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**REVIEW OF LITERATURE** 

**NEED/IMPORTANCE OF THE STUDY** 

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

FINDINGS

**RECOMMENDATIONS/SUGGESTIONS** 

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## CONSUMER SATISFACTION IN INDIAN CELLULAR INDUSTRY USING SERVICE QUALITY MODEL- AN EMPIRICAL ASSESSMENT

## DR. MANMATH NATH SAMANTARAY FACULTY MEMBER EXAMINATIONS DEPARTMENT THE FEDERATION OF UNIVERSITIES HYDERABAD

## ABSTRACT

Satisfaction is a major outcome of marketing activity and serves to link processes culminating in purchase and consumption with post-purchase phenomenon such as attitudinal change, repeat purchase and brand loyalty. It is a feeling, which a consumer gets from a process of evaluating what was received against that expected, the purchase decision itself and the fulfillment of needs and want. The key to consumer satisfaction lies in meeting these expectations. Expectations are created in the consumer mind from a variety of causes and reasons like past-experience, promotional claims, word-of-mouth and third party information. Kotler<sup>2</sup> also noted that satisfaction is a function of perceived performance and expectations that identifies feelings of a person resulting from comparing a products perceived performance in relation to his/her expectations. Consumer satisfaction is a multi-dimensional in nature and lies with multiple experiences with the service provider. This paper presents the results of a service quality gap study designed to measure consumers' expectation and perception of service quality in Indian cellular industry. SERVQUAL model, developed by Parasuraman et al. (1985-88), is the most widely used model for measuring the satisfaction gap, which is objective and quantitative in nature.

### **KEYWORDS**

Satisfaction, expectations, perceptions, consumer satisfaction, SERVQUAL model.

### **1. INTRODUCTION**

elecom has been one of the fastest growing sectors in India. Due to the explosive growth of telephone networks world over, there is a steep increase in the teledensity. With the unification of basic and cellular licenses, the number of mobile service players has leapfrogged. All the cellular service providers are fighting it out for subscriber base. Consumer satisfaction has been a buzzword for most firms that wish to create and keep a competitive advantage in today's highly competitive world.

Consumer satisfaction is a feeling which a consumer gets from a process of evaluating what was received against that expected. Consumer satisfaction for cellular mobile service providers are based on services provided by the operators. The price is nowhere seen as a tool for attracting and retaining consumer, which is at rock bottom. It is time for service providers to look at other determinants to consumer satisfaction for getting competitive edge. The determinants to consumer satisfaction are dependent on service provider's related attributes such as level of service and call charges, over charging by service providers and etc. The effect of product attributes can be moderated by individual consumer differences such as age, gender, education, occupation and consumers' expertise. In cellular market, there exist differences in buying criteria among different gender and age groups.

The rising expectations of the consumers, the explosion in availability and accessibility of technology and increasing pressure from competition is forcing service providers to take a serious look at the enigma, that is consumer. Consumer satisfaction has emerged as the new age mantra to keep the service users hooked to an organization's offering. Now, quality is an important factor in determining the overall competitiveness of the service-providers.

This paper presents the results of a service quality gap study designed to measure consumers' expectation and perception of service quality in Indian cellular industry. SERVQUAL model, developed by Parasuraman et al. (1985-88), is the most widely used model for measuring the satisfaction gap, which is objective and quantitative in nature.

## 2. INDIAN CELLULAR INDUSTRY

Till early 1990's, India had one of the most backward and stagnant telecom infrastructure facilities though telecommunications came almost at the same time as in other advanced countries. Telecommunication was ridden with ineffective government regulations and inadequate financial resources available and unaffordable for the common man.

In the last decade or so, the scene of Indian telecommunication sector has been changed. Indian telecommunication industry has been emerged as one of the fastest growing telecom markets in the world. India's present telephone network of 846.32 million lines is one of the largest in the world. Initially, Metros and A category circles, which include the circles of Maharastra, Tamilnadu, Karnataka and Andhra Pradesh, grew at a rapid pace. After NTP'99, action intensified in the B and C circles. NTP'99 led to the reduction in tariffs caused by the migration to the revenue sharing model and the falling prices of cellular handsets.

As in many developing countries, the telecom growth in India has also been witnessed due to growth in wireless subscriber base. The cellular segment began in 1994 with a few subscriber bases of around 17.4 million and has crossed 811.59 million at the end of March 2011. This has included subscriber base for both GSM and CDMA. Private operators who accounts for more than 85% of market share dominate the Indian cellular service market. The market share of the major mobile service providers are like Bharti (24.03%), Vodafone (18.87%), Idea/Spice (16.83%), Reliance (10.77%), BSNL (11.98%), Aircel (7.1%), Tata (6.75%) etc.

