

# A Study on the Service Quality and it's Relation to CRM in Telecom Industry

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## Abstract

The Indian telecommunications network is the third largest in the world and the second largest among the emerging economies of Asia. Today, it is the fastest growing market in the world. In this article an attempt has been made to study the service quality of the telecom service providers to find out the theoretical related to the concepts of Service quality in telecom sector. The objective of this paper is to explore the key dimensions of service quality for mobile services in the telecom sector and to ascertain which aspect of service quality have significant impact on customer satisfaction and after analysis suggest remedial measures to the companies under study. This study is very necessary as the service providers are providing the service and the consumer are there who are using or utilising those services which is being provided by various telecom service providers. Whether the services which are being provided by this service provider are quality based or not, it's very important to know. It's very significant to know how this service provider is performing their services and how consumers are rating the services which they are utilising from those service providers. To explore few dimension of perceived service quality in the mind set of customers of telecommunication industry and to find out the significant gap between customer expectation and service provider performance with respect to service delivery. SQE6 – SQExperience6 with significant value of 0.006, SQE7 – SQExperience7 with significant value of 0.014, SQE8 – SQExperience8 with significant value of 0.035, SQE14 – SQExperience14 with significant value of 0.019.

**Key Words:** Service Quality, CRM, Customer Satisfaction, Telecommunication, Tangibility, Assurance, Network Quality, Empathy, Reliability

## INTRODUCTION

The biggest management challenge in the new millennium of liberalization and globalization for a business is to serve and maintain good relationship with the king – the customer. In the past producers took their customers for granted, because at that time the customers were not demanding nor had alternative source of supply or suppliers. But today there is a radical transformation. The changing business environment is characterized by economic liberalization, increasing competition, high consumer choice, demanding Customer, more emphasis on quality and value of purchase etc. Over the past few decades the topic of service quality has been an important focus for practitioners, researchers and managers due to its clear associations with business performance, customer satisfaction, customer loyalty and profitability. There has been substantial growth in the services sector during the last two decades. This rapid growth has been attributed to changes in environment, fast development of new technologies and computerization, changing customer's preferences and lean manufacturing (contracting out most activities). The change in demography, culture and lifestyle had affected the consumption pattern and buying behaviour of people. This change created new opportunities and challenges for the firms to remain competitive.

The Indian telecommunications network is the third largest in the world and the second largest among the emerging economies of Asia. Today, it is the fastest growing market in the world. The telecommunication sector continued to register significant success during the year and has emerged as one of the key sectors responsible

for India's resurgent India's economic growth. This rapid growth has been possible due to various proactive and positive decisions of the Government and contribution of both by the public and the private sector. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government that provide easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices. The telecom services have been recognized the world-over as an important tool for socioeconomic development for a nation and hence telecom infrastructure is treated as a crucial factor to realize the socio-economic objectives in India. Accordingly, the Department of Telecom has been formulating developmental policies for the accelerated growth of the telecommunication services. The Government of India recognizes that provision of world-class telecommunication infrastructure and information is the key to rapid economic and social development of the country. It is critical not only for the development of the information technology industry, but also has widespread ramifications on the entire economy of the country. The Indian telecom sector is passing through a dynamic transitional phase, as it is clearly undergoing the operation of market forces of demand and supply. The sovereignty of consumers is quite evident through their revealed preference in favour of economically rational decisions

### **RELEVANCE OF THE STUDY**

Nowadays this service sector is growing rapidly. To know about the consumer perception is very important as per the growth of the sector. It's very important to know how consumers are viewing this telecom service provider. Everyone is now depended upon this telecom service provider. In every field quality is the one aspect which plays a very important role. After the growth of this sector there lies a very important factor that is the quality. It's very important to know the reason behind the success of this sector and this only can be know from the consumer perception and the expectations that they are carrying for the service provider. This study is very necessary as the service provider are providing the service and the consumer are there who are using or utilising those services which is being provided by various Telecom service provider. Whether the service which is being provided by this service provider are quality based or not, it's very important to know. It's very significant to know how this service provider is performing their services and how the consumers are rating the services which they are utilising from those service providers.

### **RESEARCH PROBLEM**

The concept of quality, efficiency, productivity, growth and survival pose a great challenge for the survival and growth of all corporate bodies. These growth and survival demands are further deepened by the need to attract and retain customers, as customers are the main focus of any successful business. Business success depends on a firm's understanding and meeting customers' needs and demands. The telecom services have been recognized the world-over as an important tool for socioeconomic development for a nation and hence telecom infrastructure is treated as a crucial factor to realize the socio-economic objectives in India. Accordingly, the department of telecom has been formulating developmental policies for the accelerated growth of the telecommunication services. The Government of India recognizes that provision of world-class telecommunication infrastructure and information is the key to rapid economic and social development of the country. It is critical not only for the development of the information Technology industry, but also has widespread ramifications on the entire economy of the country. The Indian Telecom sector is passing through a dynamic transitional phase, as it is clearly undergoing the operation of market forces of demand and supply. The sovereignty of consumers are quite evident through their revealed preference in favor of economically rational decisions.

