

# WHAT MATTERS THE MOST FOR SMS USERS' SATISFACTION AND RETENTION? EVIDENCE FROM TELECOM SECTOR OF PAKISTAN

Ishfaq Ahmed<sup>#1</sup>, Muhammad Musarrat Nawaz<sup>#2</sup>, Zulfqar Ahmad<sup>#3</sup>, Muhammad Zeeshan Shaukat<sup>#4</sup>, Ahmad Usman<sup>#5</sup>

<sup>#</sup>Hailey College of Commerce, University of the Punjab

Lahore, Pakistan

<sup>1</sup>ishfaq@hcc.pu.edu.pk

**Abstract** –Survival and growth are the prime purposes of businesses. Companies are required to provide better quality services, so that they can meet their objectives. This study is aimed to assess the quality of service provided by telecom (cellular) companies operating in Pakistan, and its effect on level of satisfaction and intentions of customers to stay with the same company is also observed. Only one service (Short Messaging service) is taken to study the impact of quality of service on customers. SERVQUAL model by Parsurman *et al.* (1988) is used for study. Respondents of the study were 331 university students using services of mobile companies. Correlation analysis was used for analysis. Results are dissucess in finding section of the paper.

**Keywords** –Satisfaction of customers, Service Quality, Retention intention, Telecom sector, Short Messaging Service

## I. INTRODUCTION OF THE STUDY

To be a market leader is dream for every organization. Firms need to be competitive in order to realize their dreams. Organizations use various strategies that bring higher returns and positive changes. While implementing these strategies customers are said to be the most valuable element for success. Now organizations try to retain their existing customers as compared to creating new ones as it takes less cost and effort. Retaining customers is important for all sectors of economies, whether manufacturing or services. Telecom sector is one of the mostly technologically developed sectors of the economy of Pakistan. Telecom sector is said to be one of the most developed sectors of Pakistan economy; as it has witnessed great amount of investment in recent past. The number of subscribers with in period of 1996 to 2009 increased from 68,000 to 95 million in 2009 shows the level of growth in the sector (PTA). Cellular growth time lasts for five years in Pakistan i.e. (2003-2008), it broke all world records of covering network. As Valdecantos (2009) found that cellular companies of Pakistan have experienced 100% growth rate for many years. Now the existing firms are facing stiff competition due to saturation in market, so creation of

customer is quite difficult, so retention of customers is the best policy. This growth and finally saturation has attracted researchers, academicians, and business community. Numerous studies have been conducted in various parts of the world to study telecom sector from various perspectives ranging from engineering to business and marketing perspectives. Numbers of researcher have linked satisfaction and retention with improved financial performance e.g. Reichheld and Sasser, (1990); Fornell and Wernerfelt, (1987). Steenkamp (1989) discussed that in order to increase market share firms must retain their customers. Provision of better services is one of the major tools used to retain customers. Considering all the issues of importance this study is structured to judge the effect of quality of service on satisfaction and retention intentions of customers in the cellular companies of Pakistan. To simplify and make the topic researchable one dimensions of the service quality SMS (Short Messaging Service) is taken for the study.

## II. REVIEW OF PREVIOUS LITERATURE

Quality is said to be an overall experience which customers' perceive by product interaction or interaction with service. Parasuraman *et al.* (1988), has defined quality which is based on judgment. "Service quality has been described as a form of attitude, related but not equivalent to satisfaction that results from the comparison of expectations with performance" (Shepherd, 1999; Cronin Jr. and Taylor, 1992; Bolton & Drew, 1991; and Parasuraman *et al.* 1988). Quality is having long lasting affect on customer satisfaction. In the words fo (Omachanu *et al.* 2008) quality has long term and lasting relation with satisfaction of customer. While discussing importance of value Atalik & Arslan (2009) found that it leads to loyalty of customers.

