THE INFLUENCE OF E-CUSTOMER SERVICES AND PERCEIVED VALUE ON BRAND LOYALTY OF BANKS AND INTERNET BANKING ADOPTION: A STRUCTURAL EQUATION MODEL (SEM)

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Abstract

There is a plethora of research which has dealt with service quality issues in different service organization. Therefore, very little research has been done on electronic service quality. The objective of this research is to measure the E-customer service that is the core dimension of e-service quality with internet banking adoption and Brand loyalty of Banks. In addition to this Customer perceived value has also been explored within internet banking context. A self-administered survey was conducted to approach 500

internet banking users in major cities of Pakistan. The data was analyzed through performing various quantitative measures such as correlation and structural equation model (SEM) by using AMOS. Findings reveal that e-customer service and perceived value significantly influence on internet banking adoption and brand loyalty of Banks. This research is first in its nature that reveals the influence of e-customer service on internet banking adoption and enriches the e-service quality literature.

Keywords: **E-Customer Service; Perceived Value; Internet Banking Adoption; Brand Loyalty of Banks; SEM**

INTRODUCTION

Electronic banking contains several types of services like ATM,s, Mobile Phone Banking, Real Time online banking, Point of sale, Call center banking, Plastic card composition. Therefore, present study will just focus on internet banking that is the most innovative and convenient service of Electronic banking. It was argued that organization should use technology if they want to survive and get advantage on competitors [1]. According to the Earl [2]; Rahi [3] the most important tool in business is technology without it companies cannot survive and never get advantages on competitors. In views of Chaffey [4] elaborates internet and its related services, it is a physical network that work all over the world and it console different computers. With accession to this, Domegan [5] also described and draw the map of technology, found that technology is dependent on customer understanding if it is understandable then it is beneficial for the customer and for companies otherwise it will create more problems. According to Mattila et al. [6] investigated the history of internet banking in Finland research depicted that the trend of using internet banking in Finland is higher as compare to other countries. Moreover for transaction Finland is gained in number first place where online transaction is made via internet banking. This is possible because every bank of Finland is providing internet banking services and customers are well familiar with their banking products and its online features. An author like Barnes-Vieyra et al. [7] argues that online transaction is the future of our companies. Banks and even in other sectors internet would be the central owner and perform different types of transaction with minimum risk. Soon people will give priority to internet for all types of transaction [8]. The use of internet is not limited to banking sector it could be used for non-commercial activities like paying the tax or entertainment. Precisely we can define e-commerce as applications that facilitate two are more than two parties for the purpose of business exchange [9]. Hence, Zhuang et al. [10] illustrate that technology is playing a key role in every type of business and it is essential without it to get competitive advantages is impossible. Furthermore, Jayawardhena et al. [11] argue that internet banking will change the way of services and interaction between mangers and customers. Mols [12] describe the importance of customer relationship by using technology you can monitor your customer in good way as compare to physical interaction. A plethora of studies that

have conducted that further effect on internet banking or overall electronic banking [9,13-15]. In views of Rahi et al. [15]; Woodruff [16] has defined customer perceived value that customer satisfaction comes with customer perceived value, explicitly the meaning of customer perceived value where the ratio of benefits would be equal the cost that customer is paying in return of that product. More precisely, Oliver [17] also nail down the definition of customer perceived value therein customer perceived value where customer outcome/input ratio is equal to the befits of the customer outcome /input ratio and where customer get satisfied with what he/she is getting in return of what he is paying. Overall, this study attempts to contribute the knowledge of user's behaviors towards adoption of internet banking with influence of e-customer services and customer perceived value.

LITERATURE REVIEW

Banking sector is a huge sector and has significant impact on respective country economy. Within banking sector, internet banking is the most convenient service for customers and for Banks [13]. For banks, it is helping to enhance efficiency and profitability [14]. Internet is playing important role in our lives as Gupta et al. [18] postulated that customer choose the internet banking services because it is convenient and have speedy action. Hence [14,15] a website in internet banking plays delivery channel role that is very important in usability point of view. Customer perceived value has also key importance according to Oliver [19] stated that, Perceived value where the ratio of outcome and input is equal to the ratio of customer satisfaction and its perceiving outcome what he/she input during the purchase. The main constructs that were used in the development of theoretical framework had described below one by one in different sections.

