The Impact of E-Banking on Customer Satisfaction:

Evidence from Banking Sector of Pakistan

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Abstract

Customer satisfaction is imperative for the incessant survival of any organization around the world. This research work intends to investigate the impact of E-banking variables on customer satisfaction in Pakistan. Five service quality dimensions; reliability, responsiveness, assurance, tangibles and empathy, derived from the SERVQUAL model with support of literature review have been selected as forecasters of customer satisfaction in E-banking. Research design of the study is quantitative. Data has been gathered through already tested questionnaire from 264 E-banking users as respondents, from different cities of Pakistan. Results of the study have revealed that there is momentous relationship between service quality dimensions and customer satisfaction in E-banking in Pakistan, with more weightage of reliability, responsiveness and assurance among the five dimensions. Through this study we can conclude that service quality in E-banking leads to satisfied customers and thus banks can gain competitive advantage by offering better-quality services to their customers in today's emulous world.

Keywords: E-banking, Customer Satisfaction, SERVQUAL Model, Pakistan

1. Introduction

Technology has played a vital role in today's world. Internet has made this world a Global village and the same has revolutionized the banking industry. Conversion from the manual based ledger system to systemized processes and the overture to internet based facilities has given a new facet to the banking sector. The competition in banking sector augmented over the last few years and to stay competitive, banks are espousing novel tools and techniques to attain customer retention and satisfaction and E-Banking is one tool towards it. As (Karjaluoto, Mattila, & Pento, 2002) argued that banking has now liberated from time and geographical limitations.

"E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels." (Shahriari, 2014). E-banking is of paramount significance in meeting user anticipations. Customer satisfaction leading to gain loyal customers can be achieved by delivering high quality services (Gronroos, 2000). With rest of the world, Asian consumers are on the quick move to digital banking (Barquin & HV, 2015). And no doubt that automation of banking procedures has unlocked new door of prospects for banking sector in Pakistan.

The main endeavour of this article is to study the relative importance of service characteristics, identified through SERVQUAL model that are needed to be ensured by the provider of e-banking facility in gaining customer satisfaction in Pakistan.

1.1 Research Ouestions

The study will try to find out the answer to following Research questions:

- 1) What are the chief service quality dimensions in determining satisfaction of e-banking customers in Pakistan?
- 2) What is the relative weightage of dimensions of service quality model in determining satisfaction of e-banking customers in Pakistan?

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2. Literature Review

2.1 E-Banking as a Novel Catalyst

Prominent change in global commercial behaviours has improved customer demand of banking services. This revolution has set a motion in the banking sector for the provision of a payment system that is compatible with the demands of the electronic market (Balachandher, Vaithilingam, Norhazlin, & Rajendra, 2001). Customer attitudes and demands are changing over time and banks are continuously improving their products and services accordingly. Through e-Banking, banks are even approaching and catering the needs of Un-banked customers. E-banking has grown to be a major distribution mean for financial institutions from the last two decades. (Karjaluoto, Mattila, & Pento, 2002). E-banking can propose swift, speedy and reliable services to customers, making them more satisfied than with the manual banking system (Nupur, 2010).

2.2 Electronic Service Quality and Customer Satisfaction

E-service quality is about overall assessment and discernment by customer regarding the eminence and quality of e-service delivery (Santos, 2003). Endurance in today's competitive banking environment is dependent on providing excellent service and products to customers. (Wang, Lo, & Hui, 2003). E-banking has attained the status of essential service in attaining customers' loyalty in banking sector by ensuring customer satisfaction and healthy relations. Above all it is of supreme importance in fulfilling customers' expectations (Berrocal, 2009)

Satisfaction can be illustrated as an "evaluation of the perceived discrepancy between prior expectations and the actual performance of the product" (Oliver, 1999). Satisfaction has an intimate link with service quality. It is essential for the online banks to become more concern about customer's perception of the online banking services' quality as it is fairly easier for the customers to assess the advantages of competing services (Santos, 2003)

Researchers have verified that provision of quality service to customers make them to stay with an organization, also catch the attention of new ones, augment corporate image and assures endurance and profitability of an organization. (Negi, 2009) (Ladhari, 2009). Customer pleasure is the contributor of absolute gains of a quality revolution, which is majorly contingent on customer's cognizance of overall service quality (Husnain & Akhtar, 2015). This is the reason that why it is very crucial to recognize how consumers perceive service quality and how it will affect their satisfaction level, through which banks can identify the gaps in service quality delivery to take essential curative actions to improve upon their activities.

