 1988),
4. The SERVPERF Model (Cronin and Taylor 1992),
5. The Three-Component Model (Rust and Oliver 1994),
6. The CARTER Model (Othman and Owen 2001),
7. The Third-Order Factor Model (Brady & Cronin 2001) and
8. The Human-Societal Element Model (Sureshchandar Model et al., 2002).

A comprehensive table (Table 1) is presented for easy understanding of various dimensions used by different authors in their attempt to posit a Service Quality (SQ) model. Early contributions towards the literature of service quality model have been developed by Gronroos in 1984, called as the Nordic Model and it has conceptualized the measurement of service quality as customers' perception regarding an organization's technical and functional quality. The Nordic model of measuring service quality is critiqued on the following grounds ; it gives only the generalized picture of service quality and not in detail. For example, it does not talk much about social responsibility and service tangibles. It does not use more terms to describe service encounter as it was mentioned in SERVQUAL to determine a quality service encounter.

The authors Parasuraman, Zeithaml, and Berry 1985, 1988 and 1991, have formulated

the concept of measuring 'service quality', very popularly referred to as SERVQUAL Model. They started the unending journey of conceptualizing the measurement of service quality in 1985 with ten service quality dimensions. Later the customer's perception and expectation regarding the service was filtered and refined to five major service quality dimensions, as follows; tangibles, reliability, responsiveness, assurance and empathy. Again the five major service quality dimensions were refined further and fine-tuned by changing the statements to get more reliable and valid results. The same criteria were used to check the psychometric properties of the SERVQUAL scale. All new models are prone to criticisms and the SERVQUAL model also was no exception. It was widely criticized at different times by different authors. It is limited to one sector, say, banking alone; the score is biased because of wrong terminology used in the statements (During 1988). Mostly it was preoccupied with the psychometric and methodological soundness of scales. Cronin and Taylor 1992 commented that it is unnecessary to measure customer expectations in service quality research. They contended that measuring perceptions is sufficient to contend with the SERVQUAL model as based on Disconfirmation Paradigm, which is not suitable for services. Teas (1993) commented on the interpretation and operationalization of the expectations standard.

The strong critics of SERVQUAL model were Cronin and Taylor. They developed a new model in 1992, and it was popularly called SERVPERF model. Their conceptualization of service quality model was based on the performance component alone. They proposed what is popularly referred to as the 'SERVPERF' scale. It is a single item scale. They developed their model based on Performance Model Satisfaction over the Disconfirmation Paradigm used by the

SERVQUAL scale. They have reduced the number of items to be measured but they have used the same service quality dimensions of SERVQUAL viz., tangibles, reliability, responsiveness, assurance and empathy. The critique of this SERVPERF model is that it is preoccupied with psychometric and methodological soundness of scales. It is used and tested only in developed nations.

During 1994, Rust and Oliver modified and extended the Nordic model into the Three-Component Model of measuring service quality and they have conceptualized the measurement of service quality as customers' perception regarding an organization's service product, service delivery and the service environment. The Rust and Oliver's Three-Component Model of measuring service quality is critiqued on the grounds that it gives only the generalized picture of service quality and it does not touch on details. For Example, it does not talk much about social responsibility, service encounter and service tangibles.

The CARTER Model of measuring service quality was developed by Othman and Owen, in 2001. CARTER's dimensions covered a proposed framework for measuring quality of services in Islamic Banks. The dimensions are: Compliance, Assurance, Reliability, Tangibility, Empathy and Responsiveness. The CARTER model provides the following benefits to the Islamic banks because it is the first approach to add and mix the customer's religious beliefs and cultural values with other quality dimensions. It provides for multi-faceted analysis of customer satisfaction, and it links quality with customer's satisfaction and service encounter. It provides information at several levels, already organized into meaningful groupings. It is a proven approach, which results in usable answers to meet customer's needs. It is empirically grounded, systematic and well documented.

