

## EMPIRICAL ANALYSIS OF SERVICE QUALITY AND CUSTOMER SATISFACTION IN TELECOMMUNICATION SERVICE PROVIDER

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### ABSTRACT

Using the SERVQUAL model, this study aimed to examine the impacts of reliability, responsiveness, assurance, empathy and tangible and perceived network quality aspects on customer satisfaction. A total of 100 current users of a GSM provider participated in this study. Correlation analysis was used to determine the perceived importance and satisfaction on each dimension of service quality, and regression analysis is used to test the hypothesis. Results indicated that responsiveness and tangibility positively influenced customer attitudes in terms of satisfaction.

**KEYWORDS:** Service quality, customer satisfaction, telecommunication, perceived network quality, Service Provider.

### 1. INTRODUCTION

Telecommunication service providers (TSPs) are of paramount importance to both developed and emerging economies. In India, TSPs are projected to contribute greatly to the national goal of achieving status as a developed nation by the year 2020. With stiff competition between three providers of Global System for Mobile Communications (GSM), customer satisfaction is a necessity for survival in the market. At the same time, Indians are becoming equipped with necessary knowledge about quality service delivery. Many telecommunication service providers in India offer various products and services in the market. TSPs have to compete with each other to ensure optimal customer satisfaction in terms of products or services. Quality is generally regarded as being a key factor in the creation of worth and in influencing customer satisfaction. Hence, the telecommunication industry in India has to be strategically positioned to provide quality services to

satisfy customers. To provide improved quality service, telecommunication companies need to investigate degree of customers' sensitivity and expectations toward service quality. Armed with such information, telecommunication outfits are then able to strategically focus service quality objectives and procedures to fit the Indian market. The purpose of this study was to examine the impact of several product and service delivery factors on reported levels of service quality with various GSM providers.

## **2. LITERATURE REVIEW**

### **2.1. IMPORTANCE OF SERVICE QUALITY**

Service quality can be described as a rationale of differences between expectation and competence along the important quality dimensions. Parasuraman, Zeithaml and Berry [1] identified ten requirements useful for customers' evaluation of the quality of services: reliability, responsiveness, tangibles, communication, credibility, security, competence, courtesy, understanding the customers and service accessibility. Zeithaml, Parasuraman, and Berry [2] proposed a service quality scale (SERVQUAL), a generic instrument that has 5 dimensions of service quality: reliability, responsiveness, assurance, empathy and tangibles, the constructs were found to have high correlation. This instrument continues to be widely used in marketing studies of customer satisfaction and consumer preference [3], despite some argument that other models may be better [4] [5] [6] and [7].

The stage of performance that a top quality service will need to give was conditioned through the expectation of the customers. Service quality is judged low when the performance was below expectation. The SERVQUAL model is a common diagnostic tool used to measure customer service and perceived satisfaction. Reliability is the service company ability to deliver promises on time. In this study we focused on five factors that could predict the quality of the service provided by the investigated telecommunication service provider. Responsiveness is the degree to which customers perceive service providers' readiness to assist them promptly. Assurance is the degree of courtesy of service providers' workers and their ability to communicate trust to customers. Empathy is the care and importance the service provider gives to an individual customer, and the degree to which specific customer needs and preferences can be understood and articulated. Lastly, tangibility is the evidence of facilities, personnel, and communication materials used by the company while offering services to customers [2] [8].

### **2.3. CUSTOMER SATISFACTION**

Customer satisfaction is a personal feeling of either pleasure or disappointment resulting from the evaluation of services provided by an organization to an individual in relation to expectations [13]