(Parasuraman, Zeithaml, & Berry, 1985) has developed a model (SERVQUAL) for measuring service quality on the basis of study on four service sectors; retail banking, credit card services, repair and maintenance of electrical appliances, and long-distance telephone services. The model initially consisted of ten dimensions which were reduced to five as some of them were overlapping.

Dimensions of SER	Dimensions of SERVQUAL Model				
1. Reliability Capability to deliver service as promised					
2. Responsiveness	Prompt delivery of services to customers				
3. Assurance	Knowledge and civility of employees, ensuring safety & delivering trust				
4. Tangibles	Outlook of physical equipments and communication resources				
5. Empathy	Providing customer care with individualistic approach				

SERVQUAL model is considered as an appropriate scale to measure service quality in various industries. Dimensions of the model fit to a particular service in order to guarantee dependable and valid results (Ladhari, 2009).

In Banking sector all these dimensions have been identified vital in determining service quality.

(Rahimuddin & Bukhari, 2010) While conducting research on e-banking in Pakistan have identified that bank's performance is not dependent on the mean it is using to deliver the service i.e. manual or online. Therefore customers prefer to perform the required banking transactions while sitting at home rather than going to bank, thus saving their time and money.

Gaining customers trust on electronic channels is the imperative element for the triumph of the internet banking. Swift delivery of innovations can be made possible by providing improved infrastructural amenities (Stewart, 1999). (Liébana, Muñoz, & Rejón, 2013) In their study concluded that accessibility, ease of use, trust and usefulness has

significant effect on customer satisfaction in context of e-banking services. Website's user-friendliness is an imperative feature that needs to be considered when evaluating electronic banking users' satisfaction and positive word of mouth in general. Convenience and access are identified as the most crucial factors in enhancing performance of e-banking services (Kaur & Kiran, 2015).

2.3 E-Banking & Customer Satisfaction in Pakistan

Pakistan is also using online services as new medium to offer their customers services 24/7. Foreign banks in Pakistan are pioneers of employing E-banking practices in mid 1990's. Following them, domestic banks also adopted it in late 90's by introducing ATM cards and debit cards. E-Banking as compared to the conventional banking majorly comprises non-human interactions between customers and banking online systems (Furst, Lang, & Nolle, 2002). Banks are providing e-banking facilities through ATMs, POS networks, Internet Banking, Mobile Banking and Call centre with catering the needs of general customers for payments. Microfinance institutions are also adding their contribution to country's payments infrastructure through branchless banking.

According to State Bank of Pakistan's Payment System's Review (2014-2015), e-banking transactions have shown an exceptional escalation. Volume of e-banking transactions has risen by 100% i.e. 470 million over the last five years, while the value of these transactions have increased 62% from fiscal year 2010-11 to 2014-15. The volume of just internet banking has increased by 3% and transaction value increased by 18% reaching 798 Billion as compared to FY 2013-14. These statistics are a proof of increased customer's divergence to online services from the traditional banking, making the assurance of quality service delivery a necessity.

Considering the increasing importance of e-banking and then quality of service in e-banking, this research article focuses on five service quality dimensions identified by (Parasuraman, Zeithaml, & Berry, 1985) and presented as comprehensive model, SERVQUAL model and their impact on customer satisfaction in Pakistan.