Internet Banking Adoption

In recent years, trend has changed as the ratio of technology users are growing. It could perceive that the trend of using internet is swelling [14]. In this new area people want easiness in every field of life and internet banking is the most popular service in banking sector as it has totally changed the traditional banking system [13]. In views of Liao et al. [20] described the importance of the technology, it is one of the powerful tool for the success of the business, technology has changed the way of the business now customer wants convenience with latest features and companies are focusing to improve their technological systems like in banking. You may have seen change in website after a short time period it is because they want to get competitive advantages by improving their technological services [3]. Information technology is a powerful tool or enabler in the era of customer service and create more opportunities for customer and as well as for investors [13]. In addition to that authors like Weick et al. [21] argues that information technology is important in any business the most essential service is to provide front line function a place where you may don't exist but your customer exist and he/she is willing to buy your products, your customer can get better advantages by using internet services [9]. Hence, the cost they are paying for a specific transaction it

would be effective, mangers can watch their customers activities that how they are performing their operation during transaction [14]. The most important factor is branchless banking where customers can perform their transaction where they dream to pay or buy the thing by using internet banking [13]. According to Nabi [22] stated that there are different types of definitions of internet banking therefore we can accumulate that it is a network that combine the computers all over the world. Electronic commerce refers to the use of electronic means and technologies to conduct commerce in various settings, such as business-to-business (B2B) and business-to-consumer (B2C) [23], moreover internet developed with the passage of time there was an era when people were limited with their computers now you can use it on smart phones, prior it was used just for emails now the trend of using web has changed the overall picture of the internet, hence if you are using website for the selling purpose you are free you don't need to bound with your system , it gives comfort to employee like branchless banking where customer can perform their transaction without any interruption [13]. Moreover those banks that are not providing internet banking they may lose their big share of those customer who want to use internet banking, now for company's authorities and organization it is essential to use the internet without it, it would be impossible to survive in competitive world [14].

According to Jayawardhena et al. [11] described the importance of e commerce it is an application that provide facilities to customer for the purpose of business and exchanges between two or more customers moreover it bring effectiveness in business process. Hence, Mols [12] claim that internet will change the way of business and the way of companies that in which they perform their activities. In views of Rahi et al. [13] it will bring your customer more closely and will create strong relationship. Furthermore Kardaras et al. [24] explain the importance of the banking sector according to research e-commerce is best for banking sector to reduce the cost of the transaction as well as to make easiness in banking operation. Shariq [15] explain that the use of internet and technology is the most important element to improve efficiency in business. With accession to previous studies Tan et al. [25] illustrate that internet banking will grow vigorously in coming few years and it will transformed traditional banking into branchless banking. Orr [26] illustrate, banks that are not providing internet banking they will lose their customer. Meanwhile, Jayawardhena [23] explain that website should be user friendly and it must have ample information that how user can perform operation during online transaction moreover if the website is not user friendly and it does not have proper contents that's means you are losing not only your customer but also trust and image your customer. According to Tarí et al. [27] narrate that companies must know that how to hold the customer for their survival and use of internet is the best way to attract your customer anywhere at any time. Hence, companies should review their policies of product development they must get feedback about their online usage if your customers are giving you proper feedback that's means you are gaining trust via use of internet [14]. Further to this Domegan [5] postulated that companies get competitive advantage by improving their technology moreover technology is the important business tool if companies want to get advantage or want profit they must review their websites. Supporting to literature Domegan [5] narrates that internet

banking can perform transaction with efficiency. In views of Lichtenstein et al. [28] narrate that internet banking is better than traditional banking and maximum operation should be transformed via internet banking.

Brand Loyalty

The brand is the identity of the product and image explains that is brand valuable or not [14]. Brand is as important as product itself it differentiate the product with other products. Brand is an emblem or symbol and this symbol motivate the customer to buy their product, symbol may be called differently like logo according to the easiness or trademark. Furthermore the key role of a brand is to distinguish a product with other on behalf of quality or service [3]. It creates trust between customer and manufacturer and gives competitive advantages. According to Kapferer [29] defined that brand is an identity of a product. It was stated, that there are many angles to see a brand for customer, it includes overall experience from their buying process to using, hence brand image comes when customer have overall experience about the brand. In views of De Chernatony et al. [30] narrate that for successful brand image it is important that companies must observe the needs of the customer deeply and it must be relevant what customer actually want and does your product fulfil the need of the customer. Hence, Aaker (1997) explains in detail about brand image and stated that if the product has unique qualities it will attract the customer and will create good brand image, hence to maintain the brand identity it is important to maintain consistency about quality and services, research also explain that to attain customer attention via services and quality is the best tool to build strong image in customer minds. According to Aaker [31] stated that if companies want good brand image they must be excellent to provide services, organizing, and should anxious about product delivery [14]. Their research also elaborated that if companies want excellent brand image they must build brand identity. Authors like Ward et al. [32] also enlighten that brand image are differentiating your product by making promise with customer to make product reliable, durable, and quality effective. Moreover research shows that those companied who are committed with services and are providing distinctive product feature get higher brand image [13].