*So the study is based on the measurement of gap of consumer perception and expectation for telecom industry and it's relation to CRM.*

#### Objectives

- To explore few dimension of perceived service quality in the mind set of customers of Telecommunication Industry.
- To find out the significant gap between customer expectation and service provider performance with respect to service delivery.

## RESEARCH METHODOLOGY

To collect enough data a face-to-face survey was conducted. Respondents were asked to assess their perception of various items of different constructs, including factors viewed as antecedents of service quality. Assessment was based on a seven point likert scale. The time period of conducting this study was 2 months i.e. from April 2013 to May 2013. The survey was conducted after a pilot study had identified and refined measurement items used in this study. Primary data have been collected from customer's different telecom users in Hyderabad. Systematic random sampling was used to select approximately equal no of customers from each type of telecom provider. The sampling has been done taking into consideration the type of telecom provider. The final sample consist of 100 individuals whose state that they were customers of one of the aforementioned service provider. Questionnaire includes five sections named as section-A, B, C, D; E. These sections include various sub-type questions. Section-A consists of customer profile which includes customer name, age, gender, education, occupation, marital status and income. Section-B consists of usage description which includes which mobile service provider they are using, what type of connection they have taken, for how many years they are using this mobile service provider etc. Section-C consists of customer perception about the mobile service provider and this questions are constructed using likert scale, it's a 7-point scale where (1=very low,2=low,3=moderately low,4=neither low nor high,5=moderately high,6=high and 7=very high). Section-D consists of questions based upon the customer expectations of the mobile service, here also a 7-point Likert scale ranking has been made(1=strongly disagree,2=disagree,3=moderately disagree,4=neither agree nor disagree,5=moderately agree,6=agree and 7=strongly agree).Section-E consists of questions based upon there experiences of the mobile service which they availed and it also 1-7 point ranking scale(1=strongly disagree,2=disagree,3=moderately disagree,4=neither agree nor disagree,5=moderately agree,6=agree and 7=strongly agree).

### Scope of the Study

- The study is carried in Hyderabad (Cyber city) of India.
- The industry taken for the study is telecom.
- The study is based on SERVQUAL instrument.

## REVIEW OF LITERATURE

There has been substantial growth in the services sector during the last two decades. This rapid growth has been attributed to changes in environment, fast development of new technologies and computerization, changing customers' preferences and lean manufacturing (contracting out most activities). The change in demography, culture and lifestyle had affected the consumption pattern and buying behaviour of people. This change created new opportunities and challenges for the firms to remain competitive. Services have been differentiated from products. They are primarily intangible (Judd, 1964; Mills & Margulies 1980). Services are simultaneously produced and consumed (Regan, 1963; Shostack, 1977). Services are also considered to be perishable (Regan, 1963), and to be a process rather than a thing (Gronroos, 1983; Shostack, 1977). The evaluation of service quality is based on customers' and service providers' perception of quality (Zeitham, Parasuraman, & Berry, 1985). The service concept has two components; the degree to which customer needs are satisfied and the added value that the customer receives (Dale 2003; Hsieh, Chou & Chen 2002). Deming (1986) estimated that 44% of people in firms are looking after service functions. The contribution of these people adds value to the quality of products and the firms' perception in the minds of consumers. There has been a significant focus on service quality during the past few decades. Researchers' interest in service quality is based on its contribution in reducing costs, increasing customer loyalty and profitability (Cronin & Taylor, 1992; Gammie, 1992; Guru, 2003; Hallowell, 1996; Newman, 2001). Customer and not the provider decide the quality of service. The customer feelings about the quality are the determinant of customer satisfaction (Bertrand, 1989; Boothe1990). One of the issues which has attracted a lot of interest has been the definition and measurement of service quality in terms of customer expectations of the service they are anticipating and their subsequent perceptions of the service which materialised' (Reynoso, and Moores, 1995, p.64).