The Third-Order Factor Model was developed by Brady & Cronin; 2001. This model conceptualized the measurement of service quality, based on three main dimensions, which are taken from the Nordic Model (Gronroos 1994), and the Three Component Model of Rust and Oliver (1994). The nine sub-dimensions and three descriptors are taken from SERVQUAL scale. First the three main dimensions of service quality are Interaction Quality, Physical Environment Quality and Outcome Quality. Secondly, the nine sub-dimensions are Attitude, Behavior, Expertise, Ambient conditions, Design, Social factors, Waiting time, Tangibles and Valence and the three descriptors are Reliability, Responsiveness and Empathy. This model is criticized on the grounds that the four services tested account for only a small portion of service industries, the 12-month interval in data collection may have influenced the variance in responses and the concept is intended as a global view of service quality.

The Human-Societal Element Model (Sureshchandar et al., 2001 & 2002) was developed with a view to overcoming the drawbacks of SERVQUAL scale as the SERVQUAL Instrument does not address certain important constituents of service quality like service product or core service and systematization/standardization of service delivery. This model conceptualizes customer-perceived service quality based on the following five service quality dimensions: Core Service or Service Product, Human element of Service Delivery, Systematization of Service Delivery, Tangibles of Service and Social Responsibility. The criticisms of this model are as follows; Due to time constraints and practical difficulties, the study was confined to banking sector and the instrument was validated by collecting data from customers of banks in a developing economy and not from a developed economy.

Measurement Instrument – Critical Contributions in the 21st Century

The Sureshchandar Model (2002), supposedly the only attempt to remodify the SERVQUAL model in the 21st century, was developed to overcome the drawbacks of SERVQUAL scale, as the SERVQUAL Instrument does not address certain important constituents of service quality, like service product or core service and systematization/standardization of service delivery. This model conceptualizes customer-perceived serviced quality based on the following five service quality dimensions: Core service or Service Product, Human element of Service Delivery, Systematization of Service Delivery, Tangibles of Service and Social Responsibility. The criticisms of this model are; due to time constraints and practical difficulties, the study was confined to banking sector and the instrument was validated by collecting data from customers of banks in a developing economy rather than from a developed economy. This Human – Societal Element Model has to a large extent consummated the evolution of service quality measurement instrument.

Core Service or Service Product

The core service portrays the ‘content’ of a service or the essence of a service. Whatever service features are offered is as important as how it is delivered (Rust and Oliver, 1994). Schneider and Bowen (1995) explained that in a service business, a lot of emphasis is usually placed on the procedures, processes, and contexts for service to the extent that organization tends to overlook that there is also something called the “core service”. Rust and Oliver (1994) defined that the service product is whatever service ‘features’ are offered. Schneider and Bowen (1995) also argued that fancy facilities, modern equipment, stylish uniforms and terrific signs can never countervail bad/mediocre food, poor financial advice, an

inappropriate will, or lousy music. Hauser and Clausing (1988) also demonstrated the influence of diverse product (or service) attributes on customers' perceptions (Sureshchandar et al., 2001, 2002).

For instance, the different examples of the core service or service product are the varieties of food and other dishes a restaurant offers to its customers. Even though the restaurant's personnel are very friendly, pleasant and gentle to their customers, if the restaurant fails to offer a good quality and tasty food or a wide variety of recipes, customers may not attach high value to the quality of service it offers. Although an educational institution has good infrastructure and other support facilities, it will not get a high rating in the academic world if it lacks well qualified and knowledgeable teachers who can impart quality education to their students.. To put it in a nutshell, the core service itself has discernible, tangible and multidimensional quality features that could discriminate services and could preponderate over other issues such as delivery. The quality of this core service largely influences and sometimes may be the ultimate determinant of the overall service quality from the viewpoint of the customers (Schneider & Bowen, 1995 ,Sureshchandar et al., 2001, 2002).

The statements of service product or core service of Sureshchandar et al., (2002) are diversity and range of services (having a wider range of financial services from the bank, e.g. deposits, retirement accounts, loans for purchase of cars, houses, foreign exchange, traveller's cheques, safe deposit, lockers, etc.), intensity and depth of service (e.g. offering more number of service options for a given transaction e.g. various fixed deposit or recurring deposit schemes with different interest rates, quick cheque clearing facility with a higher service charge, etc.), service innovation (providing information/details on a regular basis through post; telephonic banking; ATM; room

service facility; cards to defense personnel, etc.), availability of most service operations in most branches/departments of the service organization, convenient operating hours and days (e.g. Working on Saturdays and Sundays, extended service hours during evenings, weekdays, etc.) Sureshchandar et.al., (2001 & 2002).