E- Customer Service

E-Customer Service is one of the core dimensions of E-Service Quality [33]. This dimension is related to service reliability, customer sensitivity, personalized service and fast response to complain. Therefore, the original conceptualization of service quality include: customer service: sensitivity, courtesy and customer knowledge [34]. E-services can be defines as deeds, efforts or performance that delivered by information technology [35]. According to De Ruyter et al. [36] postulated that internet based customer services was driven by customers and linked with information technology system, which aimed at to enrich the customer relationship. In addition to that Santos [37] argued that e-service quality becomes a key factor for customers where comparing the technical features for instance prices of the products are easier than traditional channel. Furthermore, e-service quality can be summarised as the overall evaluation

and judgments of customers in virtual market place [37]. In views of Zeithaml [38] stated that internet service is the extent where a website facilitates its users during purchasing, shopping, getting information products or services. Authors like Cronin Jr [39] have postulated that e-service quality was not used only for competitive advantages but it also involved customers in the process of development, feedback, and enrich the customer relationship. It was said that e-service considered for operational efficiency and profitability [39]. In regards to e-commerce Zeithaml [40] suggested that it was considered that offering low prices on website was the only guarantee of success, therefore these days it has proved that customer service is the key element for achieving results in an online shop. In addition to that these days consumer demand personal attention, delivery on time and to have their emails answered quickly [40]. Hence, website management should ensure to achieve these expectations in the best possible way. Customer service in online environment had ensured key dimension of e-service quality [41]. Thus' the following hypothesis generated

H1: E-Customer Services significantly influence on internet banking adoption.
H2: E-Customer Services significantly influence on Brand Loyalty of Banks.
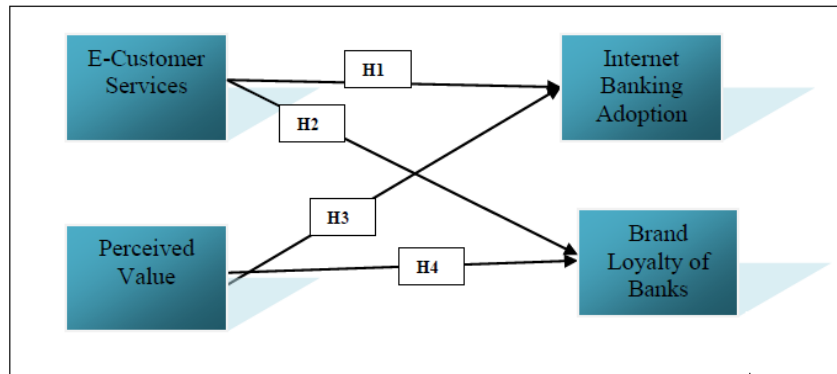
Customer Perceived Value

Customer perceived value has numerous types of element. According to Sweeney et al. [42] explain that value matter where you have your potential customers and it must be equal to what customer is paying and in return what he is getting. Hence, Sheth et al. [43] postulated that there are number of dimensions for customer perceived value like functional value where the operation comes, conditional value depend on conditions of the business nature moreover, emotional value also matter like your customer intention towards your product hence social value also count and lastly epistemic values. In views of Rahi [13], Woodruff [16] explain the dimension of perceived value in detail functional value the intention of purchase while emotional value to create curiosity towards particular brand and perceive it emotionally. Therefore, in this study we will focus on perceived value that will reflect over all process from purchase to use and its outcome. In addition to that, Oliver [19] describes the equity theory it includes the ratio of outcome/input in both perspective from customer as well as seller point of view. Meanwhile, Bolton [44] also explain customer perceived value it is a process of evaluation that what customer is paying and what he/she is getting in return moreover perceived value also include monetary and non-monetary concepts like how much time your customer consume and endeavour to find a product and in return what he get it include all efforts from physical to mental. In views of Oliver [19]; Rahi [8] emphatically stated that the concept of outcome to input must be appropriate to enhance the customer perceived value (Figure 1). Thus the following hypothesis generated.

H3: Customer Perceived value significantly influence on internet banking adoption.
H4: Customer Perceived value significantly influence on Brand Loyalty of Banks.

Proposed Research Frame Work: After literature review a theoretical framework was developed.

Figure 1: Presents the relationship of E-Customer Services that is the core dimension of e-service quality and customer perceived value on Brand Loyalty of Banks and internet banking adoption.

METHODOLOGY

Research Philosophy

The criticism on E-Customer Service and perceived value has acknowledged that further motivate researcher to employ these determinants in internet banking adoption context. Following positivist paradigm/quantitative approach was used to verify the influence of E-Customer Services and perceived value on brand loyalty and intention of internet banking adoption. According to Becker et al. [45] stated that positivists believe in employing quantitative approaches to data analysis and support objectivity to define their ontological statements.