### Service Quality and Customer Satisfaction

Churchill (1979) has defined the term "Customer satisfaction" as consequence of comparison between reward and price by acquiring it. Customers' satisfaction has now considered as

corporate level strategy (Rust and Zahorik, 1993). Various authors and researchers have given to customer satisfaction. In the words of Drucker (1973) customer satisfaction is the basis for organizational success. Customer satisfaction is a base for relation between management and marketing (Claycomb & Martin, 2002), and mean of competitive advantage. (Anderson *et al.*, 1994). Customer satisfaction is having positive impact on organizational financial performance (Anderson *et al.*, 1994; Rust & Zahorik, 1993).

Kandampully (1998) discusses that organizational loyalty towards service provision creates loyal customers. He further found that loyalty of service to customers fulfils present and future needs of customers. Offering quality service creates loyalty in customers to stay with the organization. Dissatisfaction of customers leads customers to reduced loyalty bond with organization. In words of Turel *et al.* (2007) usage adoption decision is dependent upon the price offered, social, emotional and quality offered by service provider. Quality of service is said to be impression of customer regarding inferiority or superiority service delivered (Tsoukatos & Rand 2006, Bitner & Hubert 1994). Quality of service and satisfaction of customers are closely linked as it offers value to customers and help them to make a choice whether the service justifies cost of services or not. All elements of service quality have direct impact on customers' satisfaction and value of service for them (Chau & Kao, 2009). Cavana *et al.* (2007) discusses service quality and its dimensions, he says that there are five dimensions on which service quality should be measured i.e. Assurance, Responsiveness, Empathy, Reliability and Convenience.

Measuring impact of service quality and its dimensions on customer satisfaction various researchers have given supportive evidences. Kim *et al.* (2004) while conducting his research in telecom sector of Korea found that quality of call, value added services and customer support have noteworthy impact on increasing satisfaction level of customers for mobile service providers and finally creating loyal customers. While discussing the importance of each factor of service quality Baumann *et al.* (2006) also discovered that satisfaction of customers regarding empathy and affective attitude of service provider makes customers recommend others to use the services of the recommended company; they further found that responsiveness has short run relation with customer satisfaction while empathy and affective attitude have long lasting impact on the on satisfaction and retention intentions of customers. Similarly, Cavana *et al.* (2007) discovered no relation of convenience and reliability with customer satisfaction but their findings prove significant relation of assurance, responsiveness and empathy with customer satisfaction. Cronin and Taylor (1992) discovered that customer satisfaction is a function of better service quality. Ahmed *et al.* (2010) found that reliability, tangibles, responsiveness and assurance were positively related with the customer satisfaction while empathy is not related with customer satisfaction. Lai (2004) conducted his study in China and discovered that there was positive relationship of empathy, tangibles and assurance with customer satisfaction. Similar

findings were discovered and quoted by Cronin and Taylor (1992) while searching for service quality and customer satisfaction relation. Brown & Gulycz (2001) say that customer satisfaction is important in order to retain customers.

### **Service Quality and Customer Retention**

Researchers have also given lots of attention to Customers' retention. Researchers have discussed enormous returns of the retention of customers. Like, Reichheld and Sasser (1990) and Fornell and Wernerfelt (1987); discovered retention of customers as source of reduction of costs and mean of growth in market share. Henkel *et al.* (2006) concluded that customers who are satisfied with the service provider have increased usage level of services and increased future use intentions. While discussing the importance of satisfaction Cronin *et al.* (2000) discovered that satisfaction and retention intentions of customers can be increased by offering value added and quality services. Steenkamp (1989) have also discussed service quality as an aid to retain customers for future repurchase and it finally increases market share, similarly Fornell (1992) found satisfaction to be significantly related with customer retention intentions.

