ISSN NO.2395-0692
IJAHMS International Journal of Arts, Humanities and Management Studies

An Assessment of Services of Cell-phone Service Providers' by Utilizing the SERVQUAL Model: A Study of Valsad District

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ABSTRACT:
To measure service quality of cell-phone service providers in Valsad district, SERVQUAL model has been applied. 232 respondents have been taken by applying convenience method. Data has been analyzed by adopting factor analysis and one-sample t-test. From the analysis, it has been concluded that the cell phone service providers provide a good service in Valsad District. Moreover, it has been found that assurance is the most important service quality dimension.

KEYWORDS: *Service Quality, SERVQUAL Model*

1. INTRODUCTION

Service quality is increasingly recognized as being of key strategic value by organizations in both the manufacturing and service sectors (Lewis et al., 1994). Competition has prompted firms to be more concerned with the quality of their service delivery, and cellular telecommunications sector is no exception. During the past few decades, service quality has become a major area of attention by practitioners, managers and researchers owing to its strong impact on business performance, costs, customer satisfaction, customer loyalty and profitability (Leonard and Sasser, 1982; Cronin and Taylor, 1992; Gummesson, 1998; Silvestro and Cross, 2000). As a result, there has been continued research on definitions, modeling, measurements, data collection procedures, data analyses etc. According to Brown (1992), customers prefer organizations that deliver higher service quality, and suppliers can charge a premium for superior service qualities.

2. REVIEW OF LITERATURE:

Parasuraman et al. (1985) determined that consumers access service quality using criteria which can be grouped into ten dimensions: Tangibles, Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, and Understanding/Knowing the customer. Further "purification" of the criteria eventually led Parasuraman et al. (1988) to reduce the dimensions to five: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. In essence, the "purification" process combined seven of the original ten dimensions to create the Assurance and Empathy dimensions. Specifically, the Communication, Credibility, Security, Competence, and Courtesy dimensions were combined to create Assurance, while the Understanding and Access dimensions were combined to create Empathy. Parasuraman et al. (1988) called this final version of their instrument SERVQUAL. They proposed that it be used by retailers to better understand the service expectations and perceptions of consumers and,

consequently, to improve their level of service quality. While being widely accepted, the SERVQUAL model has also received criticism

3. RESEARCH PROBLEM

The idea is that to understand the needs of customers as well as the changes in their needs over the time would allow cell phone service providers to become more customer focused and hence remain profitable over the time. It is a big question for cell phone service providers to have loyal consumers. If the companies want loyal consumers; they should know what they want from them. Companies must have to provide quality in service to attract more and more consumers. And to provide qualitative service, they must know which factors affect to the good service and which service customers want from them.

Keeping in view of the above, the attempt to assess cell-phone service providers' service quality using the SERVQUAL model with reference to Valsad District.

4. OBJECTIVES OF THE STUDY

1. To measure Service Quality using the SERVQUAL model.
2. To find out the most important dimension among SERVQUAL model.

5. METHODOLOGY

This study is exploratory and descriptive type in nature. The data has been collected by framing a questionnaire. Total 232 samples have been collected from Valsad District. Factor Analysis and one-sample t-test have been applied to analyze the data.

6. LIMITATIONS

1. The study is limited to Valsad district only.
2. Results are based on the respondents' view. So it has been assumed that they provide their feed back without biasness.

7. ANALYSIS AND INTERPRETATION

7.1 Exploratory Factor Analysis

KMO and Bartlett's Test:

An exploratory factor analysis has been run with 22 Variables to purify that the Variables (statements) regarding Service Quality taken by the researcher are suitable or not? The results are shown as under.

Table No. 1.1 KMO and Bartlett's Test

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.875

ISSN NO.2395-0692
IJAHMS International Journal of Arts, Humanities and Management Studies

Bartlett's Test of Sphericity	Approx. Chi-Square	3.601E3
	df	231
	Sig.	.000

The KMO measure of sampling adequacy 0.875 indicates that the present data are Suitable for factor analysis. Similarly, Bartlett's test of sphericity is 0.00 ($P < 0.01$) which is significant at the level, which means that factor analysis could be performed on this study, indicating that the scale is usable.

Communalities

Table No. 1.2 Communalities

Communalities		
	Initial	Extraction
They are well present. (Tangible)	1.000	.819
They are never too busy to respond to your request.	1.000	.687
They understand your problems.	1.000	.795
They are capable to solve your problems.	1.000	.758
Solutions to problems are appropriate.	1.000	.716
They keep their promises in time. (Reliability)	1.000	.656
They handle your problems sincerely.	1.000	.745
You can fully depend on them.	1.000	.730
They maintain accurate record of your service usage.	1.000	.744
They perform the service right the first time.	1.000	.720
They tell you exactly when service will be performed. (Responsiveness)	1.000	.731
They provide service without delay.	1.000	.835
They are always willing to help you.	1.000	.753
They give their customer short waiting time or fast service rotate.	1.000	.705
They are honest. (Assurance)	1.000	.736
Their behavior fills confidence in their customers	1.000	.806
They are consistently polite with their customers.	1.000	.780
The company provides support so they can perform their job well.	1.000	.771
They give individual attention on you. (Empathy)	1.000	.883
They understand your specific needs.	1.000	.801
They keep you informed about services.	1.000	.507
They have their customer best interest in heart.	1.000	.866
Extraction Method: Principal Component Analysis.		