Measurement and Scaling

The survey instrument consisted of two parts, first part asked about Demographic characteristics like Region, Age, Gender, Qualification while second part include four latent construct with 14 items. Three items for Customer Perceived value adopted from Rahi [3]. Hence, Internet banking adoption consisted on three items adopted from Martins et al. [46], in addition to this three items of Brand loyalty adopted from Rahi et al. [14] and lastly three items of E-Customer Service adopted from Ho et al. [47].

Sampling

The survey was administered towards commercial banks visitors. Formal letters were written to the respective banks of the commercial banks. Where, the researcher asked for permission from branch managers to collect the data within bank branches. The survey was administered in English language. The reason of this English language is

the second largest language to speak in Pakistan. To further strengthen the methodology, about language, opinion was taken from branch managers. Majority of them were agreed with assumption as most of the customers are educated they can well understand English language. Convenience sampling was used in this study. The sample size has been estimated given the guidelines provided by Cochran [48]. As the population of banking customers was larger an ideal sample size would have to be 267 [49]. Following is the detail description of mathematical formula proposed by Cochran [48].

$$n_0 = \frac{z^2 \times p(1-p)}{e^2}$$

Where
$n0$=is the sample size
Z=is the two tailed area under the normal curve where α=0.05 and the z value is 1.96
e=is the acceptable sampling error
p=is the population of a proportion with a desired attribute (assumed to be 0.5 which maximises the sample size to be determined)

Given these values and an acceptable sampling error of 6.5%, the sample size is determined as:

This gives the acceptable sample size to be approximately 267.

According to Comrey et al. [50] stated that sample size of 50 is very poor, while 100 is poor, 200 is reasonable, 300 is good, 500 is very good and 1000 is brilliant for structural equation modeling. In light of above arguments this study was selected a sample size of 500 internet banking users.

Structural Equation Model SEM

For the purpose of data analysis Structural Equation Model was employed. Generally SEM consists of two models include: measurement model and Structural Model. Prior to structural modeling study has to assess the measurement model of latent construct for their dimensionality, validity, and reliability by going through the process named as confirmatory factor analysis (CFA). It has been recommended by different researcher in the field of service marketing [51]. Hence, this study employed a confirmatory analysis (CFA) to check the influence of E-Customer services, and Perceived value on Behavioural intentions of users towards internet banking adoption.

Reliability and Validity

The issues of reliability and validity were analysed before employment of structural modeling. As the study is quantitative in nature, usually Cronbach's (α) has been

recommended to ensure reliability. Therefore, Composite Reliability (CR) has been preferred for this study as supported by Henseler et al. [52]. Two type of validity was approached: Convergent and discriminate validity. The convergent validity was confirmed through estimation of average variance extracted (AVE) by following recommended values Fornell et al. [53] as it must be greater than 0.5. Furthermore, the discriminant validity was also ensured through Confirmatory Factor Analysis (CFA).

Sample Profile: The pie chart reflects the demographic details of 500 respondents as sample for this study. As it can be seen in Figure 2, the age of the respondents 32% for Less than 25 years old, 34.6% that counts at age between 26 to 35 years, 22.1% for 36 to 45% and above 46 there are 11.2% respondents. Overall a good mixture of age was directed for this study. Figure 3 presents 53.1% of male whilst 46.9% female respondents.

Figure 2: Pie chart reflects the demographic details of 500 respondents.
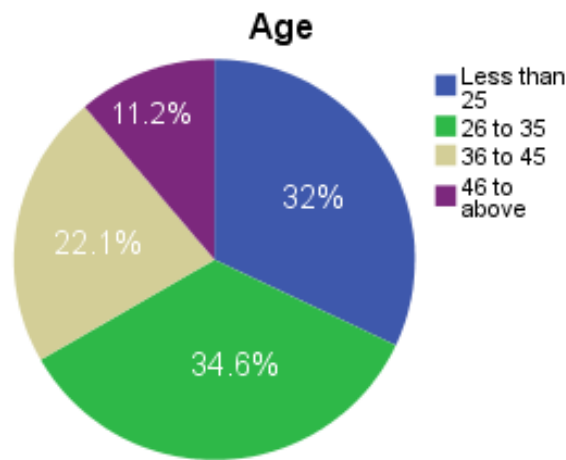

