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Service Quality and Customer Satisfaction: Evidence from Pakistan Telecom Sector

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Abstract:

Modern technology shift has enlarged the competition domain and broadened the choice of value-added services offered by the telecom service providers. Telecom sector differs from other service sectors on several grounds but the foremost is the customer switch out rate, which is much higher in telecom sector than any other service sector. Cellular companies need to enhance the quality of services to retain customers for a longer period of time. The purpose of this study is to identify the relationship between service quality and customer satisfaction in telecom sector of Pakistan. Frequency, descriptive analysis, correlation analysis and multiple regression analysis were applied on the data and the results revealed that privacy, empathy, services offered and reputation having the positive and significant relationship with customer satisfaction while reliability, assurance and tangibility do not have positive and significant relationship with customer

satisfaction in telecom sector within the region of Lahore, Pakistan. The results also suggest to the telecommunication companies to providing the better services to their customers while keeping the variables used in this study.

Key words: Service quality, Customer satisfaction, Customer perception, Customer expectations.

1. Introduction

It is desirous for every organization to have long life and success. Various factors have potential to contribute to the success of organization. It is not only the profit which adds to the success of organization but it is also important to satisfy all stakeholders. Among all stakeholders, customers are considered most important. To retain and attract new customers is the life blood of organizations. During last two decades, the service oriented industry has become more popular and it has comprised a prime area of the world economy. In the late 20th century, three forces which are transport, television and telecommunication, are considered as driving forces of economic integration. Telecommunication services are viewed as a key tool needed for the rapid growth and modernization of various sectors of economy. Economy has to face various obstacles in the absence of a sound telecom system.

Many companies related to telecommunication sector are identifying, implementing and evaluating different marketing strategies to retain and attract new customers. Quality and customer satisfaction plays a vital role in the success, profitability and survival of the organization. There is a direct relation between quality and customer satisfaction as these two concepts have been linked to customer behavioral intentions as loyalty to that specific product, referral, and willingness to spend for that product. (Olsen, 2002)

Competitive advantage through outstanding service quality is an important weapon for the long life of business in different sectors of industry and this trend is increasing day by day. Restaurant is an important area but usually it is neglected. However this industry has not been exempted from the consideration of increased competition. The restaurant industry is experiencing a dramatic transformation process in Malaysia. (Kivela, Inbakaran, & Reece, 1999)

A study conducted by Reichheld & Sasser (1990) told that close connection between customer retention and profiability. According to Kaplan & Norton (2001), there is a strong advocacy for taking customer retention as one of key performance symbols.

In Pakistan, competition in cellular companies is very tough as the number of players in this industry is few and they can't compromise on even a single element of performance. To ascertain differentiation in the performance of companies, quality is the most distinctive measure. This study aims to enquire the relationship between service quality and customer satisfaction in accordance with the elements of service quality presented by (Parasuraman, Zeithaml, & Berry, 1988).

1.1 Objectives of the Study

1. To analyze the relationship between service quality and customer satisfaction.
2. To analyze the developments and improvements followed by the telecommunication sector to increase the customers satisfaction.
3. To examine the satisfaction level of customers on the basis of service quality provided by telecommunication sector.
4. To examine the most influential variables in term of service quality.

2. Literature Review

The telecom services are considered as a significant tool for socio-economic development for any nation. Various sectors of the economy require these support services for their rapid growth and modernization. In the absence of a sound telecom network system, an economy becomes disabling. The quality of services is directly proportional to the customer satisfaction.

Loke, Taiwo, Salim, & Downe, (2011) used SERVQUAL model for their study to check the influence of reliability, empathy, responsiveness, tangible and assurance on customer satisfaction. They used the regression analysis and the results revealed that responsiveness, empathy, reliability and assurance having positive relationship with customer satisfaction. They also used t-test and show that there is a gap between importance and perceived satisfaction. Parasuraman and his companions developed a conceptual model regarding service quality. They identified ten measures which are tangible, reliability, responsiveness, competence, courtesy, credibility, Security, access, communication, and understanding the customer to measure service quality.