### **3. REVIEW OF THE LITERATURE**

Kennedy & Schneider (2000) stated that in the changing economy, knowledge is as important as product/service, which is becoming globally standardized. Companies gain competitive advantage through constant innovation; better targeting consumers and additional services. Consumer satisfaction has been an important aspect for every organization due to constant innovation in components or services. Kotler and Armstrong (1993) stated that consumer/customer satisfaction is determined by the relationship between the consumer's expectations and product's perceived performance.

Oliver (1999) defined, "Satisfaction as pleasurable fulfillment. Satisfaction is the consumer's sense that consumption provides outcomes against a standard of pleasure versus displeasure. It is judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumer-related fulfillment". Fe and Ikova (2004) added that the perception of the word "satisfaction" influences the activities, which a consumer conduct to achieve it. Researchers have also identified consumer satisfaction as a multi dimensional in nature and viewed overall satisfaction as a function of satisfaction with multiple experiences with the service provider. Tse and Wilton (1988) stated consumer satisfaction as the consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption.

Woodside et al (1989) found from the research study that consumer judgment of service quality is positively associated with overall satisfaction with the service encounter. The overall satisfaction varies with the service quality and consumer satisfaction. Overall consumer satisfaction with the service encounter is associated with behavioral intention to return to the same service provider. Now, quality is an important factor in determining the consumer satisfaction. Service quality and consumer satisfaction are important concept as a means of creating competitive advantages and consumer loyalty. According to Berry et al. (1997), service quality has become a significant differentiator and the most powerful competitive weapon, which all the service organizations want to possess.

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McCune (1989) suggested that due to increased public desire for improved services with the dramatic growth in the service industry, companies has led to assess quality of service for an increased consumer satisfaction. Service quality and consumer satisfaction are widely recognized as key influences in the formation of consumer's purchase intentions in service environment. From the study of Taylor and Baker (1994), it appeared that consumer decision-making which included the interaction of satisfaction and service quality provided a better understanding of consumer purchase intentions. Zeithaml et al. (1996) made attempts to understand the characteristics of services and what providers should possess in order to project a high quality service articulated by their consumers. They made a conclusion that consumers' provided service quality is a different concept from their satisfaction level and service quality can be known by measuring the gaps between consumers' expectations and their performance.

Cronin and Taylor (1992), however, argued that the conceptualization of service quality as a gap between expectations and performance is inadequate. According to them, the concept of satisfaction defined as a gap between expectations and performance of disconfirmation of expectations. Satisfying consumers is a challenge for any service company. Anderson et al. (1994) stated that when quality and expectations increase, there is a positive effect on consumer satisfaction in the long run, but increased expectations may have a negative impact in the short run. Expectations have a positive effect on consumer satisfaction in the long run because they capture the accumulated memory of the market concerning all past quality information and experience. Wisniewski (2001) found an overall conclusion from the study that SERVQUAL approach was conceptually attractive and operationally useful. It offered a cost-effective way of ensuring that services remained consumer-focused and helped to identify the gap between performance and consumer expectations about a service that resulted in improvement.

### 4. OBJECTIVES OF THE STUDY

- Based on the inputs from the various literature studies, a research study was carried out with the following objectives:
- 1. To give an overview of growth of cellular industry in India.
- 2. To find out the demographic characteristics of the cellular telephone use in Hyderabad city.
- 3. To determine consumer perceived service quality as a role for consumer satisfaction.

### **5. HYPOTHESIS**

The hypothesis that can be established from the research objectives is:

- There is a significant difference between average ratings of expectations and perceptions by the cell phone users.
- H0: There is no significant difference between average ratings of expectations and perceptions by the cell phone users.

Ha: There is a significant between average ratings of expectations and perceptions by the cell phone users.

### 6. RESEARCH METHODOLOGY

As satisfaction is basically a psychological state, therefore care should be taken in the effort of quantitative measurement. Parasuraman, Zeithaml and Berry between 1985 and 1988 provided the basis for the measurement of consumer satisfaction with a service by using gap between the consumer's expectation of performance and their perceived experience of performance. This has provided the way for measuring the satisfaction gap, which is objective and quantitative in nature. Therefore, in addition to consumer satisfaction model measurement, SERVQUAL was also used to measure the satisfaction gap. A structured and standardized questionnaire was used with 22-items SERVQUAL scale for measuring service quality. The items were measured on a 7-point Likert scale ranging from "strongly disagree" as 1 to "strongly agree" as 7. Out of 22-items, there were four items determined tangibility dimension, five items determined reliability dimension, four items determined responsiveness dimension, four items determined assurance dimension and five items determined empathy dimension.