3. Research Methodology

Based on the literature review, the study focuses on the dimensions of service quality (SERVQUAL Model) influencing customer satisfaction towards electronic banking in Pakistan, which consists of reliability, responsiveness, assurance, tangibles and empathy. The model is summarized in Figure 1

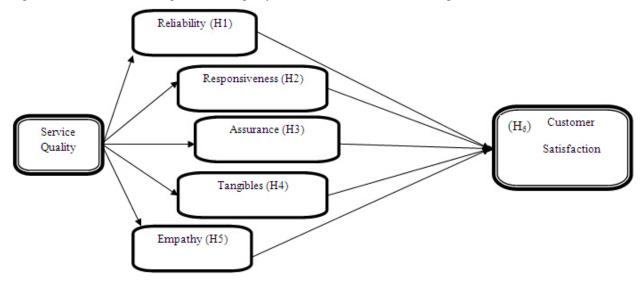


Figure 1. Conceptual Framework

3.1 Research Hypotheses

Research hypotheses based on the research model include:

- H1: Reliability has significant effect on customer satisfaction in E-banking.
- H2: Responsiveness has significant effect on customer satisfaction in E-banking.
- H3: Assurance has significant effect on customer satisfaction in E-banking.
- H4: Tangibles have significant effect on customer satisfaction in E-banking.

H5: Empathy has significant effect on customer satisfaction in E-banking.

H₆: Reliability, Responsiveness, Assurance, Empathy, and Tangibles have significant effect on customer satisfaction in E-banking.

3.2 Sampling & Data Collection

The study is an explanatory research, focused on an effort to connect ideas to recognize their relationship. Research is mainly based on primary data source that will be analyzed using quantitative research methods. Quantitative research involves hefty samples and planned questionnaire that is then numerically and statistically analyzed (Davis, 2000). Customers of different banks in Pakistan who are using any of the e-banking facility have been considered as respondents. The respondents have been selected through non-probability sampling method i.e. convenience sampling, as it was not possible to get access to the list of e-banking customers to conduct random sampling. Total 300 questionnaires were circulated, out of which 264 were considerable for the study. Respondents are from different banks across Pakistan. Questionnaire has been adopted through different research articles to ensure that questions on each service quality dimension fairly lead to the reliable results (Nupur, 2010) (Unyathanakorn & Rompho, 2014) (Molapo, 2008) (Sabir, Ghafoor, Akhtar, Hafeez, & Rehman, 2014) (Micuda & Cruceru, 2010) (Bebli). The respondents responded to a questionnaire consisting of some demographic questions and questions on each dimension of service quality on five point Likert Scale.

3.3 Statistical Analysis Methodology

Correlation and Multiple Regression model will be applied to determine the significance level of the variables for the customer satisfaction in e-banking individually as well as in SERVQUAL model as a whole.

The basic Regression equation for the model will be:

$$CS_{EB} = \alpha + \beta_1 X_{RL} + \beta_2 X_{RS} + \beta_3 X_{AS} + \beta_4 X_{TA} + \beta_5 X_{EM} + e$$

Where, CS_{EB}= Customer Satisfaction in E-Banking

 X_{RL} = Reliability, X_{RS} = Responsiveness, X_{AS} = Assurance, X_{TA} = Tangibles & X_{EM} = Empathy

 α = constant, β = Coefficients to estimate & e= error term

4. Data Analysis and Findings

4.1 Testing the First Hypothesis (H1):

		Correlation	
		CUS.SATISFACTION	RELIABILITY
CUS. SATISFACTION	Pearson Correlation	1	.647**
SATISFACTION	Sig. (2-tailed)		.000
	N	264	264

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

ANOVA ^b							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	42.915	1	42.915	188.790	$.000^{a}$	
	Residual	59.556	262	.227			
	Total	102.471	263				

a. Predictors: (Constant), RELIABILITY

b. Dependent Variable: CUS.SATISFACTION

Coefficients^a

		Unstandardized	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.939	.192		4.884	.000
	RELIABILITY	.714	.052	.647	13.740	.000

a. Dependent Variable: CUS.SATISFACTION

As we can see that in the correlation table, significance value is 0.000 which is lower that the significance level of 0.05 and even 0.01, depicting that there is significant relation between reliability and customer satisfaction. Value of 0.647 is portraying positive correlation. ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F-statistic here, 188.790 is depicting that model is significantly describing the variance. The value of t-test has also come out to be greater than 2, leading us to say that our results have not happened by chance and we can therefore accept our hypothesis i.e.

H₁: Reliability has significant effect on customer satisfaction in E-banking.