Human Element of Service Delivery

This factor refers to all aspects (reliability, responsiveness, assurance, empathy, moments of truth, critical incident and recovery) that will fall under the domain of the human element in the service delivery. The statements of Social Responsibility of Sureshchandar et al., 2002 are providing services as promised, having the necessary skills and ability and, more importantly, the willingness of the employees for action whenever a critical incident takes place (i.e. when a problem arises), whenever a critical incident takes place (i.e. when a problem arises), the degree to which the organization succeeds in bringing the condition back to normalcy by satisfying the customer, providing services right the first time, providing services as per the promised schedule, apprising the customers of the nature and schedule of services available in the organization, prompt service to consumers, willingness to help customers and readiness to respond to customer's requests, extent to which the feedback from customers is used to improve service standards, regularly apprising the customers about information on service quality and actual service performance versus targets in the organization, employees who instil confidence in customers by proper behavior, making customers feel safe, secure, satisfied and delighted in their transactions, employees who are consistently pleasing and courteous, employees who have the knowledge and competence to answer customer's specific queries and requests, effectiveness of customer grievance procedures and processes, caring and individual attention to customers by having the

customers' best interest at heart and employees who understand the need of their customers (Sureshchandar et al., 2001, 2002).

Systematization of Service Delivery: non-human element

Systematization of service delivery refers to the non-human element in the service delivery in contrast to the human element, which has been effectively captured by SERVQUAL. Customers would always expect and appreciate the service delivery processes to be perfectly standardized, streamlined and simplified so that they could receive without any hassles, hiccups or undesired/inordinate questioning by the service providers. A study of 1,500 consumers by Cambridge, a Massachusetts-based research firm, found that 44 percent of the respondents indicated that "ease of doing business with" was the fundamental reason for choosing a financial firm (Zemke and Schaaf, 1990).

The process of improvement has become the prime focus of the service quality revolution and the key to Total Quality Service (TQS) depends on understanding the process, as a mechanism to transmute knowledge and respond to customers faster than the competitors. Overall quality of the products or services could be made better by improving the quality of the process either directly or indirectly. The basic business processes go a long way in enriching the quality of an organization's products or services. Enhancement of technological capability (e.g. computerization, networking of operations, etc.) plays a crucial role in establishing the seamlessness in service delivery (Sureshchandar et al., 2001 & 2002).

The statements of Systematization of Service Delivery are the non-human element of service referred to by Sureshchandar et al., 2002. Systematization stands for a highly standardized and simplified delivery process so that services are delivered without any hassles

of excessive bureaucracy. It is a highly simplified and structured delivery process in which service delivery times are minimum and enhancement of technological capability (e.g. computerization, networking of operations, etc.) contributes service to customers more effectively. Procedures and processes are perfectly foolproof and adequate. Necessary personnel for good customer service and adequate and necessary facilities for good customer service are provided (Sureshchandar et al., 2001, 2002).

Tangibles of Service (Servicescapes)

The tangible facets of the service facility are the equipment, machinery, signage, employee appearance, etc. and the man-made physical environment, popularly known as the "Servicescapes". The statements of Social Responsibility by Sureshchandar et al., 2002 are the ambient conditions such as temperature, ventilation, noise, odour, etc. prevailing in the organization premises, physical layout of equipment and other furnishings comfortable for the customers to interact. Having house keeping as a priority and of the highest order in the organization, visually appealing signs, symbols, advertisement boards, pamphlets and other artifacts in the organization, employees who have a neat and professional appearance and visually appealing materials and facilities are associated with servicescape.