ISSN NO.2395-0692
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Table no.1.2 shows that all variables are having values more than 0.50, which indicate that all the variables are fit well. Variable no.1 stands with highest initial value (0.883) and variable no. 19 stands with lowest initial value (0.507).

Extraction Method: Principal Component Analysis

Table No. 1.3 Total Variance Explained

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.184	41.746	41.746	9.184	41.746	41.746	3.729	16.949	16.949
2	2.564	11.656	53.402	2.564	11.656	53.402	3.355	15.251	32.200
3	2.115	9.612	63.014	2.115	9.612	63.014	3.344	15.198	47.398
4	1.617	7.350	70.364	1.617	7.350	70.364	3.099	14.084	61.482
5	1.067	4.849	75.213	1.067	4.849	75.213	3.021	13.731	75.213
6	.693	3.149	78.361						
7	.620	2.817	81.178						
8	.580	2.636	83.815						
9	.534	2.430	86.244						
10	.418	1.902	88.146						
11	.350	1.589	89.735						
12	.337	1.533	91.269						
13	.329	1.495	92.764						
14	.285	1.297	94.061						
15	.232	1.056	95.117						
16	.224	1.017	96.134						
17	.204	.929	97.063						
18	.175	.796	97.859						
19	.144	.656	98.516						
20	.126	.572	99.087						
21	.110	.499	99.586						
22	.091	.414	100.000						
Extraction Method: Principal Component Analysis.									

The total variance explained by principal components is displayed in Table -1.3. It indicates that there is a significant drop in the Eigen values from the fifth component onwards. Hence, the first

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IJAHMS International Journal of Arts, Humanities and Management Studies

five components (factors) in the initial solution have an Eigen values over 1 and they account for about 75.213 percent of the observed variation. According to Kaiser Criterion, only the first five factors should be used because subsequent Eigen values are all less than 1.

Rotated Component Matrix

Table No. 1.4 Rotated Component Matrix[a]

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
They are well present. (Tangible)	.875				
They are never too busy to respond to your request.	.779				
They understand your problems.	.799				
They are capable to solve your problems.	.747				
Solutions to problems are appropriate.	.673				
They keep their promises in time. (Reliability)		.553			
They handle your problems sincerely.		.713			
You can fully depend on them.		.775			
They maintain accurate record of your service usage.		.799			
They perform the service right the first time.		.663			
They tell you exactly when service will be performed. (Responsiveness)				.765	
They provide service without delay.				.845	
They are always willing to help you.				.754	
They give their customer short waiting time or fast service rotate.				.695	
They are honest. (Assurance)			.800		
Their behavior fills confidence in their customers			.830		
They are consistently polite with their customers.			.830		
The company provides support so they can perform their job well.			.810		
They give individual attention on you. (Empathy)					.883
They understand your specific needs.					.890
They keep you informed about services.					.529
They have their customer best interest in heart.					.869
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Factor loadings are used to measure correlation between variables and the factors. A loading close to 1 indicates a strong correlation between a variable and the factor, while a loading closer

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IJAHMS International Journal of Arts, Humanities and Management Studies

to zero indicates weak correlation. Unrotated solutions of factor loading are not suitable for interpretation purpose since the variables generally tend to load on multiple factors.From the table no.1.4, it has been found that all the 22 variables are divided into five components.

7.2 Importance of Service Quality Dimension

In order to identify the important and unimportant dimensions, a one sample t-test has been applied with a cut-off point three (3). The results are summarized in table no.

H_0: $\mu < 3$, Dimension is not important

H_1: $\mu \nless 3$, Dimension is important

Table No. 1.5 One-Sample Test

One-Sample Test

Test Value = 3

	t	N	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Mean	Importance	Rank
						Lower	Upper			
Tangible	-.732	211	210	.465	-.04265	-.1575	.0722	2.9573	Not Important	5
Reliability	5.077	211	210	.000	.28910	.1768	.4014	3.2891	Important	4
Responsiveness	7.153	211	210	.000	.46090	.3339	.5879	3.4609	Important	2
Assurance	7.496	211	210	.000	.501185	.36939	.63298	3.50118	Important	1
Empathy	5.026	211	210	.000	.30450	.1851	.4239	3.3045	Important	3

A summary of descriptive statistics is presented in Table no.1.5. It indicates that four dimensions have a mean more than three (3) while only one has a mean less than three (3). It also indicates that all dimensions excluding Tangible are significant ($p \leq 0.05$). All these dimensions of service quality have positive mean difference and confidence intervals, and so it rated as important to subscribers. But only tangible is not significant ($p > 0.05$). Moreover it has negative mean difference and confident intervals so it is unimportant to the subscribers. It means that all the dimensions excluding Tangible are important to subscribers in receiving the services of cell phone service providers in Valsad.

8. CONCLUSION

From the analysis, it has been concluded that the cell phone service providers provide a good service in Valsad District. Moreover, it has been found that the most important service quality

dimension to the scribers is Assurance followed by Responsiveness, Empathy and Reliability, being least important. Tangible dimension as earlier indicated is unimportant to the customers.

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