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## **ASSESSING THE E-SERVICES OF THE BANKING SECTOR BY USING E-SERVQUAL MODEL: A COMPARATIVE STUDY OF LOCAL COMMERCIAL BANKS AND FOREIGN BANKS IN PAKISTAN**

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### **Abstract**

The aim of the present study is twofold; firstly, to measure the differences in e-services of foreign and local commercial banks and secondly, to find out the critical dimension of e-SERVQUAL for online banking. The study used comparative approach; local commercial and foreign banks in Pakistan. For this purpose, the study targeted local (MCB and HBL) and foreign (Standard Chartered and Alfalah) banks. A total of 195 responses were received through a mean of questionnaire based on a five - point Likert scale from Sahiwal. The study performed reliability

analysis, regression and Pearson chi-square. The reliability of all dimensions was tested with a Cronbach alpha that was greater than .7. The results of the chi-square showed that no difference is found with respect to any dimension in e-services of both local and foreign banks in Pakistan. The findings of the regression analysis showed that e-service quality was affected by 66.2% due to dimensions of e-SERVQUAL. The "reliability" and "privacy" have highest impact on e-service quality than all other dimensions, so banks should pay more attention on these dimensions because that is critical to online banking.

**Keywords: Online Banking; Customer Satisfaction; e-service quality.**

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## **INTRODUCTION**

In every sector, internet has changed the ways of doing business. Traditionally, financial services have been provided to customers on conventional channels during limited working hours, but later on, the internet has reshaped the banking industry of all over the world. Over the last few years, online banks have started to become more and more popular because they have made it easier for the customers to manage their cash at home rather than physically go to the banks for funds transaction as well as doing banking at any time whenever they want.

In Pakistan internet banking has started in mid-1990 and this initiative has taken by foreign banks. While, the local commercial banks adopted the e-banking practices like a credit card, ATM, debit card, etc. in the late 1990's [1]. Due to increasing competition among the foreign and domestic banks; they are more prone to get the branchless banking services that are attractive and convenient for the customers [2]. By employing e-commerce technologies, often banks in Pakistan enable to control their cost, attract new customer and retain existing ones by empowering them to monitor their accounts 24-hours a day and 7- days in a week. Almost all banks in Pakistan have built their own websites that help the customer to get the updates about bank current happenings, products and use some services that are available at all times. Nowadays, customer loyalty is a big challenge in the service industry that's why it is of great concern of the service providers of banks that helps them to be competitive. Though there is needed to assess the customer satisfaction with e-services time to time that are offered by banks in Pakistan. The study tried to achieve the following objectives; to assess the E- quality dimensions that are critical to an online banking service and to inspect the differences in e-services provided by foreign and local commercial banks of Pakistan.

## **REVIEW LITERATURE**

The emergence of e-service is due to the growth of internet. Earlier companies move

towards automation due to cost reduction and focused more on customer needs and wants [3] but later on, they realized that it has significant impact on the company financial performance [4]. E-service is defined as [5] “content-centered and internet-based customer service, driven by the customer with the goal of strengthening customer-service provider relationships”. In order to retain the customers and sustain the growth in a virtual market, there is a need to measure the customer satisfaction with services provided time to time [6,7]. Customer satisfaction is measured via e-service quality [8-13] because it is considered a key input to customer satisfaction [14].