Social Responsibility

Social responsibility is an important concept, which is probably missed out completely in the quality management literature. A study conducted by "Consumer Reports" on customers found that one of the predominant consumer concerns on service quality was: "Equal treatment tempered by pragmatism, stemming from the belief that everyone, big or small, should be treated the same". They were also concerned about getting good service at a reasonable price, but not at the expense of

quality. With the entire business community undergoing a service quality revolution, this subtle aspect helps an organization to lead as a corporate citizen in encouraging ethical behavior in everything it does. The point which merits articulating here is that an organization cannot count only on financial performance to survive in this ever-changing scenario of global competition, but also has a responsibility to the society in which it exists. For instance, a hospital that gives free treatment to the economically downtrodden, an educational institution that grants scholarship for the poor, or a financial institution that provides loans to needy ones with less rigid loan conditions, would certainly be revered and valued by the customers. Although this factor sounds highly complex and imperceptible, it improves an organization's image and goodwill, thereby influencing customer perceptions of service quality (Sureshchandar et al, 2001, 2002).

Discussion and Implications

The assessment of the service quality instruments framework suggests that service quality is positively associated with the perception of the customers of service sectors. It is further observed that the relationship between service quality and performance of the company helps loyalty. An explanation for this might be that customers perceive the service quality as the basic ingredient for satisfaction and the positive feelings toward the service organization and this in turn spurs the performance output of the firm. Such underlying aspect has been reinforced by this conceptual study as it reexamined the various instruments developed by different authors using umpteen number of dimensions each contributing to the service quality perception of the consumers and performance of the companies.

Given the influence of service quality on various performance dimension of the organization, it is important that the services managers are concerned with whether or not

customers develop positive feelings towards the quality of service delivered through the employees of the firm. An unsatisfactory service encountered or 'moment of truth' can obviously lead to a lost sale or diminished customer loyalty. This emphasized the importance of good communication and human resource training to employees of service organizations at all levels especially for the people who are in direct contact with the customers. Further, it is suggested that the management can play a critical role in enhancing contact employees' service delivery process by setting high performance standards and appraising and rewarding them fittingly.

It is time that academia also take note of the important contributions extended to this service quality marketing literature and educate the business management to get prepared and meet the ever raising standards. However, this conceptual framework honestly acknowledges the limitations of the effort as it is only a revisit of the existing literature in service quality instruments and no specific effort has been made to check the applicability of any of these models in a developing economy like India. Therefore the authors urge the researchers to take up this mantle of finding out the applicability and thereby developing an industry specific as well as economy specific service quality instrument suiting the current requirements of the service sectors.

Conclusion

The issues addressed in this study suggest that the SQ instrument evolution can be conceptualized and understood further through a comprehensive SQ Inventory. In conclusion, consumers do not buy the highest quality service (Cronin & Taylor, 1994); convenience, price and availability may enhance satisfaction while not actually affecting consumer's perceptions of service quality. In this way, service marketers armed with a more complete and holistic view of service quality will be better able to focus

service enhancement, planning and resource allocation. Nevertheless, none of the service quality instrument dealt with in this article is an all encompassing one as many authors suggest. In other words, further research exploration in industry specific service quality instrument is clearly necessary and appropriate for better consummation.

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Table 1
Dimensions of Service Quality Instruments

S. No	Dimensions	Gronroos Nordic Model	SERVQUAL Model Parasuraman et al., 1985	SERVQUAL Model Parasuraman et al., 1988	SERVPE RF Model Cronin and Taylor, 1992	Three Component Model Rust and Oliver, 1994	The CARTE R Model (Othman and Owen 2001),	The Third-Order Factor Model (Brady & Cronin 2001)	The Human Element Societal Model (Sureshchandar et al., 2002)
1.	Technical Quality	•							
2.	Functional Quality	•							
3.	Access		§						
4.	Communication		§						
5.	Competence		§						
6.	Courtesy		§						
7.	Credibility		§						
8.	Reliability		§	ü	i	Ø	r		
9.	Responsiveness		§	ü	i	Ø	r		
10.	Security		§			Ø			
11.	Tangibles		§	ü	i		r		
12.	Understanding knowing the customer		§					♦	
13.	Empathy			ü	i		r	♦	
14.	Assurances			ü	i		r	♦	
15.	Service Product								
16.	Service Delivery								
17.	Service Environment								
18.	Compliance						r		
19.	Interaction Quality								
20.	Physical Environment Quality								
21.	Outcome Quality								
22.	Core Service								⌈
23.	Human Element								⌈
24.	Non-Human Element								⌈
25.	Servicescapes								⌈
26.	Social Responsibility								⌈