The study indicated that the variations between expected performance and perceived performance of these ten measures overall service quality. The limitation of this concept is that it does not determine any particular service industry. Later, this concept was revised and service quality was perceived as *"a global judgment, or attitude, related to the superiority of the service"* (Islam & Ali, 2011).

Ojo (2010) conducted study aimed at exploring the relation between service quality and customer satisfaction with a target on MTN (Mobile Telecommunication Network) Nigeria. The population of his research consisted of 230 respondents and research questions and objectives were formulated and tested. Regression analysis and correlation coefficient were used in testing their hypothesis. The study found positive relationship between quality of services and customer satisfaction. The

researcher wrapped up the research with a recommendation that the organizations should pay attention on quality of services because of its impacts on customer satisfaction. Organizations should appreciate suggestions from the customers and should design new programmes to determine quality of services and customer satisfaction.

2.1 Service Quality:

The term quality is defined by different people in different ways as the definition of service quality may differ from situation to situation or person to person. However the variance in the definition of service quality is only in wording but typically the concept is same. The definitions of service quality involve determining whether the perceived service delivery meets the expectations of customers or not. In this study the dimensions which are taken as service quality are reliability, assurance, tangibility, privacy, empathy, services offered and reputation.

2.1.1 Service quality Gap

A gap is defined as a variation or difference between perception of customers about firm's performance and customer's expectation.

Service Quality (SQ) = Customer's Perception (P) – Customer's Expectations (E)

A comparison of Customer's Expectation (E) regarding services that should be offered by the organization versus Customer's Perceptions (P) about performance which is actually provided by the service organization is termed as Service Quality (SQ).

Managing quality of services targets at the management of gaps perceptions and expectations of customers. The objective of the firm is to reduce the gap between customer's perceptions and expectation (Loke, Taiwo, Salim, & Downe, 2011).

2.2 Customer Satisfaction

Customer satisfaction can be defined as a personal feeling of a customer of either contentment or disappointment found by evaluation provided services by the organization to a specific particular in relation to his expectations. Service providers pay a great attention on customer satisfaction to achieve customer retention. Customer satisfaction results in loyalty of customers. High satisfaction of customers escorts to the repetition of product purchase and visitation to stores. On the other hand low customer's satisfaction leads to complaining behavior (Loke, Taiwo, Salim, & Downe, 2011).

Anderson, Fornell, & Lehmann (1994) found that service industry is dependent on continual cycle of repurchare. Therefore, customer's retention demands hard work and efforts by the organizations. Chen (2008) revealed that there is a significant and positive effect of perceived value of services and customer satisfaction on behavioral intentions to use that product in future.

3 Conceptual Model and Development of Hypothesis

The variables of the model is borrowed from different studies conducted in past. "Reliability", "Assurance" and "Empathy" are taken from (Ahmad, et al. 2010) while "Tangibility", "Reputation" and "Services offered" are taken from (Islam & Ali, 2011) and the variable named "Privacy" is taken from the (Sakhaei, Afshari, & Esmaili, 2013).
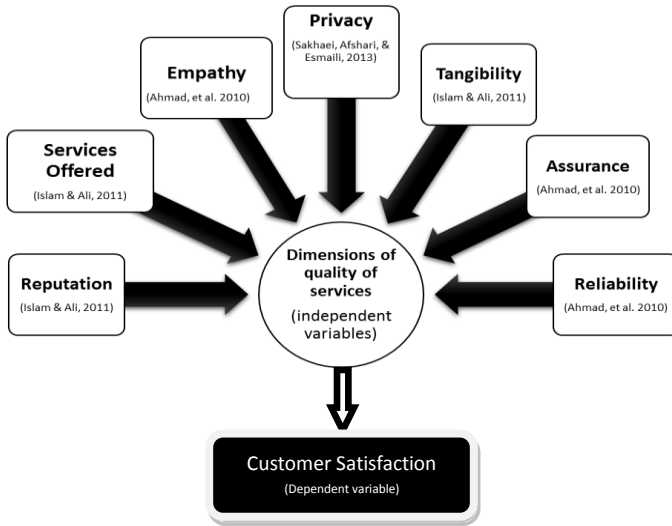
Figure 1 (Variables of model adopted from different studies)