For this study, present users of cell phone were only considered as respondents. A sample size of 305 respondents from Hyderabad city was interviewed. The researcher followed convenience sampling method because respondents who were seen using or have possession of mobile phones happen to be in right place at the right time (Jain and Hundal, 2006).

Data analysis is a significant function of the study. After the collection of data, it was processed with the help of computer. Data were processed with MS-Excel, which is essentially spreadsheet. But for managing quantum and type of data, SPSS (12.0) package was used to summarize and analyze the responses. Reliability analysis was tested using the Cronbach Alpha coefficient. Paired t-test was used to test whether any significant difference exists between average ratings of expectations and perceptions by the cell phone users.

## 7. RESULTS

## SERVICE PROVIDERS

There are many service providers available in the market and the consumers are using their services. The respondents were asked to indicate their service provider. It was seen that out of 305 surveyed who were current users of mobile services, 30.8% of respondents were using Vodafone services, followed by Airtel services (30.5%), BSNL (11.8%), Reliance (10.5%), Idea (10.2%) and Tatateleservices (6.2%).

#### DESCRIPTIVE STATISTICS

Vital socioeconomic parameters of interest were investigated to bring to the fore salient characteristics of the respondents. The key demographic characteristics of the consumers shows that 226 (74%) of cell phone users were male followed by female 79 (26%). 150 (49.2%) of the respondents were using cell phone services belong to less than 25 years age group, students comprised the maximum proportion 120 (39.3%) and 104 (34.1%) respondents were working in private sector. Dependent were 123 (40.3%) and 71(23.3%) were earning Rs. 10,000 to Rs. 20,000.

#### **RELIABILITY ANALYSIS**

A reliability analysis was performed to test the reliability and internal consistency of the research instrument used in this study. The internal consistency of each scale was quite high as shown in Table: 1. The Cronbach's Alpha coefficients range from 0.685 to 0.84, which were high. Nunnally (1978) suggested that for early stages of any research, the reliability of 0.50 to 0.60 is sufficient. He also recommended that instruments used in basic research have reliability of about 0.70 or better. Based on the results, the reliability of all value in the study found to be above the standard set by Nunnally. It was concluded that all scales behaved consistently.

	TABLE 1: RESULTS OF RELIABILITY ANALYSIS									
	SERVQUAL Dimensions	No. of Items	Cronbach's Alpha							
			Expectation	Perception						
	Tangible	4	0.685	0.765						
	Reliability	5	0.780	0.838						
	Responsiveness	4	0.801	0.803						
	Assurance	4	0.761	0.809						
Γ	Empathy	5	0.797	0.813						

Source: Primary Data

### SERVQUAL GAP MODEL

The result of study includes analysis of SERVQUAL gap, which is shown in Table: 2. Means and standard deviation scores are presented for cellular mobile subscriber respondent's expectations and perceptions. The mean scores ranged from 4.21 (Std. deviation = 1.271) to 5.29 (Std. deviation = 1.353), with an overall mean of 5.02 (Std. deviation = 1.353) for SERVEXP scale and mean of 4.56 (Std. deviation = 1.381) for SERVPERC scale. The total SERVQUAL score is negative (-0.458).

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SERVQUAL gap is the difference between the perception and expectation scores. It was found from the calculation that a negative gap showed that respondent's of service in cellular service industry were exceeding the respondent's perceptions. Expectations and perceptions scores were measured on a 7-point Likert scale on which the higher the number the better the expectation/perception about the service.

In the current competitive market, the service quality performance with comparison to consumer's expectation can lead to a satisfied consumer. The average ratings for expectations are higher than the average perception ratings in all dimensions of service quality. This results in a negative total consumer satisfaction gap. The less (more) consumer satisfaction gap reflects consumer is satisfied (dissatisfied) with the service. The widest gaps are those in the dimensions of assurance (-0.556) and empathy (-0.617). Consumers are more satisfied with the appearance of the service provider's physical facilities, equipment, personnel and communication materials, therefore the gap in the dimension of "tangibles" is the narrowest (-0.302). The result of the SERVQUAL model shows that the expectations of consumers are higher than their perception. The present study reveals a satisfaction gap of -0.458. The result of hypothesis showed that there is a significant difference between average ratings of expectations and perceptions by the respondents of cellular subscribers.