4.2 Testing the Second Hypothesis (H2):

Correlation

	•	CUS.SATISFACTION	RESPONSIVENESS
CUS.SATISFACTION	Pearson Correlation	1	.647**
	Sig. (2-tailed)		.000
	N	264	264

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

$ANOVA^b$

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.924	1	42.924	188.862	.000 ^a
	Residual	59.547	262	.227		
	Total	102.471	263			

a. Predictors: (Constant), RESPONSIVENESS

Coefficients^a

C	efficients					
		Unstandardized	d Coefficients	Standardized Coefficients		,
M	odel	В	Std. Error	Beta	t	Sig.
1	(Constant)	1.232	.171		7.197	.000
	RESPONSIVENESS	.635	.046	.647	13.743	.000

a. Dependent Variable: CUS.SATISFACTION

The significance value of 0.000 and correlation value of 0.647 are illustrating positive significant linear correlation between responsiveness and satisfaction, with F-value of 188.862 depicting that the model is significant. The value

b. Dependent Variable: CUS.SATISFACTION

of t-test greater than 2 has assured that null hypothesis can be rejected. Thus, results are strengthening the acceptance of our second hypothesis .i.e.

H₂: Responsiveness has significant effect on customer satisfaction in E-banking.

4.3 Testing the Third Hypothesis (H3):

Correlation

Correlation			
		CUS.SATISFA	CTION ASSURANCE
CUS.SATISFACTION	Pearson Correlation	1	.476**
	Sig. (2-tailed)		.000
	N	264	264

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

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.263	1	23.263	76.950	$.000^{a}$
	Residual	79.207	262	.302		
	Total	102.471	263			

a. Predictors: (Constant), ASSURANCE

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Mo	del	В	Std. Error	Beta	t	Sig.
1	(Constant)	1.984	.182		10.925	.000
	ASSURANCE	.449	.051	.476	8.772	.000

a. Dependent Variable: CUS.SATISFACTION

The significance value for assurance as predictor of customer satisfaction has also come out to less than 0.05 significance level, i.e. 0.000 and correlation value greater than zero, 0.476; which mean that there is significant relation between assurance and customer satisfaction. Large F-value of 76.95 and t-test value of 8.772 have also come out to be significant in determining fit of the model. However, the analysis values have come out to be less as compared to that of reliability (X_{RL}) and responsiveness (X_{RS}) independent variables, predicting that the relation of first two independent variables with customer satisfaction is comparatively more significant than assurance. The results however have led to the acceptance of our third hypothesis, i.e.

H₃: Assurance has significant effect on customer satisfaction in E-banking.

b. Dependent Variable: CUS.SATISFACTION

4.4 Testing the Fourth Hypothesis (H4):

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		CUS.SATISFACTION	TANGIBLE
CUS.SATISFACTION	Pearson Correlation	1	.544**
	Sig. (2-tailed)		.000
	N	264	264

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

ANOVA ^b							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	30.335	1	30.335	110.178	.000ª	
	Residual	72.136	262	.275			
	Total	102.471	263				

a. Predictors: (Constant), TANGIBLE

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.669	.182		9.167	.000
	TANGIBLE	.511	.049	.544	10.497	.000

a. Dependent Variable: CUS.SATISFACTION

Tangibles have also come out to in significant relation with customer satisfaction in e-banking with significance value of 0.000 and correlation of 0.544. ANOVA table has given us a high value of F i.e. 110.178, exemplifying that the variance explained in the dependent variable by tangibles is significant. Value of t-test 10.497 has fortified the ground for accepting our hypothesis. Thus,

H4: Tangibles has significant effect on customer satisfaction in E-banking.

4.5 Testing the Fifth Hypothesis (H5):

Correlation

		CUS.SATISFACTION	EMPATHY
CUS.SATISFACTION	Pearson Correlation	1	.460**
	Sig. (2-tailed)		.000
	N	264	264

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

b. Dependent Variable: CUS.SATISFACTION

ANOVA^b

Model		Sum of Squares df		Mean Square	F	Sig.	
1	Regression	21.715	1	21.715	70.451	.000ª	
	Residual	80.756	262	.308			
	Total	102.471	263				

a. Predictors: (Constant), EMPATHY

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.130	.172		12.354	.000
	EMPATHY	.377	.045	.460	8.393	.000

a. Dependent Variable: CUS.SATISFACTION

Like other independent variables of the SERVQUAL Model, empathy has also generated significant results with customer satisfaction, when considered separately. 0.000 value of significance has depicted that there is significant relation between the variables. By looking at value of correlation we can say that at 0.01 level, there is a significant relation between empathy and customer satisfaction with a correlation equal to 0.460. Sizeable F and t-test values, i.e. 70.451 and 8.393 respectively, lead us to accept our hypothesis. Thus,

H₅: Empathy has significant effect on customer satisfaction in E-banking.