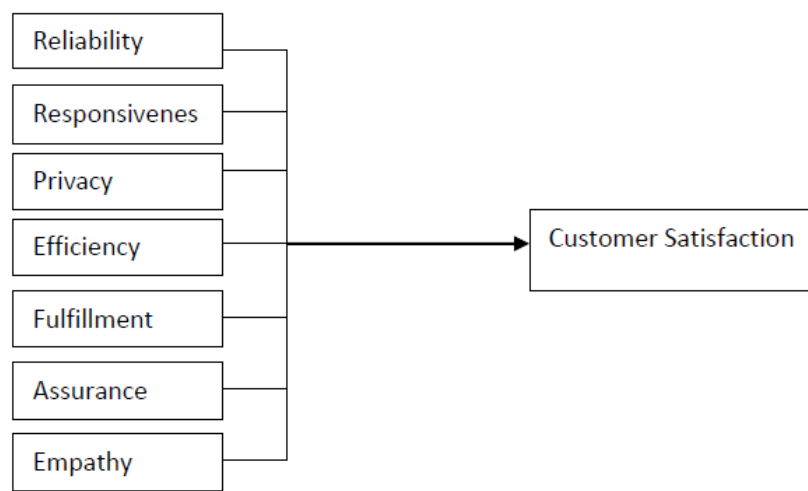
E-service quality is defined as “the consumers’ overall evaluation and judgment of the excellence and quality of e-service offerings in the virtual marketplace”[15]. Several scholarly studies have been done on assessment of e-service quality in different contexts across different sectors. A study on internet banking indicated that customers put more emphasize on the quality of service in case of choosing a specific bank [16]. Khalil [17] considered five dimensions in his study tangibility, assurance, empathy, reliability, and responsiveness to assess the customer satisfaction with online banking service. Moreover, Jun and Cai [18] put forward seven dimensions to assess the e-service quality and these dimensions were; ease of use, information, access, website design, courtesy, responsiveness, and reliability. Another study [19] considered seven dimension of e-service quality were trust, speed of delivery, reliability, ease of use, customized communication, web site content, and functionality in their study in order to measure the customer perception about online financial institutions. Whereas, Li et al. [20] in their empirical study on online travel service considered nine dimensions; ease of use, website design, reliability, system responsiveness, availability, privacy, empathy, experience and trust. They found that reliability, ease of use, trust, system availability and responsiveness contributes a lot to customer satisfaction. Another study [21] conducted in Egypt with an aim of investigating the customer perception about e-quality dimensions in terms of their importance. They used triangulation approach and found that all nine dimensions i.e. (usability, reliability, privacy, responsiveness, incentives, assurance, empathy, efficiency and fulfillment) of e-service have significant impact on customer satisfaction. Another study conducted in the UK [22] measuring the perception of the customer regarding the actual performance of the bank against the mentioned e-SQ dimensions. The findings indicated that customer holds a negative or unfavorable perception, so bank needs to reshuffle their service delivery system in order to improve the customer perception.

Parasuraman et al. [23] developed a scale consisted of 10 dimensions of service quality evaluation (gap analysis) these were; reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles. Later on, these were tailored into five ones i-e reliability, responsiveness, assurance and empathy or SERVQUAL [24]. Dissatisfaction with this model [25-31] has led researchers to develop the SERVPERF (performance only-technique) model, that measures the customer

perception regarding the service provided or in other words cognitive assessment of customer about service performance [23,26,27,32]. Zeithaml, et al. [12] suggested that attributes like efficiency, reliability, fulfillment, privacy, responsiveness, compensation are the suitable measures to assess the e-service quality, or e-SERVQUAL.

## Theoretical Framework

**Figure 1:** The dimensions of e-service quality.



After reviewing the past studies, some of the dimensions of e-servqual are selected that measures the online services. In Figure 1 the dimensions of e-service quality (reliability, responsiveness, privacy, efficiency, fulfillment, assurance and empathy) has been taken as independent variable and customer satisfaction has been taken as the dependent variable.

## Hypotheses Development

On the basis of literature review following hypotheses have been developed:

H1: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to reliability.

H2: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to responsiveness.

H3: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to privacy.

H4: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to efficiency.

H5: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to fulfillment.

H6: There is a difference in e-banking services of foreign and local banks in Pakistan

with respect to assurance.

H7: There is a difference in e-banking services of foreign and local banks in Pakistan with respect to empathy.

## METHODOLOGICAL DESIGN

### Data collection and Analysis

The present study has focused on assessing the e-services of the banking sector by using e-SERVQUAL. On the basis of literature review the study used the following dimensions of e-SERVQUAL i.e. reliability, responsiveness, privacy, efficiency, fulfillment, assurance and empathy. The study has made a comparison between foreign and local commercial banks. The Standard chartered and Bank Alfalah has been chosen as foreign banks, Muslim Commercial Bank and Habib Bank Limited have been selected as local commercial banks. The respondents of this study are the residents of Sahiwal, a total of 250 questionnaires was distributed and received only 195 valid responses by using non-probability sampling technique on a convenient basis. A close ended questionnaire has adapted from a previous study [21,22] according to Pakistani culture. The questionnaire contained two sections. The section one is based on demographic information while section two was based on dimensions of e-SERVQUAL (reliability, responsiveness, assurance, empathy, privacy, fulfillment and efficiency). These dimensions were measured in 5- point Likert scale ranging from strongly disagree (1) to strongly agree (5).