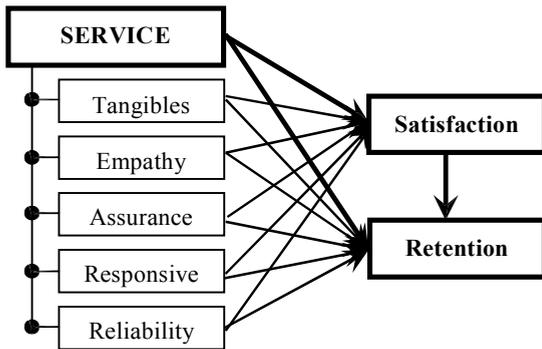
Quality of service is regard of superiority or inferiority of service provided and provider of services (Tsoukatos & Rand 2006, & Bitner & Hubert 1994). Chau & Kao (2009) also discussed the dimensions of service quality and found that these dimensions have a significant impact on evaluation of service by users and their future repurchase intentions. Kandampully (1998) discusses that provision of better services from the companies creates loyal customers for future. If service provider is committed to provide better quality services then customer loyalty and trust can be gained. Kim *et al.* (2004) discovered that increasing level of satisfaction of customers and consequently creating future loyal customers requires delivering superior service quality. Customers with high Loyalty score are reported to have higher retention intentions, are willing to spend more funds towards the service provider, and would suggest others to others to become future customers. (Keiningham, *et al.* 2007). Chen (2008) concluded that customer perception of quality of service and satisfaction regarding service is having positive and significant effect on future intentions to purchase. Cronin *et al.* (2000) concluded that customer intentions of future usage is function of service quality, value of that service and satisfaction of customer. Cöner and Güngör (2002) discovered that better service quality would create more loyal customers for future. Lai (2004) conducted research in Singapore and discovered a significant impact of dimensions of service quality with satisfaction of customers and their future retention intentions. Canadian scholar Barnes (1997) a Canadian scholar also emphasize customers who are loyal would recommend others which increases customer base and increased source of earning for organization.

Kim *et al.* (2004) concluded that call quality, offering value added services and provision of customer support plays an important role in satisfying customers and their intentions to stay with the same service provider. Deng *et al.* (n.d.) also

conducted study in Chinese telecom market and argue that out of many determinants of satisfaction of customers perceived quality of service is one of the most significant determinant of satisfaction of customer and loyalty of customers. According to Parasuraman *et al.* (1988) service quality has five specific dimensions i.e. tangibles, empathy, reliability, assurance, and responsiveness. Cavana *et al.* (2007) has discussed five dimensions of assurance of quality, i.e. Convenience, Responsiveness, Empathy, responsiveness and Reliability; and all these dimensions are very significant for concept of quality. Cavana *et al.* (2007) discussed that responsiveness, empathy and assurance have strong relationship with customer satisfaction and repurchase intentions, but convenience and reliability were found to be but not much relevant to the issue. Different findings were given by Ahmad *et al.* (2010), as tangibles, assurance, responsiveness, reliability were found to be positively related with retention intentions while empathy was not related with retention. It is clear that if company wants to retain its customers, they should be satisfied by provision of better service quality (Brown & Gulycz, 2001).

On the basis of above given literature following model and hypothesis can be drawn

III. RESEARCH MODEL AND HYPOTHESIS



	Hypothesis Statement
H1	Service quality and customer satisfaction are positively related
H1a	There is positive relationship between Tangibles and customer satisfaction.
H1b	There is significant relationship between Empathy and customer satisfaction
H1c	There is positive relationship between Assurance and customer satisfaction
H1d	There is positive relationship between Responsiveness and customer satisfaction
H1e	There is positive relationship between Reliability and customer satisfaction
H2	Service quality has a positive relation with customer retention
H2a	There is positive relationship between Tangibles and customer retention
H2b	Empathy has a significant relationship with the Customer retention
H2c	Assurance has a positive relationship with customer retention
H2d	Responsiveness has a positive relationship with customer retention
H2e	Reliability has a positive relationship with customer retention

IV. DESIGN OF THE STUDY

Young university students with between age of 20-25 were selected as population. This age group is selected because of the amount of attraction received by this age group by the cellular companies. This age group is the biggest target of the marketing efforts made by all cellular companies, because it covers largest portion of the population and are having highest literacy rate in the country. For survey purpose 400 students from various universities were selected and personally administered questionnaire was used to collect data from the respondents. Out of whole sample size, 331 complete questionnaires were received back having response rate of 83%. Average age of respondents was 21.60 years, out of which 60% were male and 40% female. Service quality and satisfaction dimension questions were taken from the research work of Lai (2004); While questions regarding retention intentions were taken from Yu *et al.* (2005). The instrument comprised on 7 point likert scale which ranges from strongly disagrees (1) to strongly agree (7). SPSS 17.0 version was used for analysis.