According to Zeithaml (1988), perceived value is very subjective and distinct and it is different from one customer to another. After consolidating four consumers' expressions of value, she defined perceived value as a customer's overall assessment of the utility of a product based on the perception of what is received and what is given. A customer might evaluate the value dimension of the same product differently at different occasions. To

illustrate; a customer may regard price as the most important criteria at the time of making decision to purchase a product. Subsequently, when he/she is faced with any problem with regards to the product, he/she might consider that customer service is the most important factor that will affect his/her satisfaction/dissatisfaction. According to Monroe (1991), customer perceived value as the ratio between perceived benefits and perceived sacrifice. According to Melody (2001), in a competitive market, service providers are expected to compete on both price and quality of services and also it is necessary for the service providers to meet the consumers' requirements and expectations in price and service quality. The positive relationship of service quality with customer satisfaction (Danaher and Mattsson, 1994; Kim et al., 2004), customer preference (Ranaweera and Neely, 2003), profitability (Fornell, 1992; Danaher and Rust, 1996), competitiveness (Rapert and Wren, 1998), is well proven in the academic literature. Investigators have also found customer satisfaction from a multi dimensional nature and view overall satisfaction as a function of satisfaction with multiple experiences with the service provider. According to (Parasuraman et al., 2000), in general satisfaction is developed on the information from all prior experiences with the service supplier and is consider as a function of all prior transaction and information . The vast academic references that discuss the body of work conducted by Parasuraman, Zeithaml, and Berry (1985) will act at the starting point for exploration. They devised a tool that puts into operation the five dimensions and gaps model of service quality. In addition this was followed up in their 1988 paper with a survey tool named the SERVQUAL, in order to measure the fifth gap of 'perceived service quality' (Carman, 1990) The tool is divided into five key categories and labelled according to the five dimensions of service quality determined by Parasuraman et al, (1985). Acknowledging that their independent research has identified five dimensions of service quality is important when choosing to explore customer perceptions, particularly as these variables can be put into practice when delivering a new service quality initiative to customers. Thus, it remains clear from the literature that the SERVQUAL has been widely used within service industries to understand the perception of the target market, providing a measurement of the service quality of the organization.

## **SERVICE QUALITY, CRM & HEALTHCARE**

In general, the aim to put together linkage of internal and external social networks are to engage patients and export ideas, foster innovations of new services, quick response/feedback for existing service and technologies from people inside and outside organization. Both provide a range of roles for patient or his/her family. The relationships can create emotional support, substantial aid and service, influence, advice and information that a person can use to deal with a problem. In addition, listening tool between Social Networks and CRM systems is a mechanism to capture actual data from social media and propagates this information forward to the CRM. This tool should be able to filter noise (level of necessity for business process) from actual data that needs to be communicated to CRM. Social CRM empowers patient/family to have the ability in controlling his own data. Once patient/family registers to have service from healthcare provider, it will enable them to have personalized e-health systems with Social CRM as the frontline of the system. The system will authorize for each patient then; the authorization and self-managed account/service are granted to access all applications and data offered by the systems. This authorization is expected to be in the long run since the information and contents continue to grow. Technical assistant is available through manual or health informatics officer (just like any other customer service in business/organization) who stand by online assisting patient/family in utilizing the system especially for the first timer. Furthermore, since all the information (medical records) can be accessed online anywhere and anytime, it will enable collaborative treatment from telemedicine. Consider this scenario; while we go to physician for a diagnosis, sometimes there is tradeoff between time allocated to each patient and the comprehensiveness of diagnosing process. The long queue the patient waits for consultation enables the healthcare provider to allocate time wisely for each patient. Within the constraint of consultation time, the physician is able to conduct diagnosis efficiently and effectively. The system supports the customer service because it helps both the healthcare provider and patient in diagnosis activity. The physician will have complete information, knowledge, saving a lot of time to learn about patient history because patients participate in the detailing his medical records data through the system, and patient benefits from quality of diagnoses time because his medical records are overviewed in full scene. In other words, it can provide better customer service to meet patient's expectation and improve the quality of consultation time. The physician is expected to have a comprehensive view of the patient's history before diagnosing or analyzing consulted symptoms. This can be achieved because physician will be able to observe the report of patient's medical history such as last medicine consumption, previous diagnoses, lab result, activities suggested by health educator etc. In addition, by empowering patients with medical data and personalized e-health, the healthcare needs to provide officer in duty (health educator/ health promoter) in order to interpret medical data or In general, the aim to put together linkage

of internal and external social networks are to engage patients and export ideas, foster innovations of new services, quick response/feedback for existing service and technologies from people inside and outside organization. Both provide a range of roles for patient or his/her family. The relationships can create emotional support, substantial aid and service, influence, advice and information that a person can use to deal with a problem.