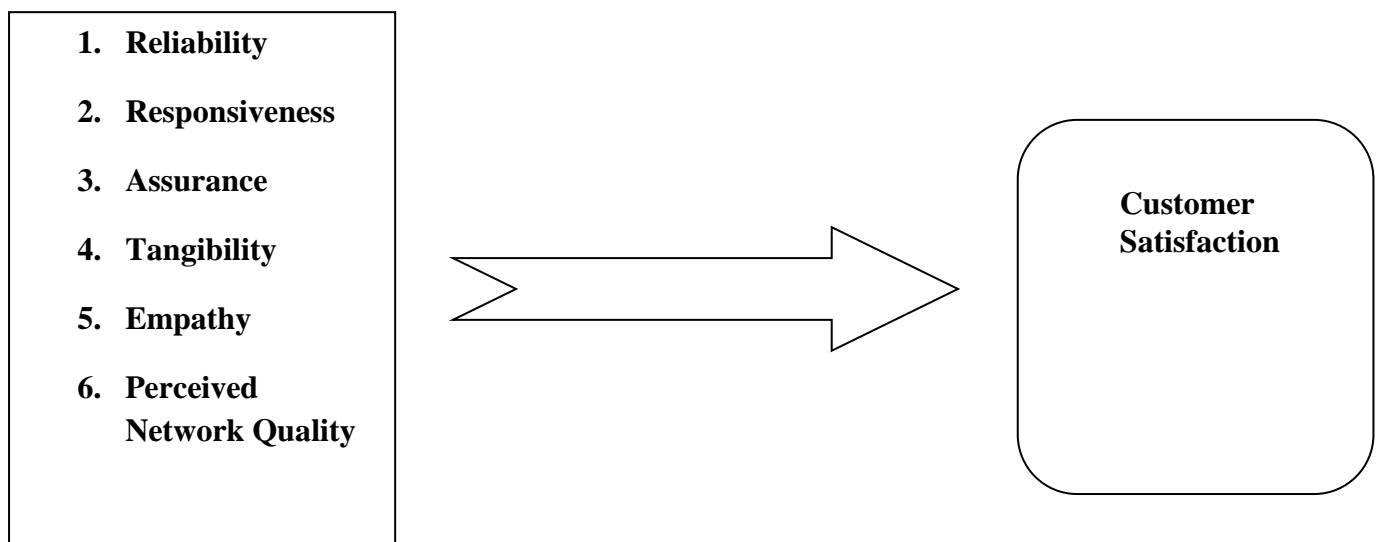
[14]. Service providers frequently place a higher priority on customer satisfaction, because it has been seen as a prerequisite to customer retention. As a positive outcome of marketing activities, high customer satisfaction leads to repeat visitation to stores, repeat product purchases, and word-of-mouth promotion to friends [15] [17], while low customer satisfaction has been associated with complaining behavior [19]. A satisfied customer often stays loyal longer, and is likely to patronise the firm in future [3]. Customer satisfaction can be conceptualized as either transaction-specific satisfaction or cumulative satisfaction [20]. Transaction-specific satisfaction is a customer's evaluation of her or his experience and reactions to a specific company encounter [21]. Cumulative satisfaction refers to customers overall evaluation of patronage experience from inception to date [22].

### 3. METHODOLOGY

#### RESEARCH MODEL AND HYPOTHESES

The aims of this study are twofold: First, using SERVQUAL model, we examined significant differences in the six service quality dimensions (tangibility/physical aspects, reliability, responsiveness, assurance, empathy and perceived network quality) by evaluating customers' satisfaction of the GSM telecommunication firm. Secondly, we examined the impact of the six service quality dimensions on customer perceptions of service delivered by the firm (see Fig. 1).

**Fig. 1: Research Framework**



The Six hypotheses are as follows:

*H1: Tangibility will have a significant impact on Customer Satisfaction*

*H2: Reliability will have a significant impact on Customer Satisfaction*

*H3: Responsiveness will have a significant impact on Customer Satisfaction*

H4: Assurance will have a significant impact on Customer Satisfaction

H5: Empathy will have a significant impact on Customer Satisfaction

H6: Perceived Network Quality will have significant impact on Customer Satisfaction

#### 4. DATA ANALYSIS AND RESULTS

##### 4.1. DEMOGRAPHIC PROFILE

Table1: Demographic Profile

Variables		Frequency	Percentage
Age	18-24	95	94.1
	25-34	6	5.9
Gender	Male	27	26.7
	Female	74	73.3
Profession	Businessman, Agriculturalist, Government Employee /Private Employee	4	4
	Public, Housewife, Student, Any Other (specify)	97	96
Service Provider	Reliance Jio	8	7.9
	Idea	3	3
	Vodafone	24	23.8
	BPL Mobile	2	2
	Tata Indicom	9	8.9
	Airtel	21	20.8
	Aircel	25	24.8
	BSNL		
Connection	Postpaid	27	26.7
	Prepaid	74	73.3

##### 4.2. RELIABILITY

Cronbach's alpha reliability analysis was conducted on the independent variables in order to determine the reliability of the instrument used. Nunnally [23] has suggested 0.70 as the acceptable level for reliability Measure. Alpha values ranged from 0.727 to 0.770, thus indicating an acceptable level of reliability (see Table 1).