**Figure 3:** Presents 53.1% of male whilst 46.9% female respondents.
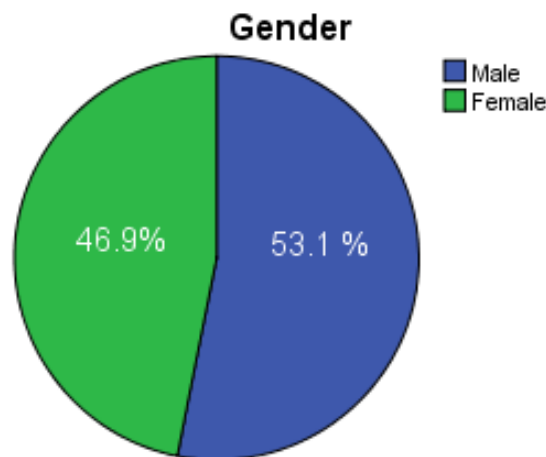
Data was further analysed with demographic characteristics of education and region. Figure 4 illustrated that there were 48.4% respondents that belonged to urban side while, 51.6% respondents had participated from country side. With accession to this Education of the respondents were measured where 2.9% respondents were considered below high school education, 6.3% from those who attended high school, 10.2% respondents who attended college, the maximum share was graduate respondents with 50.8% and finally 29.9% respondents were those who were post graduated (Figure 5).

Figure 4: Illustrated that there were 48.4% respondents that belonged to urban side.
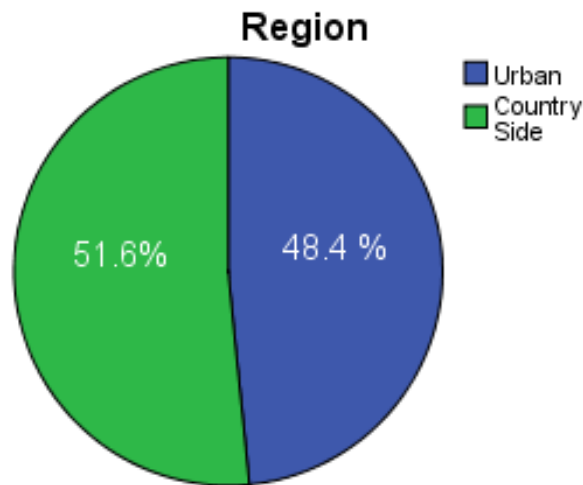
Figure 5: Presents the maximum share was graduate respondents with 50.8% and finally 29.9% respondents were those who were post graduated.
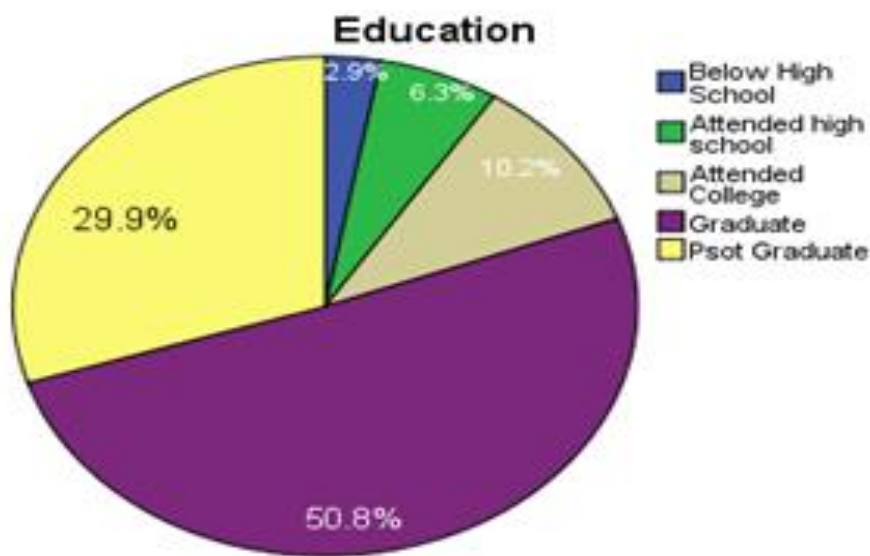
FINDINGS

Explanation Measurement Model

The measurement for this study comprised of four constructs where E-Customer Services and Customer perceived value were presented as exogenous whilst, Internet Banking adoption and Brand Loyalty of Banks were presented as reflective first order endogenous variables. Table 1 depicted result of confirmatory factor analysis (CFA), where, factor loading values supported by Chin [54] as recommended threshold level of 0.6. Further to this measurement model needs to be assessed construct validity, convergent validity, discriminate validity, composite reliability and average variance extract (AVE). Composite reliability (CR) Table 1 depicted, degree where the construct indicator represent the latent construct, values exceeded 0.7 recommended by Hair et al. [55]. Hence, average variance extracted that reflects the overall amount of variance in the indicators accounted for latent construct, values in Table 1 exceeded 0.5 as recommended by Hair et al. [55]. In addition to this the construct validity was assessed on the fitness of index of the model. Figure 6 presents all model fit index for instance (RMSEA=0.041, CFI=0.983, TLI=0.977, NFI=0.964 and chisq/df=1.852).

Table 1: Measurement Model.