4.6 Testing the Sixth Hypothesis (H6):

The last hypothesis is about testing the relation of all the dimensions of SERVQUAL model with customer satisfaction in e-banking.

Table 1. Descriptive Statistics

	N	Mean
CUS.SATISFACTION	264	3.5492
Valid N (listwise)	264	

The mean value of customer satisfaction i.e. 3.5492 is portraying that customers are fairly satisfied with the overall e-banking services.

The overall regression and ANOVA are summarised as follows:

Table 2. Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.732ª	.537	.528	.42905

a. Predictors: (Constant), EMPATHY, ASSURANCE, TANGIBLE, RELIABILITY, RESPONSIVENESS

b. Dependent Variable: CUS.SATISFACTION

Table 3. ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.977	5	10.995	59.730	$.000^{a}$
	Residual	47.494	258	.184		
	Total	102.471	263			

a. Predictors: (Constant), EMPATHY, ASSURANCE, TANGIBLE, RELIABILITY, RESPONSIVENESS

Table 2 is explaining the overall predictability of the model. The adjusted R-square value of 0.528 indicates that the right side of the equation that is the independent variables (Reliability, Responsiveness, Assurance, Tangible & Empathy) is explaining 52.8% of the left side of the equation, i.e. customer satisfaction in e-banking. Hence, there are some other variables too which contribute to the customer satisfaction in e-banking in Pakistan than the SERVQUAL model dimensions.

Table 3 is showing that significance value is less than 5% i.e. 0.000, which means that there is a significant correlation between the dependent and independent variables. Table is also depicting considerable F-value of 59.73 which means that the model and data are healthy fit in explicating customer satisfaction in E-Banking.

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.361	.191		1.894	.059
	RELIABILITY	.422	.065	.382	6.446	.000
	RESPONSIVENESS	.348	.062	.355	5.593	.000
	ASSURANCE	.098	.057	.446	2.763	.004
	TANGIBLE	.094	.056	.100	1.696	.091
	EMPATHY	.047	.043	.057	1.090	.277

a. Dependent Variable: CUS.SATISFACTION

Table 6 is presenting the coefficient analysis which shows the relationship between dependent variable and each independent variable. If we see the Sig. value, the values of Reliability, Responsiveness and Assurance are demonstrating that they have significant correlation with customer satisfaction, as their Sig. values are less than 5%. But the Sig. values of Tangible and Empathy have come out be more than the significance level, describing that they do not have significant relation with customer satisfaction. The same results are being illustrated by the t-values, as it should be above 2 to accept our hypothesis. Here the value of t-test has come out to be greater than 2 for Reliability, Responsiveness and Assurance. And among the three, Reliability has produced the most significant results. Thus, when studying SERVQUAL model's all dimensions' relation with customer satisfaction e-banking in Pakistan, Tangible and Empathy have not generated significant results for depicting relation with customer satisfaction. However when analyzed individually against customer satisfaction, they have been found correlated positively.

From the results generated in table 5, we can develop the regression equation as follows:

$$CS_{EB} = 0.361 + 0.422X_{RL} + 0.348X_{RS} + 0.098X_{AS} + 0.094X_{TA} + 0.047X_{EM} + 0.472$$
 Here

 X_{RL} = One unit change in reliability will change the customer satisfaction by 0.422 unit on average.

 X_{RS} = One unit change in responsiveness will change customer satisfaction by 0.348 unit on average.

b. Dependent Variable: CUS.SATISFACTION

 X_{AS} = One unit change in assurance will change customer satisfaction by 0.098 unit on average.