V. FINDINGS AND CONCLUSION

Findings from Table 1 depict the score means and standard deviation for all the dimensions of service quality and its customer satisfaction and retention intentions. The score mean of service quality shows value of 4.828, it donates that customers are slightly satisfied with service quality provided by the mobile companies. Findings score for every dimension of quality of service shows that respondents are more satisfied on the dimensions of ‘responsiveness and tangibles’ and

Descriptive Statistics			
	Mean	Std. Deviation	N
SERVQUAL	4.8208	.71827	331
Tangibles	5.4003	1.15432	331
Empathy	3.3595	1.51529	331
Assurance	4.8520	1.20069	331
Responsiveness	5.0725	1.13993	331
Reliability	4.8741	1.05820	331
Satisfaction	5.2598	1.44249	331
Retention	5.3369	1.28002	331

moderate level of satisfaction with ‘reliability and assurance, and were less satisfied with ‘empathy’. The satisfaction mean score is 5.259 which show slight level of satisfaction with service quality; similarly, intentions to stay (retention) were having mean score of 5.3369 which shows that overall respondents are slightly satisfied from their SMS service providers.

TABLE-1 Descriptive Statistics

Table-2 shows the results of Pearson Correlation (shown at the end). The given table shows relationship between the dimensions of services quality and customer intentions to retain with the mobile service provider. The table also shows

relationship between the service quality dimensions and customer satisfaction and retention intentions.

The results shows that overall quality of service has a significant relation with the satisfaction of customers ( $r=0.538$ ,  $p<0.000$ ) and customer retention ( $r=0.394$ ,  $p<0.001$ ). These specific finding confirms H1 and H2 that service quality has a significantly positive relationship with customer satisfaction and retention. The service dimension, 'tangibles' also proves to have a significant and positive relationship with the customer satisfaction ( $r=0.183$ ,  $p<0.001$ ) and retention ( $r=0.190$ ,  $p<0.001$ ). This finding proves hypothesis H1a and H2a that tangibles have a positive relationship with customer satisfaction and retention. The dimension 'empathy' has surprisingly shown a significant but negative relation with the customer satisfaction ( $r=-0.36$ ,  $p<0.001$ ) and customer retention ( $r=-0.248$ ,  $p<0.001$ ). This finding further explains that there is significant but negative relationship between empathy and customer satisfaction and retention. Quality dimension of 'Assurance' shows a significantly positive relationship with the customer satisfaction ( $r=0.425$ ,  $p<0.001$ ) and retention ( $r=0.359$ ,  $p<0.001$ ), and proves H1c and H2c. The quality dimension of 'Responsiveness' also shows a significant and positive relationship with the customer satisfaction ( $r=0.521$ ,  $p<0.001$ ) and retention ( $r=0.381$ ,  $p<0.001$ ) and confirms H1d and H2d hypothesis. 'Reliability' findings shows a significant and positive relationship with the customer satisfaction ( $r=0.435$ ,  $p<0.001$ ) and customer retention ( $r=0.297$ ,  $p<0.001$ ) and finally prove hypothesis H1e and H2e.

Findings also prove that there is positive relationship between customer satisfaction and retention ( $r=0.580$ ,  $p<0.000$ ). These findings confirm the Hypothesis H3 that there is significant relation between customer satisfaction and retention; greater the customers will be satisfied higher will be chance of their retention with the same mobile service provider.