Constructs	Loading	AVE	CR
E-Customer Service	**Service**	**0.506**	**0.754**
The online transaction process was accurate.	0.68		
The hyperlinks on this portal site are valid.	0.77		
Internet banking portal performs the service correctly.	0.68		
Perceived Value	**Value**	**0.651**	**0.848**
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) offers attractive service costs.	0.82		
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) charges me fairly for similar services.	0.80		
Compared to alternative Banks (don't have internet banking), the Banks (have Internet Banking) provides more free services.	0.80		
Internet Banking	**Internet**	**0.608**	**0.823**
I intend to use the system in the next months.	0.79		
I intend to consult the balance of my account on the platform of	0.78		

Internet banking.			
I intend to perform a transfer on the platform of Internet banking.	0.77		
Brand Loyalty	**Brand**	**0.584**	**0.808**
I feel that a banks branding services (Internet Banking) possesses its practical function	0.71		
I feel that a banks branding services (Internet Banking) possesses a positive symbolic meaning.	0.79		
I feel that a bank branding services (Internet Banking) can relate to the pleasant experience.	0.79		

Figure 6: The Final Measurement Model.
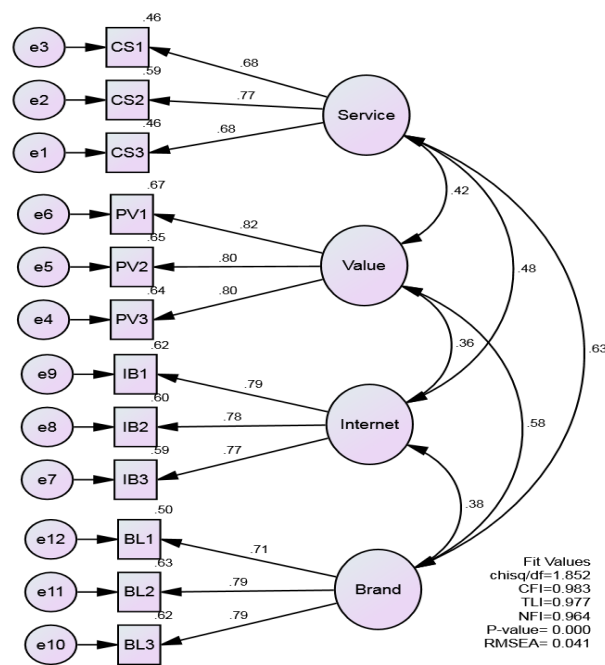
The final measurement Model

The data were subjected to a discriminate validity. Table 2 illustrated squared correlation coefficient between the constructs. The square root of AVE (bold) in Table 2 was found greater than its corresponding correlation coefficients, values presented in rows and columns. All these results presented in Table 2 indicate the achievement of discriminate validity as recommended by Hair et al. [55].

Table 2: Discriminate validity.

Constructs	E-Customer Service	Perceived Value	Internet Banking	Brand Loyalty
E-Customer Service	**0.711**			
Perceived Value	0.42	**0.806**		
Internet Banking	0.48	0.36	**0.779**	
Brand Loyalty	0.63	0.58	0.38	**0.764**
Note: Bold values indicate the square root of AVE of each construct				

Structural Model

Measurement model was achieved after conducting validity and reliability analysis. Further, the structural equation model was developed to test the proposed hypotheses in this study. For path analysis AMOS 21.0 was used. Figure 7 shows the results from the analysis that presents path coefficient from independent constructs to their corresponding dependent constructs as stated in the research hypothesis.

Figure 7: The path coefficient for all hypotheses.

The path coefficient for all hypothesis of interest in the study
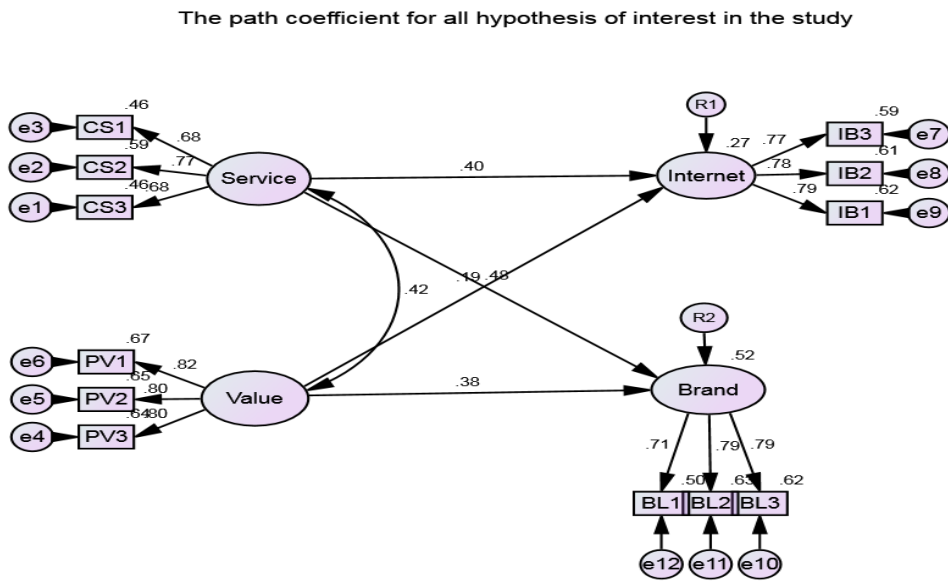
Fit Values
chisq/df=1.852
CFI=0.983
TLI=0.977
NFI=0.964
P-value= 0.000
RMSEA= 0.041