**Table 2: Reliability Analysis**

Service Quality Dimensions	Cronbach's Alpha
Tangibility/ Physical aspects	0.758
Reliability	0.770
Responsiveness	0.742
Assurance	0.727
Empathy	0.757
Perceived network quality	0.769
Customer satisfaction	0.630

#### 4.3 HYPOTHESIS TESTING: PERCEIVED SERVICE QUALITY DIMENSION AND CUSTOMER SATISFACTION

The regression results reported in Table 3 showed that the five perceived service quality dimensions explained 88% of the customer satisfaction towards the GSM telecommunication firm, thereby confirming the fitness of the model. We found out that responsiveness has the strongest effect on the customer satisfaction ( $\beta=1.032$ ,  $p<0.01$ ), followed by tangibility ( $\beta=0.005$ ,  $p<0.01$ ). However, responsiveness aspect was found to be highly significant towards customer satisfaction.

**Table 3: Hypothesis Testing Results (n=100)**

Hypothesis	Path	B	SE B	$\beta$	Sig
H1	TANG – CS	0.006	0.047	0.005	0.899
H2	REL – CS	-0.021	0.031	-0.043	0.508
H3	RES – CS	0.848	0.050	01.032	0.000**
H4	ASSU – CS	-0.102	0.048	-0.103	0.036
H5	EMP – CS	-0.014	0.031	-0.019	0.660
H6	PNQ – CS	-0.022	0.032	-0.027	0.493

Note: TANG=Tangibility/Physical aspects; REL=Reliability; RES=Responsiveness; ASSU=Assurance; EMP=Empathy; CS=Customer Service

Note:  $p < 0.01$  \*\*

#### 4.4 PEARSON CORRELATION RESULTS

Table 4: correlation results

Pearson correlation	Reliability	Assurance	Empathy	Tangibility	Perceived network quality	Responsiveness
Reliability	1000.00	<b>0.587</b>	0.439	0.485	0.447	<b>0.799</b>
Assurance		1000.00	0.494	<b>0.532</b>	0.378	0.442
Empathy			1000.00	0.382	0.349	<b>0.485</b>
Tangibility				1000.00	0.259	0.459
Perceived network quality					1000.00	0.367
Responsiveness						1000.00
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

The correlation results reported in the table 3 shows the closeness between the variables, some of the highly correlated variables are reliability and assurance (0.587), assurance and tangibility (0.532), reliability with responsiveness (0.799), empathy with responsiveness (0.485).

These correlation results the strong influences with each other, the strongest correlation identified is reliability which is highly influenced by responsiveness seen earlier in regression, and this result can be considered for cross verifying regression analysis also.

#### 5. DISCUSSION AND CONCLUSION

In the above study the dimensions like responsiveness, reliability, perceived network quality, assurance, empathy, are considered as independent variables, whereas customer satisfaction is considered as dependent variable .the percentage at which these independent and dependent variables fit each other is indicated by model summary, where it is given as 88%.When it comes to dimensional influence of customer satisfaction it is responsiveness stands first. The next service quality dimensions which influence customer satisfaction are tangibility.

Other dimensional aspects like reliability, assurance, empathy, perceived network quality are less influential. Customers give least importance or do not consider these factors when it comes to exhibiting their satisfactory level. These service quality dimensions also have negative effects in influencing the customer satisfaction. The regression results indicate if the employees or the company concentrate in the insignificant aspects it will not influences customer satisfaction or will

not have positive effect on them. So these results indicate company should focus on improving responsiveness and tangibility rather than focusing other dimensions.

#### **6. DIRECTION FOR FURTHER RESEARCH**

As the present research examined service quality factors in a single area, additional studies need to be undertaken to examine customer satisfaction patterns in other regions and with larger samples. Nevertheless, we would argue that our findings provide additional insight into customers' perceived satisfaction within the telecommunications domain. Results of this study should encourage strategy development for superior service quality management particularly in the areas of assurance, empathy and perceived network quality. Training Programs should be tailored to equip staff with necessary skills to better serve the customers and ultimately to remain competitive in the market.

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