- Reliability------means to provide promised services.
- Assurance-----refers to credibility, guarantee and security to customers by organization's employees using their knowledge.
- Tangibility-----define the physical attributes.
- Privacy-------refers to state of being secure in terms of personal data.
- Empathy-----capacity to grasp and share feelings of customers.
- Services offered-----facilities offered by the organization.
- Reputation---Good will and positive image among customers and organization.

3.1 Hypothesis of study

On the bases of literature review the following hypothesis are developed.

H_0: There is no positive and significant relationship between reliability and customer satisfaction in telecom sector.

H_1: There is a positive and significant relationship between reliability and customer satisfaction in telecom sector.

H_0: There is no positive and significant relationship between assurance and customer satisfaction in telecom sector.

H_2: There is a positive and significant relationship between assurance and customer satisfaction in telecom sector.

H_0: There is no positive and significant relationship between tangibility and customer satisfaction in telecom sector.

H_3: There is a positive and significant relationship between tangibility and customer satisfaction in telecom sector.

H_0: There is no positive and significant relationship between privacy and customer satisfaction in telecom sector.

H_4: There is a positive and significant relationship between privacy and customer satisfaction in telecom sector.

H_0: There is no positive and significant relationship between empathy and customer satisfaction in telecom sector.

H_5: There is a positive relationship between empathy and customer satisfaction in telecom sector.

H_0: There is no positive and significant relationship between services offered and customer satisfaction in telecom sector.

H_6: There is a positive and significant relationship between services offered and customer satisfaction in telecom sector.

H_0: There is no relationship positive and significant between reputation and customer satisfaction in telecom sector.

H_7: There is a positive relationship between reputation and customer satisfaction in telecom sector.

4. Methodology

This research is based on the primary data collected from youth as majority of mobile users comprise youth. A structured questionnaire was used for collection of data from Lahore and Pakpattan Cities, as an instrument. A 5 point likert scale is used to measure the willingness of respondents. This scale includes 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. Out of 120 respondents from Lahore and Pakpattan were selected and 100 questionnaires

were received back as a response with a response rate 83%. Questions in questionnaire was adopted from different studies conducted in past which were suitable for measuring the customer satisfaction in telecom sector.

5. Results and Interpretation

Demographic Variables

Five questions were used to determine the personal and demographic characteristics of respondents, in the questionnaire. These characteristics are analyzed as following:

Table 1

Variables		Frequency	Percentage
GENDER	Male	18	18.0
	Female	82	82.0
	Total	100	100.0
QUALIFICATION	Matriculation	2	2.0
	Intermediate	8	8.0
	Graduation	43	43.0
	Master	47	47.0
	Total	100	100.0
AGE	Under 20	38	38.0
	20-24 years	57	57.0
	25-28 years	2	2.0
	More than 28	3	3.0
	Total	100	100.0
CELLULAR COMPANY	Ufone	40	40.0
	Warid	18	18.0
	Telenor	23	23.0
	Mobilink	13	13.0
	Zong	6	6.0
	Total	100	100.0
SINCE HOW LONG YOU USE?	Less than 1 year	8	8.0
	1-2 years	29	29.0
	3 or more years	58	58.0
	Missing Value	5	5.0
	Total	100	100.0

Of 100 respondents, 82(82.0%) were female and 18(18.0%) were male. Majority of respondents were found holding a master's level degree. Most of the respondents were between 20-24 years old which shows that most of the respondents were young. Majority of respondents (40%) were found using Ufone as cellular company. 58% youngsters were using the related cellular company since 3 or more years. SPSS version 15.0 was used to analyze the data and the tests which were applied to check the hypothesis of the study are as following: correlation and multiple regressions analysis.