### DATA ANALYSIS

Factor Analysis:- KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.825
Bartlett's Test of Sphericity	Approx. Chi-Square	1579.289
	df	435
	Sig.	.000

From the above table it may be observed that the KMO value is above 50%. Hence sample data is adequate for applying factor analysis. Bartlett's Test of Sphericity also gives significant result to substantiate the above statement.

The respective factor loadings of the concerned variables for each of the factors after rotation are given in the following table:

Factor	Variables	Loading	Variance Explained
<b>Factor 1</b>	SQP1	.582	32.292
	SQP5	.536	
	SQP6	.614	
	SQP10	.547	
	SQP12	.495	
	SQP18	.499	
	SQP19	.646	
	SQP20	.662	
<b>Factor2</b>	SQP13	.720	7.562
	SQP14	.834	
	SQP15	.545	
	SQP26	.390	

	SQP27	.357	
<b>Factor3</b>	SQP16	.815	6.759
	SQP17	.762	
<b>Factor4</b>	SQP2	.617	5.391
	SQP3	.605	
	SQP4	.783	
<b>Factor5</b>	SQP7	.689	4.733
	SQP22	.646	
	SQP23	.684	
<b>Factor6</b>	SQP21	.423	4.487
	SQP24	.832	
	SQP25	.824	
<b>Factor7</b>	SQP8	.750	3.849
	SQP9	.768	
<b>Factor8</b>	SQP28	.868	3.624
	SQP29	.696	
	SQP30	.523	
<b>Factor9</b>	SQP11	.796	3.516

### Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SQE1 - SQ Experience1	.120	1.707	.171	-.219	.459	.703	99	.484
Pair 2	SQE2 - SQ Experience2	.220	1.756	.176	-.128	.568	1.253	99	.213
Pair 3	SQE3 - SQ Experience3	.280	1.583	.158	-.034	.594	1.769	99	.080
Pair 4	SQE4 - SQ Experience4	.230	1.632	.163	-.094	.554	1.409	99	.162
Pair 5	SQE5 - SQ Experience5	.310	1.568	.157	-.001	.621	1.977	99	.051
Pair 6	SQE6 - SQ Experience6	.460	1.648	.165	.133	.787	2.791	99	.006
Pair 7	SQE7 - SQ Experience7	.430	1.713	.171	.090	.770	2.510	99	.014
Pair 8	SQE8 - SQ Experience8	.400	1.875	.187	.028	.772	2.133	99	.035
Pair 9	SQE9 - SQ Experience9	.350	1.966	.197	-.040	.740	1.780	99	.078
Pair 10	SQE10 - SQ Experience10	.200	1.764	.176	-.150	.550	1.134	99	.260
Pair 11	SQE11 - SQ Experience11	.250	1.800	.180	-.107	.607	1.389	99	.168
Pair 12	SQE12 - SQ Experience12	-.100	2.028	.203	-.502	.302	-.493	99	.623
Pair 13	SQE13 - SQ Experience13	.220	1.605	.161	-.099	.539	1.370	99	.174
Pair 14	SQE14 - SQ Experience14	.350	1.473	.147	.058	.642	2.376	99	.019
Pair 15	SQE15 - SQ Experience15	.050	1.077	.108	-.164	.264	.464	99	.643
Pair 16	SQE16 - SQ Experience16	.240	1.372	.137	-.032	.512	1.750	99	.083

The table calculated paired sample T test on SPSS above is showing the gaps significantly where telecom industry is needed to work to improve its service quality. Firstly the gap of SQE6 –SQExperience6 with significant value of 0.006, Secondly the gap of SQE7 –SQExperience7 with significant value of 0.014, Thirdly the gap of SQE8 –SQExperience8 with significant value of 0.035, Fourthly the gap of SQE14 –SQExperience14 with significant value of 0.019.

### Managerial Implication

The telecom industry should work on the following gaps to reduce the gap of service expectation and service experienced by the users.

- SQE6 –SQExperience6 with significant value of 0.006.
- SQE7 –SQExperience7 with significant value of 0.014.
- SQE8 –SQExperience8 with significant value of 0.035.

- SQE14 –SQExperience14 with significant value of 0.019.