 X_{TA} = One unit change in tangible will change customer satisfaction by 0.094 unit on average.

 X_{EM} = One unit change in empathy will change customer satisfaction by 0.047 unit on average.

Thus, we can accept our last hypothesis too,

H₆: Reliability, Responsiveness, Assurance, Empathy, and Tangibles have significant effect on customer satisfaction in E-banking.

5. Conclusion & Discussion

From the statistical analysis, it has been observed that customers are fairly satisfied with the e-banking services in Pakistan in terms of service quality. Major finding of the study include there is relationship of each independent variable with the dependent variable when studied individually. However, when all service quality dimensions taken as predictor of customer satisfaction, Reliability has produced the most significant results followed by responsiveness and assurance, on other hand tangibles and empathy relatively have not produced significant results in e-banking in Pakistan. (O'Neill, Palmer, & Wright, 2003) have concluded in their study that those organizations who will consistently endow with convincing, comprehensible and responsive online service experiences will be the frontrunners in the online market space. And the same has been revealed by the results of the current study.

The findings also lead us to conclude that in Pakistan, people evaluate e-banking service quality majorly on three key dimensions out of five of the SERVQUAL model: Responsiveness, Reliability and Assurance. One reason that can be attached to the less importance of tangibles is that e-banking in Pakistan has not still attained the usability as in the developed countries. Most of the people get benefit of only few basic operations, offered by e-banking in Pakistan, i.e. withdrawing cash from ATMs, account inquiries, POS (Point of sale) transactions, etc. (Dar, 2011) has concluded in his study that there is awareness of e-banking products and services in Pakistan, but there is still room to create more awareness among the banking customers in order to ensure full espousal of e-banking in Pakistan (Husnain & Akhtar, 2015). The other reason of it can be the relative increased importance of the benefit received from the service than the outlook of the facilities providing them. As (Kang & James, 2004) suggest that the "perceived service quality model" substitutes the attributes of the physical product with the utilization of services, i.e. what and how the service is provided determine the perceived service quality by the user.

The relative less significance of empathy in evaluating e-banking service quality by the users can be attributed to the characteristic of e-banking as cited by (Rowley, 2006) that service is in e-banking is virtual, involving no face to face dealings. However, both tangibles and empathy are worth considerable in enhancing customer service quality experience, with supreme importance of reliability, responsiveness and assurance as predictors of customer satisfaction in e-banking in Pakistan.

6. Limitations

Despite of adopting an opposite and fair approach, there are some related limitations of the study:

- The sample size of the research chosen is small as compared to the e-banking customers in Pakistan, because of the time-constraint. Increased sample size can lead us to better generalizability of the results of the study.
- The sample has been derived through non-probability sampling as list of respondents that would allow for random sampling was not accessible.

7. Recommendations for Further Study

- Further research should be carried out with increased sample size to generalize the results of the study.
- Access to list of customers using e-banking in Pakistan can enable to use probability sampling method to ensure that survey sample is better representative of the population.
- Other service quality factors which affect customer satisfaction can also be added for further research.
- Bank specific research i.e. private and public or local and foreign banks may generate more clear results regarding customer satisfaction in e-banking sector in Pakistan.