## VI. DISCUSSION

Findings suggest that customers are slightly satisfied with the quality of service of cellular service providers where assurance and tangibles score much high than other service quality dimensions but empathy shows that the lowest score of all dimensions. Consequently correlation findings show that quality dimension of empathy has significantly negative relationship with satisfaction and retention of customers while other four dimensions have positive relation with the customer satisfaction and retention. All dimensions of service quality have a significant relationship with the customer satisfaction and retention. As this study is concerned with only one type of service provided by cellular companies, it is limited in its scope with respect to other services offered by cellular companies, its scope should be expanded and other services by cellular service provider should be included in studies. Findings of the study provides an insight and direction to the policy makers, regarding their concern for customer satisfaction and retentions and tells them the areas to be emphasized to achieve increased level of satisfaction and

retention of customers, specifically towards Short Messaging Service of companies.

## REFERENCES

1. Ahmad, Z., Ahmed, I., Nawaz, M.M., Usman, A., Shaukat, Z.M., Ahmad, N. (2010), Impact of Service Quality of Short Messaging Service on Customers Retention: an Empirical study of Cellular companies of Pakistan. *International Journal of Business and Management*. 5(6), 154-160
2. Ahmed, I., Nawaz, M.M., Usman, A., Shaukat, M.Z., Ahmad, N. (2010), Impact of Service Quality on Customer Satisfaction: empirical evidence from telecom sector of Pakistan. *Interdisciplinary Journal of Contemporary Research for Business*, 1(12),98-113.
3. Atalik O., and Arslan M. (2009), A study to Determine the Effects of Customer value on Customer Loyalty in Airline Companies operating: Case of Turkish Air Travelers, *International Journal of Business and Management*. 4(6), 154-162
4. Anderson, E. and Sullivan, M.W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), 125-43.
5. Barnes, James G. (1997). Closeness, Strength, and Satisfaction: Examining the Nature of Relationships Between Providers of Financial Services and Their Retail Customers. *Psychology and Marketing*. 14(8), 765-790.
6. Baumann C., Burton S., Elliott G. & Kehr H.M. (2006), Prediction of attitude and behavioral intentions in retail banking, *International Journal of Bank Marketing*, 25(2), 102-116.
7. Bitner, M.J. and Hubert, A.R. (1994), Encounter satisfaction versus overall satisfaction versus quality, In: Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications, London, pp. 72-94.
8. Bolton, R.N, and Drew, J.H. (1991), A longitudinal analysis of the impact of service changes on customer attitudes. *Journal of Marketing*. 55, 1-9.
9. Brown, S. A., & Gulycz, M. (2001). *Customer relationship management: A strategic imperative in the world of e-business*: New York: Wiley.
10. Cavana, R.Y., Corbett, L.M., and Lo Y.L. (2007), Developing zones of tolerance for managing passenger rail services quality, *International Journal of Quality & Reliability Management*. 24(1), 7-31.
11. Chau, V.S. and Kao, Y.Y. (2009), Bridge over troubled water or long and winding road? Gap-5 in airline service quality performance measures. *Managing Service Quality*. 19(1), 106-134.
12. Chen C.F. (2008), Investigating structural relationship between service quality, perceived value, satisfaction, and behavioural intentions for air