Descriptive Statistics

Table 2

Variables	N	Mean
Reliability	100	3.5150
Assurance	100	3.6200
Tangibility	100	3.3050
Privacy	100	3.4640
Empathy	100	3.4480
Services Offered	100	3.2860
Reputation	100	3.5125
Customer Satisfaction	100	3.5180
Valid N (list wise)	100	

Table 2 shows the descriptive statistics including dependent and independent variables of this research. Analysis revealed that Reliability, Reputation and Customer satisfaction do have the mean value 3.51which mean that the customers have slightly agree with these services. While the Assurance having the highest means value 3.62 which mean that customers have also slightly agree with this service.

Correlations Analysis

Table 3

Variables		1	2	3	4	5	6	7	8
Reliability	Pearson Correlation	1	.408(**)	.567(**)	.476(**)	.627(**)	.356(**)	.482(**)	.374(**)
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	100	100	100	100	100	100	100	100
Tangibility	Pearson Correlation	.408(**)	1	.392(**)	.430(**)	.399(**)	-.012	.309(**)	.229(*)
	Sig. (2-tailed)	.000		.000	.000	.000	.903	.002	.022
	N	100	100	100	100	100	100	100	100
Assurance	Pearson Correlation	.567(**)	.392(**)	1	.656(**)	.481(**)	.137	.362(**)	.261(**)
	Sig. (2-tailed)	.000	.000		.000	.000	.173	.000	.009
	N	100	100	100	100	100	100	100	100
Privacy	Pearson Correlation	.476(**)	.430(**)	.656(**)	1	.459(**)	.288(**)	.491(**)	.401(**)
	Sig. (2-tailed)	.000	.000	.000		.000	.004	.000	.000
	N	100	100	100	100	100	100	100	100
Empathy	Pearson Correlation	.627(**)	.399(**)	.481(**)	.459(**)	1	.286(**)	.376(**)	.379(**)
	Sig. (2-tailed)	.000	.000	.000	.000		.004	.000	.000
	N	100	100	100	100	100	100	100	100
Services Offered	Pearson Correlation	.356(**)	-.012	.137	.288(**)	.286(**)	1	.359(**)	.277(**)
	Sig. (2-tailed)	.000	.903	.173	.004	.004		.000	.005
	N	100	100	100	100	100	100	100	100
Reputation	Pearson Correlation	.482(**)	.309(**)	.362(**)	.491(**)	.376(**)	.359(**)	1	.527(**)
	Sig. (2-tailed)	.000	.002	.000	.000	.000	.000		.000
	N	100	100	100	100	100	100	100	100
Customer Satisfaction	Pearson Correlation	.374(**)	.229(*)	.261(**)	.401(**)	.379(**)	.277(**)	.527(**)	1
	Sig. (2-tailed)	.000	.022	.009	.000	.000	.005	.000	
	N	100	100	100	100	100	100	100	100

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 3 shows the correlation analysis between variables. Reliability shows the value r=.374 and p value=.000 which means that there is weak positive and significant relationship

between reliability and customer satisfaction. Tangibility shows the r=.229 and p value=.002 which means that there is very weak positive and significant relationship between tangibility and customer satisfaction. Assurance shows the r=.261 and p value=.009 which also means that there is very weak positive and significant relationship between assurance and customer satisfaction. Privacy and empathy show the r=.401 and r=.379 with p value .000 and .000 respectively. Which mean both privacy and empathy have weak positive and significant relationship with customer satisfaction. Reputation and Services offered have also positive and significant relationship with customer satisfaction because r=.277, r=.527 and p value=.005, p value= .000 respectively.

Model Summary

Table 4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578	.334	.283	.51629

Predictors: (Constant), reputation, tangibility, services Offered, assurance, empathy, privacy, reliability

Table 4 shows the summary of the model which contains the adjusted R square=.283 which is also called goodness of fit of our model. R square=.283 shows that there is 28.3% variation in depend variable customer satisfactionwith due to all independent variables.