References

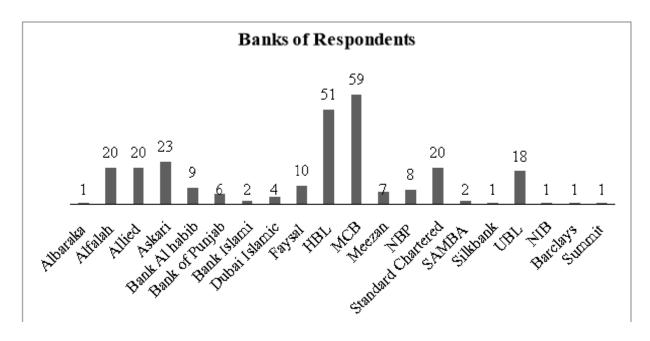
- Balachandher, K. G., Vaithilingam, S., Norhazlin, I., & Rajendra, P. (2001). Electronic Banking in Malaysia: A Note on Evolution of Services and Consumer Reactions.
- Barquin, S., & HV, V. (2015). Digital Banking in Asia: What do consumers really want? McKinsey & Company.
- Bebli, R. S. (n.d.). The Impact of internet banking service quality on customer satisfaction in the banking sector of Ghana. School of Management, Blekinge Institute of Technology.
- Berrocal, M. (2009). Fidelizacio'n y Venta Cruzada, Informe Caja Castilla La Mancha.
- Dar, N. A. (2011). Awareness of electronic banking in Pakistan. *Proceedings of 2nd International Conference on Business Management*.
- Davis, D. (2000). Business research for Decision Making (5 ed.). Pacific Groove: Thomson Learning.
- Furst, K., Lang, W., & Nolle, D. (2002). Internet banking. *Journal of Financial Services Research*, 22. http://dx.doi.org/10.1023/A:1016012703620
- Gronroos, C. (2000). Service Management and Marketing. A customer Relationship Management Approach. England: John Wiley & Sons, Ltd., 2.
- Husnain, M. Relationship marketing and customer loyalty: Evidence From banking sector in Pakistan.
- Husnain, M., & Akhtar, M. W. (2016). Impact of Branding on Impulse Buying Behavior: Evidence from FMCG's Sector Pakistan. *International Journal of Business Administration*, 7(1), p59. http://dx.doi.org/10.5430/ijba.v7n1p59
- Kang, G., & James, J. (2004). Sevice quality dimensions: An examination of Gronroos service quality model. *Managing Service Quality, 14*(4), 266-277. http://dx.doi.org/10.1108/09604520410546806
- Karjaluoto, H., Mattila, M., & Pento, T. (2002). Factors underlying attitude formation towards online Internet banking in Finland. *International Journal of Bank Marketing*, 20(6), 261-272. http://dx.doi.org/10.1108/02652320210446724
- Kaur, N., & Kiran, R. (2015). E-Banking Service Quality and Customer Loyalty: Changing Dynamics of Public, Private and Foreign Bank Consumers in India. Global Business and Management Research: An International Journal, 7(1), 74-92.
- Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences, 1*(2), 172-198. http://dx.doi.org/10.1108/17566690910971445
- Liébana, C., Muñoz, L., & Rejón, G. (2013). The determinants of satisfaction with e-banking. *Industrial Management & Data Systems*, 113(5), 750 767. http://dx.doi.org/10.1108/02635571311324188
- Micuda, D., & Cruceru, G. (2010). Testing SERVQUAL Dimensions on the Romanian Banking. *International Conference on RISK MANAGEMENT, ASSESSMENT and MITIGATION*. Romania.
- Molapo, M. N. (2008, October). An assessment of internet banking service quality. University of Johannesburg.
- Negi, R. (2009). Determining customer satisfaction through perceived service quality: A study of Ethiopian mobile users. *International Journal of Mobile Marketing*, 4(1), 31-38.
- Nupur, J. M. (2010, September). E-Banking and Customers' Satisfaction in Bangladesh: An Analysis. *International Review of Business Research Papers*, 6(4), 145-156.
- Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, *63*, 33-44. http://dx.doi.org/10.2307/1252099
- O'Neill, M., Palmer, A., & Wright, C. (2003). Disconfirming user expectations of the online service experience: inferred versus direct disconfirmation modelling. *Internet Research: Electronic Networking Applications and Policy*, 13(4), 281-296. http://dx.doi.org/10.1108/10662240310488960
- Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50. http://dx.doi.org/10.2307/1251430
- (Fiscal Year 2014-15). *Payment Systems Review, Department Payment Systems*. State Bank of Pakistan. Retrieved from http://www.sbp.org.pk/psd/pdf/FY/FiscalYear-2014-15.pdf
- Rahimuddin, M., & Bukhari, S. A. (2010). E- Banking System in Pakistan. Blekinge Institute of Technology, Sweden.