The results in Table 3 depict path coefficient of respective constructs with its level of significance. The hypothesis results revealed that of all four hypotheses have significance relationship. The relationship between E-Customer services to Internet Banking adoption has supported by (H1: b=0.429, z=6.271, significance=0.000). Hence, the relationship between E-Customer Services and Brand Loyalty of Banks has supported by (H2: b=0.561, z=7.862, significance=0.000). H3 conveyed that Customer Perceived Value significantly relates with Internet Banking adoption and has been supported by (H3: b=0.176, z=3.373, significance=0.000). Finally, the results of H4, where Customer Perceived Value significantly influence on Brand Loyalty of Banks accepted and has been supported by (H4: b=0.378, z=7.005, significance=0.000).

Table 3: Hypothesis testing.

Construct	Path	Construct	Estimate	S.E	C.R	P		Result
Internet	<---	Service	0.429	0.068	6.271		***	Significant
Brand	<---	Service	0.561	0.071	7.862		***	Significant
Internet	<---	Value	0.176	0.052	3.373		***	Significant
Brand	<---	Value	0.378	0.054	7.005		***	Significant
Note: Significance level where, * p < .05; **p < .01; ***p < .001.								

DISCUSSION/CONCLUSION

After conducting detail research it is clear that all private and Govt. Banks should focus on e-customer service. Internet banking is the key service for customer loyalty. Furthermore, if managers want that their customer must be loyal with banks they should focus on e-customer services and customer perceived value. The relationship between e-customer service and internet banking adoption reveal that by improving e-customer service banks can get more and more internet banking users, whilst customer perceived value was also supported with e-customer service and internet banking adoption relationship. Meanwhile, Customer perceived value itself influence on internet banking users as presented in H3 if the customer perceived value would high the ratio of internet banking users will significantly increase. In accordance to all major findings, a conclusion can be drawn that, for customer loyalty internet banking is most important there is no doubt that the other findings like customer perceived value is also important therefore e-customer service is eye-popping for the sake of Internet banking adoption and brand loyalty of banks.

REFERENCES

1. Goetsch DL, Davis S (2004) Effective Customer Service: Ten Steps for Technical Professions: Pearson Prentice Hall.
2. Earl MJ (1994) The new and the old of business process redesign. The Journal of Strategic Information Systems 3: 5-22.

3. Rahi S (2016) Impact of Customer Perceived Value and Customer's Perception of Public Relation on Customer Loyalty with Moderating Role of Brand Image. Journal of Internet Banking and Commerce 21.

4. Chaffey D (2007) E-business and E-commerce Management: Strategy, Implementation and Practice: Pearson Education.

5. Domegan CT (1996) The adoption of information technology in customer service. European Journal of Marketing 30: 52-69.

6. Mattila M, Karjaluoto H, Pento T (2003) Internet banking adoption among mature customers: early majority or laggards? Journal of services marketing 17: 514-528.

7. Barnes-Vieyra P, Claycomb C (2001) Business-to-business e-commerce: models and managerial decisions. Business horizons 44: 13-20.

8. Rahi S (2016) Impact of Customer Value, Public Relations Perception and Brand Image on Customer Loyalty in Services Sector of Pakistan. Arabian J Bus Manag Review S: 2.

9. Rahi S (2015) Moderating Role of Brand Image With Relation to Internet Banking and Customer Loyalty: A Case of Branchless Banking. The Journal of Internet Banking and Commerce.

10. Zhuang Y, Lederer AL (2004) The impact of top management commitment, business process redesign, and IT planning on the business-to-consumer e-commerce site. Electronic Commerce Research 4: 315-333.

11. Jayawardhena C, Foley P (2000) Changes in the banking sector–the case of Internet banking in the UK. Internet Research 10: 19-31.

12. Mols NP (2000) The Internet and services marketing–the case of Danish retail banking. Internet Research 10: 7-18.

13. Rahi S, Ghani M (2016) Internet Banking, Customer Perceived Value and Loyalty: The Role of Switching Costs. J Account Mark 5: 2.