Items	Expectati	ons (SERVEXP Scale)	ale) Perceptions (SERVPERC Scale) SER			Paired Sample			
	Mean	Std. Deviation	Mean	Std. Deviation	P-E	t-Value			
1	5.08	1.25	4.74	1.346	-0.344	-3.805			
2	4.84	1.25	4.43	1.309	-0.407	-4.865			
3	4.82	1.114	4.55	1.138	-0.266	-3.431			
4	4.98	1.267	4.79	1.244	-0.190	-2.113			
5	4.82	1.508	4.50	1.426	-0.321	-3.363			
6	5.05	1.361	4.60	1.397	-0.452	-4.789			
7	4.93	1.431	4.61	1.401	-0.328	-3.523			
8	5.28	1.402	4.56	1.506	-0.721	-7.683			
9	5.11	1.449	4.70	1.519	-0.407	-4.127			
10	5.08	1.284	4.71	1.467	-0.364	-4.029			
11	4.97	1.410	4.72	1.330	-0.252	-2.616			
12	5.11	1.434	4.61	1.431	-0.502	-5.468			
13	4.71	1.592	4.36	1.462	-0.357	-3.355			
14	4.98	1.375	4.49	1.313	-0.495	-4.980			
15	5.24	1.293	4.61	1.410	-0.630	-6.502			
16	5.14	1.28	4.56	1.375	-0.574	-6.077			
17	5.29	1.313	4.75	1.420	-0.531	-5.733			
18	5.03	1.345	4.34	1.420	-0.689	-7.860			
19	5.07	1.387	4.40	1.461	-0.675	-6.520			
20	4.92	1.376	4.21	1.271	-0.711	-7.276			
21	5.03	1.256	4.47	1.350	-0.561	-5.675			
22	5.06	1.398	4.61	1.396	-0.449	-4.766			
Overall SERVQUAL Gap = -0.458									

#### **TABLE 2: SHOWING SERVICE QUALITY GAP**

### 8. CONCLUSIONS AND SUGGESTIONS

As the consumer satisfaction gap found to be narrow, it was found that most of the mobile users were satisfied with the service provider's physical facilities, equipment, technology, personnel and communication materials. Since most of the users were young, they felt the technology and infrastructure should be improved to provide quality service. Most of the user's felt that the service provider should mention the cost of providing service clearly in the brochure to avoid confusion. Service is intangible in nature. This issue should be taken care of by the service providers. Tangibility of service has impact on consumer satisfaction. So to ensure better tangibility of services, service providers has to ensure that the brochure containing information should be appealing and informative in nature and also materials associated with the service are in keeping with the type of services provided to the consumers.

Most of the mobile users felt that to increase the satisfaction level, the service providers should have ability to perform the promised service and priority to resolve problems. It was also observed that users were unhappy about the long waiting hours in resolving problems by the service provider's employees. All these factors accounted for larger negative service gap.

There were some users who expressed their dissatisfaction as for not getting information on the type of service facilities that are provided for the costs incurred at the time of activation of their mobile number. Some users felt that employees of the service provider are neither busy nor willing to help consumers. Therefore, the employees of the service provider should emphasize on the responsiveness.

In the personal interviews with mobile users, it was found that most of the consumers were unhappy with the customer care representative's response towards resolving a problem. The knowledge and courtesy of the service providers' employees and their ability to convey trust and confidence on consumers will result in narrowing the negative gap. The customer care department should emphasize more on providing prompt response to any problem of the consumers. Assurance should be given extra care because in telecommunication service, consumers seek for confirmation that his/ her problem is going to be performed as promised. Consumers need to be assured about uninterrupted service. If bills are paid or recharged in case of prepaid users, mobile should be connected within a very short time, any kind of discrepancy can affect consumer satisfaction as well as the trust of the subscribers on the company.

Cellular mobile market in India is getting more competitive, therefore, firms expecting to build and maintain competitive advantages in the market, according to the result of the study, must try their best to achieve higher consumer satisfaction and improve service quality. Service providers must pay attention to and invest more on consumer relationship management programs for their consumers to survive in the market. Service providers' priority should be to identify the most important factors in assessing service quality. Service support is an important quality element for achieving high consumer satisfaction level. Problems can happen in the service provision process, service providers should build an efficient service supporting system to resolve the problems quickly and sufficiently based on consumer's inconvenience. Employees who are involved in providing service should be provided with adequate training in order to offer a consistently high standard of service delivery.

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Source: Primary Data

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