- Rowley, J. (2006). An analysis of the literature: Towards a research agenda. *Internet Research*, 16(3), 339-359. http://dx.doi.org/10.1108/10662240610673736
- Sabir, R. I., Ghafoor, O., Akhtar, N., Hafeez, I., & Rehman, A. U. (2014, June). Factors Affecting Customer Satisfaction in Banking Sector of Pakistan. *International Review of Management and Business Research*, 3(2).
- Santos, J. (2003). E-service quality: a model of virtual service quality dimensions", Managing service quality. *13*(3), 233-246. http://dx.doi.org/10.1108/09604520310476490
- Shahriari, S. (2014, march). Effective Factors on Loyalty of E-Banking Customers. *International Journal of Advance Research in Computer Science and Management Studies*, 2(3), 257-267.
- Stewart, K. (1999). Transference as a means of building trust in World Wide Web Sites. *Proceedings of the 20th ICIS*. Charlotte, North Carolina.
- Unyathanakorn, K., & Rompho, N. R. (2014). Factors Affecting Customer Satisfaction in Online Banking Service. *Journal of Marketing Development and Competitiveness*, 8(2), 50-60.
- Wang, Y., Lo, H., & Hui, Y. (2003). The antecedents of service quality and their influences on bank reputation: evidence from the banking industry in China. *Managing Service Quality*, 13(1), 72-83. http://dx.doi.org/10.1108/09604520310456726

Appendix A
Summary of Demographics of Respondents

Age

		Frequency	Percent
	18-25	111	42%
	26-40	132	50%
	41 & Above	21	8%
Gender			
	Male	130	49%
	Female	134	51%
Occupation			
	Student	73	28%
	Employee	132	50%
	Businessman	28	10%
	Other	31	12%
Education			
	Intermediate	20	8%
	Graduate	109	41%
	Masters	116	44%
	Other	19	7%



Appendix B

QUESTIONNAIRE

Age	: 1) 18 -	- 25 2) 26 – 4	3) 41 and Ab	ove				
Gen	nder: 1) Male []	2) Female []				
Occ	upation: 1) Stu	ident [] 2)]	Employee []	3) Businessman []	4) Other []	
Edu	cation: 1) Mat 5) Other []		2) Intermediate [] 3) Graduate []	4) Masters []
Ban	k:							
(Ple	ase name your Ba	ank/ Banks)						
<u>CU</u>	STOMER SATIS	<u>FACTION</u>						
Q1.	You are satisfied	with the online s	services provided by	y your bank				
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agree	e 5) Strongly Agree				
Q2.	You are satisfied	with the bank's	online based servic	e quality				
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agre-	e 5) Strongly Agree				
Q3.	Overall service o	f online banking	is better than your	expectation				
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agree	e 5) Strongly Agree				
REI	<u>LIABILITY</u>							
Q4.	The use of e-ba	nking is reliable						
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agr	ee 5) Strongly Agre	ee			
Q5.	I prefer using I	E-Banking instea	d of visiting branch	for making my transa	ctions			
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agr	ee 5) Strongly Agre	ee			
Q6.	I am satisfied wit	th the service cha	rges of my Bank					
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agr	ee 5) Strongly Agre	ee			
Q 7.	I have always fou	ınd ATM Booths	in working order					
1)	Strongly Disagre	e 2) Disagree	3) Neutral 4) Agr	ee 5) Strongly Agre	ee			

Q8. E-banking performs the service right the first time.

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

RESPONSIVENESS

Q9. I always get the detail of my account through SMS/Email on my Cellular phone?

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q10. The Helpline services of the bank are efficient?

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q11. I am always informed by the bank when the services will be performed?

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q12. My Bank's E-Banking facility makes accurate promise about the service they deliver.

Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree
 Response of service through e-banking is very prompt and quick.

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

ASSURANCE

Q14. I feel secure while making transactions through Internet?

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q15. I am satisfied of the knowledge of the employees

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q16. The behavior of e-banking employees instills confidence in customer

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q17. My E-Banking site does not share my personal information with other sites

Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

TANGIBLES

THIODELES

Q18. The e-banking physical facilities are visually appealing

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q19. I am satisfied with the technological up-to-date equipments of the bank

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q20. The e-banking physical facilities of bank are modern

Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree
 EMPATHY

Q21. When you have a problem, Bank shows a sincere interest in solving it.

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q22. You get personal attention from bank employee, if need of contact arises

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree

Q23. Employees of Bank understand your specific needs.

1) Strongly Disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly Agree