### Reliability Analysis

The Table 1 shows the reliability of the scale. Internal consistency among the items was tested, all the items have Cronbach alpha greater than .7, and it showed the consistency in the responses.

**Table 1:** Reliability.

Sr. No	Variables	Cronbach Alpha
1	Reliability	.790
2	Responsiveness	.710
3	Privacy	.876
4	Efficiency	.776
5	Fulfillment	.731
6	Assurance	.715
7	Empathy	.920

**Regression analysis**

In Table 2 the adjusted R-square indicates that e-service quality is affected by 66.2% due to predictor variables (reliability, responsiveness, privacy, efficiency, fulfillment, assurance and empathy). It indicates that these predictor variables have the greatest impact on e-banking service quality in Pakistan. The Durbin Watson value 1.760 shows that no auto correlation is found among the variables.

**Table 2:** Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.716 <sup>a</sup>	0.679	0.662	0.60946	1.76

a. Predictors: (Constant), reliability, responsiveness, empathy, efficiency, fulfillment, assurance, privacy.

b. Dependent Variable: e-banking service quality.

Furthermore, in Table 3 the fitness of the model was also tested with the help of ANOVA. The model found significant with a value of 23.562. These independent variables actually relate to e-service quality of banks with a p- value of.000.

**Table 3:** ANOVA.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.946	7	0.278	23.562	.000 <sup>a</sup>
	Residual	7.027	28	0.251		
	Total	8.972	35			

a. Dependent Variable: e-banking service quality.

b. Predictors: (Constant), reliability, responsiveness, empathy, efficiency, fulfillment, assurance, privacy.

**Table 4:** Coefficients.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.46	0.413		3.17	0.039
	responsiveness	0.492	0.021	0.475	2.264	0.007
	privacy	0.507	0.018	0.597	2.259	0.032
	efficiency	0.722	0.166	0.571	1.977	0.004
	fulfillment	0.591	0.125	0.39	3.571	0
	assurance	0.416	0.206	0.467	2.312	0
	empathy	0.345	0.012	0.231	2.194	0.003
	reliability	0.654	0.013	0.604	4.715	0.005

a. Dependent Variable: e-banking services.

In the coefficients Table 4, the standardized coefficient (Beta) tells us how much change takes place independent variable (satisfaction) due to a one unit change in predictor variable. Here, reliability and privacy more regress the satisfaction with 1 unit change brings .604 and .597 changes in e-banking service quality. With one unit change in efficiency will leads towards .571 increases in e-services. The increase in responsiveness (.475), assurance (.467), fulfillment (.390) and empathy (.231) will cause an increase in e-banking service quality (Table 5).

**Table 5:** Pearson Chi- square.

Variables	Critical Value	Asymp. Sig. (2- sided)
Reliability	7.294	.607
Responsiveness	5.771	.763
Privacy	13.276	.209
Efficiency	4.819	.682
Fulfillment	9.333	.407
Assurance	6.378	.496
Empathy	9.295	.232
E-service quality	1.003	.317

## **Hypotheses Testing**

### **Hypothesis 1**

The chi-square results indicate that there is no difference in e-banking services of foreign and local banks in Pakistan with respect to reliability at score ( $\chi^2= 7.294$ ,  $p=.607$ ). Both banks e-services are available 24hrs a day, provides accurate information to their customers, meanwhile, the result also highlights that customers perceived overall performance of the banks are satisfactory. Therefore, we accept H1.

### **Hypothesis 2**

The study found that there is no difference in e-services of both local and foreign banks in Pakistan with respect to responsiveness at score ( $\chi^2=5.771$ ,  $p=.763$ ). According to the findings, both banks provide the service right at the first time and respond quickly as per need of the customer. Furthermore, it facilitates the customer by enabling a quick login and sign out of the account meanwhile, helper functions on the site are sufficient that guides the customer. Therefore, we accept H2.