## CONCLUSION

Though the telecom industry is doing comparatively good in Hyderabad but then too, the findings imply that recruiting competent staff may be a critical aspect for customers in judging the quality of telecommunication services. There is a positive relationship between service quality and customer satisfaction. Obtaining customer satisfaction depends to a large extent on ensuring that the firm maintains high service quality standards. Putting in place quality mechanisms has significant effect on the level of customer satisfaction. Among the service quality variables that significantly affected customer satisfaction include competence, courtesy, tangibility, reliability, responsiveness and communication. For managers, this finding has important implications with regard to brand building strategies. The study documented that service quality is the dominant route to customer satisfaction. Indications of a successful brand building strategy are found when companies provide quality services relative to other companies within the same industry. Thus, identifying and satisfying customers' needs could improve network services because what is offered can be used to fulfill the users expectations. Telecom management needs to emphasize service quality. Due to the fact that telecom firms do not provide tangible products, their service quality is usually assessed by measures of the service-provider's relationship with customers. Thus, telecom service management should pay attention to staff skill possession, knowledge, attention to customers and their needs, offering of fast and efficient services and general attitude to customer services. Other issues for improving upon customer satisfaction in the telecom services include confidentiality in transactions, trustworthiness, extension of working hours, and provision of insurance for customers. Policymakers for the company should therefore see to customer satisfaction based on these measures. Invariably, there is need for the management of telecom firms to intermittently train their workers on relationship marketing skills. Such training would build a customer-oriented climate in which contact staff can deliver service efficiently and effectively, acknowledging that acquiring and retaining customers is the very essence of marketing. Consequently, customer relations behaviors can serve as the criteria for telecom staff performance evaluations and promotions. The key to customer creation and retention appears to be the fostering of a favorable relative attitude among clients. Thus it is not merely enough to satisfy a customer, the customer's attitude towards a specific network should be more favorable as compared to competing networks; and a favorable relative attitude can be created by satisfying the customers through improved service quality. It is also suggested to managers that to lessen the degree of mixed feelings following a poor service recovery, service organizations might consider sending customized communication messages to disgruntled customers. Reminding the customer about the positive aspects of the service operation might be enough to bolster positive feelings, and thereby reduce attitude ambivalence that can lead to customer satisfaction.

## References

- Anderson, E & Sullivan, M.W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12 (2), 125-43.
- Anderson, E.W., & Fornell, C. (1994). Customer satisfaction, market share and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53.
- Antreas, D.A. (1997). Another look into the agenda of customer satisfaction. *International Journal of Bank Marketing*.
- Barsky, J. (1995). *World-class customer satisfaction*. Burr Ridge, IL: Irwin Professional.
- Besterfie ld, D.H. (1994). *Quality Control*. Englewood Cliffs, NJ: Prentice-Hall.
- Bitner, M., Booms, B., & Tetreault, M. (1990). The service encounter: diagnosing favourable and unfavourable incidents. *Journal of Marketing*, 54(1), 71-84.



- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811–828.
- Consumer Reports. (1998). *Buying Guide Issue*. September, Consumers Union of United States, New York.
- Cronin, J. J. Jr & Taylor, S. A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, 56, 405-20.
- Czepiel, J. A. (1990). Service encounters and service relationships: Implications for research. *Journal of Business Research*, 20: 13-21.
- Donabedian, A. (1982). *Explorations in quality assessment and monitoring: The definition of quality and approaches to its assessment*. Ann Arbor, Michigan: Health Administration Press.
- Ekinci, Y. (2003). An investigation of the determinants of customer satisfaction. *Tourism Analysis*, 8(2), 193-196.
- Elnan, H., & Anderson, O. (1999). *Measuring and monitoring service quality in the bus industry*. Proceeding of the 3rd Asian Academy of Management Conference.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56, 6-21.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J., & Bryang, B.E. (1996). The American customer satisfaction index: Nature, purpose, and finding. *Journal of Marketing*, 60, 7-18.
- Frempong, G. (2002). Telecommunication Reforms – Ghana’s Experience. Discussion Paper, Technical University of Denmark.
- Oyeniya, O., & Abiodun A. J. (2008). Customer service in the retention of mobile phone users in Nigeria. *African Journal of Business Management*, 2 (2), 026-031. [Online] Available: <http://www.academicjournals.org/AJBM>
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for further research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Reidenbach, R.E. & Sandifer-Smallwood, B. (1990). Exploring perceptions of hospital operations by a modified SERVQUAL approach. *Journal of Health Care Marketing*, 10, 47-55.
- Rust, R.T., and Oliver, R.L. (1994). Service quality: insights and managerial implications from the frontier. In Rust, R.T. & Oliver, R.L. (Eds), *Service quality: New directions in theory and practice*, 241-68.
- Sachdev, S. B., and Verma, H. V. (2004). Relative importance of service quality. *Journal of Services Research*, 4(1), 93-116.
- Söderlund, M. (1998). Customer satisfaction and its consequences on customer behaviour revisited. *International Journal of Service Industries Management*, 9(2), 169-88.
- Spreng, R.A., & Mackoy, R.D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, 72(2), 201-14.