ANOVA (b)
Table 5

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.284	7	1.755	6.584	.000(a)
	Residual	24.523	92	.267		
	Total	36.808	99			

a Predictors: (Constant), reputation, tangibility, services offered, assurance, empathy, privacy, reliability
b Dependent Variable: customer satisfaction

Table 5 shows the overall significant level of our model. F value 6.584>2 and p value .000<.001 which mean that our model is statistically significant.

Coefficients (a)
Table 6

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.693	.396		4.271	.000
	Reliability	.047	.116	.052	.409	.684
	Assurance	-.101	.127	-.100	-.800	.426
	Tangibility	-.009	.084	-.011	-.104	.917
	Privacy	.140	.102	.173	1.369	.100
	Empathy	.139	.096	.165	1.441	.055
	Services offered	.031	.081	.038	.384	.067
	Reputation	.282	.079	.380	3.595	.001

a Dependent Variable: customer satisfaction

Table 6 shows the beta coefficients and p values of the variables individually. Reliability (β=.04, p<.684) which means that Reliability is not significantly related with customer satisfaction.Hence our first alternative research hypothesis H_1 is rejected i.e. there is positive and significant relationship between reliability and customer satisfaction. Assurance (β=- -.101, p<.426) which is also not significantly related to customer satisfaction. Hence H_2 is also rejected i.e. there is positive and significant relationship between assurance and customer satisfaction. Tangibility (β= -.04, p<.684) which is also not statistically significant. H_3 is also rejected i.e. there is positive and significant relationship between tangibility and customer satisfaction. Our alternative hypothesis H_4, H_5, H_6 and $H_7$are

accepted because privacy, empathy, services offered and reputation have (ß=.140, p<.10), (ß=.139, p<.05), (ß=.031, p<.06) and (ß=.282, p<.001) respectively. Hence, privacy, empathy, service offered and reputation have positive and significant relationship with customer satisfaction.

Table 7

Research Hypothesis	P-Value	Results
There is a positive and significant relationship between reliability and customer satisfaction in telecom sector.	.68	Rejected
There is a positive and significant relationship between assurance and customer satisfaction in telecom sector.	.42	Rejected
There is a positive and significant relationship between tangibility and customer satisfaction in telecom sector.	.91	Rejected
There is a positive and significant relationship between privacy and customer satisfaction in telecom sector.	.10	Accepted
There is a positive relationship between empathy and customer satisfaction in telecom sector.	.05	Accepted
There is a positive and significant relationship between services offered and customer satisfaction in telecom sector.	.06	Accepted
There is a positive relationship between reputation and customer satisfaction in telecom sector.	.00	Accepted

6. Discussion and Conclusion

This research investigates the relationship between service quality and customer satisfaction in telecom sector within the area of Lahore and Pakpattan cities of Pakistan. Out of all hypotheses H_1, H_2 and H_3 are rejected indicating that reliability, assurance and tangibility do not positively related to the customer satisfaction. The research hypotheses like H_4, H_5, H_6 and H_7 are accepted so privacy, empathy, service offered and reputation having positively related to the customer satisfaction. The results of this study is similar to the (Islam & Ali, 2011) in term of reliability, services offered and tangibility and also similar with the results of (Ahmad *et. al,* 2010) in term of empathy and assurance. The result of this study in term of reliability and privacy is also similar to the results of (Sakhaei, Afshari, & Esmaili, 2013). This study will also provide help for

all cellular companies like Jaz, Ufone, Warid, Telenor and Zong to improve their services according to the demands of their customers. The model of this study can also be used for any other sector to check the services especially in banking sector due to the huge competition among all kinds of banks.

7. Limitations of the study

The sample size is very small due to the time constraints so the results can be more significant if the sample size increased. This study is conducted in Lahore and Pakpattan cities so the results may be vary in other cities of the Pakistan due to the difference in customs and traditions of the people. The data is collected from only the youngsters so the results may be different if the people included in the sample with different ages.

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