### **Hypothesis 3**

With respect to privacy, the results of chi-square shows that there is no difference in e-services of both local and foreign banks in Pakistan with a score ( $\chi^2=13.276$ ,  $p=.209$ ). The customer's credit card information is kept secure and explicitly has privacy policies of both banks. The respondents of both banks are satisfied with privacy concern and believe that bank site does not share their personal information with any else, therefore, we accept H3.

### **Hypothesis 4**

No difference is found in e- services of banks in Pakistan with respect to efficiency at score ( $\chi^2=4.819$ ,  $p=.482$ ). The customers of both banks believe that banks offer a variety of packages at reasonable price and the website is designed properly that helps to get what we need efficiently, therefore, we accept H4.

### **Hypothesis 5**

The chi-square result shows that no difference is found in e-services of both local and foreign banks in Pakistan with respect to fulfillment at score ( $\chi^2=9.333$ ,  $p=.407$ ). It is believed that banks fulfill it promises what they promise to deliver within a suitable time as well as saves the customer's time by permitting a minimal effort for banking transactions, therefore, we accept H5.



### **Hypothesis 6**

With respect to assurance the study once again found no difference in e-services of both banks with a score of ( $\chi^2= 6.378$ ,  $p=.496$ ). The customers believed that bank website assures us about that they have a good repo or well recognized bank and meanwhile they give us a confidence on banking services. Therefore, we accept H6.

### **Hypothesis 7**

The present study found no difference in foreign and local banks with respect to empathy ( $\chi^2=9.295$ ,  $p=.232$ ) in Pakistan. According to respondents banks are individually tailor the needs of customers and overall the service provided by the bank is good enough. Therefore, we accept H7.

### **Hypothesis 8**

The chi-square indicates that with respect to e-banking service quality of foreign and local banks found no difference with a score value of ( $\chi^2=1.003$ ,  $p=.317$ ). Overall, the customers are satisfied yet, with the performance of e-services of banks. They believed that service quality of both banks is same and it is proved through chi-square results, therefore, we accept H8.

## **CONCLUSION**

As we know the survival of any business is due to customers and customer is a king. In service industry, there is a need to measure periodically, whether they are satisfied or not from the services provided to them. Services can be offered both at traditional outlets as well as online. As the present study tried to assess the online banking services, for this, the study used the most appropriate tool e-SERVQUAL. The findings of the study reveal that there is no difference in e-services of both local and foreign banks in Pakistan with respect to all dimensions of e-SERVQUAL.

The study also found that e-service quality is an important antecedent to customer satisfaction and is affected by dimensions of e-SERVQUAL, among all dimensions, reliability and privacy has a great influence on e-service quality and these dimensions are perceived critical by the customers while assessing the e-banking services. The study concluded that customers are satisfied with the current e-services and felt no difference in local and foreign banks, but it does not mean that banks sit idle after knowing that their customers are satisfied by gaining high scores on seven dimensions, there is still more room for improvement in order to increase the perceived service quality. So, the bank managers and decision makers should pay more attention to the identified dimension while devising the strategies and will enable to provide high service quality to their customers.

## LIMITATIONS

The first limitation lies on sampling technique, non-probability sampling technique was used and data were gathered from single city Sahiwal on a convenient basis. The sample size was not sufficient to generalize the findings to the entire population. The study was limited to few banks not the entire banking sector due to time constraints. The present study considered some variables of e-SERVQUAL model for the assessment of e-banking services, the future study may be used other items of e-SERVQUAL model to assess the e-services. The future study may be used interview technique along with a questionnaire or may be used qualitative approach (interview) in order to increase the understanding about customer satisfaction with e-services of banks. The present study viewed only customer perspective future study may be looked on other stakeholder perspective.

## PRACTICAL IMPLICATIONS

This study is important for future research & also important for stockholder's perspective. Research, gave valuable information to Foreign (Alfalah and Standard Chartered) and local banks (HBL and MCB) about the e- service quality and the critical dimension that most affects the e-service quality as well as the most preferred by the customers. By taking into account, bank manager and decision maker should devise some strategies in order to give their best and gain an edge on the basis of dimension that is critical for e-service quality or preferred by the customer while evaluating the online banking service quality. Working in that manner, banks increase the customer satisfaction level, loyalty, retention rates in terms of profitability and ultimately GDP of Pakistan.

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