- passengers: Evidence from Taiwan, *Transportation Research Part A*, 42, 709-717.
13. Churchill, Gilbert A., Jr. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research* 16: 64-73.
  14. Claycomb, C. and Martin, C.L. (2002), Building customer relationships: an inventory of service provider's objectives and practices. *Journal of Services Marketing*. 16(7), 615-35.
  15. Cöner, A., and Güngör, M.O. (2002), Factors affecting customer loyalty in the competitive Turkish metropolitan retail markets. *Journal of American Academy of Business*. 2 (1), 189-195.
  16. Cronin Jr., J.J, and Taylor S.A. (1992), Measuring service quality: A re-examination and extension. *Journal of Marketing*. 56, 55-68.
  17. Cronin Jr., Brady M.K. and Hult, G.T.M. (2000), Assessing the effects of quality, value, and customer satisfaction on consumer behavioural intentions in service environments. *Journal of Retailing*. 76(2), 193-218.
  18. Deng, Z., Lu, Y., Wei, K.K. and Zhang, J. (n.d.), Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China, *International Journal of Information Management*. Article in Press.
  19. Drucker, P.F. (1973), *Management: Tasks, Responsibilities and Practices*, Harper & Row, New York, NY.
  20. Fornell, C. and Wernerfelt, B. (1987), Defensive marketing strategy by customer complaint management: a theoretical analysis. *Journal of Marketing Research*. 24, 337-46.
  21. Fornell, C. (1992), A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing*. 56, 6-21.
  22. Henkel, D. Houchaime, N. Locatelli, N. Singh, S. Zeithaml, V.A. and Bittner (2006), The Impact of emerging WLANs on Incumbent Cellular Service Providers in the U.S. *M.J. Services marketing, McGraw-Hill Singapore*
  23. Keiningham, T. L., Cooil, B., Aksoy, L., Andreassen, T.W., and Weiner, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing Service Quality*, 17(4), 361-384.
  24. Kandampully, J. (1998), Service quality to service loyalty: A relationship which goes beyond customer services, *Total Quality Management*. 9(6), 431-443.
  25. Kim, M.K., Park, M.C., and Jeong, D.H (2004), The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services, *Telecommunication Policy*, 48,145-159.
  26. Lai T.L. (2004), Service Quality and Perceived Value's Impact on Satisfaction Intention and Usage of Short Message Service (SMS), *International systems Frontiers*. 6(4), 353-368
  27. Omachonu V., Johnson W.C. & Onyeano, G. (2008), An empirical test of the drivers of overall customer satisfaction: evidence from multivariate Granger causality. *Journal of Services Marketing*. 22(6), 434-444.
  28. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*. 64(1) , 12-40.
  29. Reichheld, F.F. and Sasser, W.E. (1990), Zero defection: quality comes to services, *Harvard Business Review*, Vol. 68 No. 5, pp. 105-11.
  30. Shepherd C.D. (1999), Service quality and the sales force: A tool for competitive advantage. *Journal of Personal Selling & Sales Management*. 19(3), 73-82.
  31. Steenkamp, J.-B.E.M. (1989), *Product Quality*. Van Gorcum, Assen/Maastrichts.
  32. Turel O., Serenko A. & Bontis N (2007), User acceptance of wireless short messaging services: Deconstructing perceived value. *Information and Management*. 44, 63-73.
  33. Tsoukatos, E. and Rand, G.K. (2006), Path analysis of perceived service quality, satisfaction and loyalty in Greek insurance. *Managing Service Quality*. 16(5), 501-19.
  34. Valdecantos, C. (2009), Online available at [http://consultantvalueadded.com/2009/01/12/emergin\\_gmarkets-telecom-market-review\\_pakistan-2008/](http://consultantvalueadded.com/2009/01/12/emergin_gmarkets-telecom-market-review_pakistan-2008/)
  35. [www.pta.gov.pk](http://www.pta.gov.pk)
  36. Zeithaml, V.A. (2000), Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the Academy of Marketing Science*. 28(1), 67-85.

**Table-2** Correlation Findings of Service Quality, Customer Satisfaction and Retention

		Correlations							
		SERVQUAL	Tangibles	Empathy	Assurance	Responsiveness	Reliability	Satisfaction	Leave_Intentions
SERVQUAL	Pearson Correlation	1							
	Sig. (2-tailed)								
Tangibles	Pearson Correlation	.438**	1						
	Sig. (2-tailed)	.000							
Empathy	Pearson Correlation	-.058	-.086	1					
	Sig. (2-tailed)	.290	.118						
Assurance	Pearson Correlation	.705**	.145**	-.253**	1				
	Sig. (2-tailed)	.000	.008	.000					
Responsiveness	Pearson Correlation	.860**	.241**	-.323**	.539**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
Reliability	Pearson Correlation	.705**	.258**	-.119*	.394**	.479**	1		
	Sig. (2-tailed)	.000	.000	.030	.000	.000			
Satisfaction	Pearson Correlation	.538**	.183**	-.236**	.425**	.521**	.435**	1	
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000		
Leave_Intentions	Pearson Correlation	.394**	.190**	-.248**	.359**	.381**	.297**	.580**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	

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

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