14. Rahi S, Ghani MA (2016) Customer's Perception Of Public Relation in E-Commerce and its Impact On E-Loyalty With Brand Image and Switching Cost. Journal of Internet Banking and Commerce 21.

15. Shariq S (2006) Internet banking in Pakistan. Master thesis, Business Administration.

16. Woodruff RB (1997) Customer value: the next source for competitive advantage. Journal of the Academy of Marketing Science 25: 139-153.

17. Oliver RL (1993) Cognitive, affective and attributes of the satisfaction response. Journal of consumer research 20: 418-430.

18. Gupta M, Rao R, Upadhyaya S (2008) Electronic Banking and Information Assurance Issues. Advances in Banking Technology and Management: Impacts of ICT and CRM.

19. Oliver RL (1999) Whence consumer loyalty?. Journal of Marketing 63: 20-38.

20. Liao Z, Cheung MT (2002) Internet-based e-banking and consumer attitudes: an empirical study. Information and Management 39: 283-295.

21. Weick KE, Quinn RE (1999) Organizational change and development. Annual review of psychology 50: 361-386.

22. Nabi F (2005) Secure business application logic for e-commerce systems. Computers and Security 24: 208-217.

23. Jayawardhena C (2004) Personal values' influence on e-shopping attitude and behaviour. Internet Research 14: 127-138.

24. Kardaras D, Papathanassiou E (2001) Electronic commerce opportunities for improving corporate customer support in banking in Greece. International Journal of Bank Marketing 19: 292-298.

25. Tan M, Teo TS (2000) Factors influencing the adoption of Internet banking. Journal of the AIS, 1(1es), 5.

26. Orr HA (2000) Adaptation and the cost of complexity. Evolution 54: 13-20.

27. Tarí JJ, Sabater V (2004) Quality tools and techniques: are they necessary for quality management? International Journal of Production Economics 92: 267-280.

28. Lichtenstein S, Williamson K (2006) Understanding consumer adoption of internet banking: An interpretive study in the Australian banking context. Journal of Electronic Commerce Research 7: 50-66.

29. Kapferer JN (2004) New Strategic Brand Management: Creating and Sustaining Brand Equity Ser: Kogan Page, Limited.

30. De Chernatony L, Malcolm M (1998) Creating powerful brands in consumer, service, and industrial markets. USA: Butterworth-Heinemann (Oxford and Boston).

31. Aaker JL (1997) Dimensions of brand personality. Journal of Marketing Research 34: 3347-3357.

32. Ward S, Brown B, Hill A, Kelley J. Downs W (1999) Equatorius: A New Hominoid Genus from the Middle Miocene of Kenya. Science 285: 1382-1386.

33. Cristobal E, Flavián C, Guinalíu M (2007) Perceived e-service quality (PeSQ) Measurement validation and effects on consumer satisfaction and web site loyalty. Managing Service Quality: An International Journal 17: 317-340.

34. Parasuraman A, Zeithaml VA, Berry LL (1985) A conceptual model of service quality and its implications for future research. The Journal of Marketing 41-50.

35. Rowley J (2006) An analysis of the e-service literature: towards a research agenda. Internet Research 16: 339-359.

36. De Ruyter K, Wetzels M, Kleijnen M (2001) Customer adoption of e-service: an experimental study. International journal of service industry management 12: 184-207.

37. Santos J (2003) E-service quality: a model of virtual service quality dimensions. Managing Service Quality: An International Journal 13: 233-246.

38. Zeithaml VA (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: 67-85.

39. Cronin Jr JJ (2003) Looking back to see forward in services marketing: Some ideas to consider. Managing Service Quality: An International Journal 13: 332-337.

40. Zeithaml VA (2002) Service excellence in electronic channels. Managing Service Quality: An International Journal 12: 135-139.

41. Liu C, Arnett KP (2000) Exploring the factors associated with Web site success in the context of electronic commerce. Information and Management, 38: 23-33.

42. Sweeney JC, Soutar GN (2001) Consumer perceived value: the development of a multiple item scale. Journal of retailing 77: 203-220.

43. Sheth JN, Newman BI, Gross BL (1991) Why we buy what we buy: A theory of consumption values. Journal of business research 22: 159-170.

44. R N Bolton KNL (1999) A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction Journal of Marketing Research.

45. Becker S, Bryman A, Ferguson H (2012) Understanding research for social policy and social work: themes, methods and approaches: Policy Press.

46. Martins C, Oliveira T, Popovič A (2014) Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. International Journal of Information Management 34: 1-13.

47. Ho C-TB, Lin WC (2010) Measuring the service quality of internet banking: scale development and validation. European Business Review 22: 5-24.

48. Cochran W (1977) Sampling techniques. New York, Wiley and Sons 98: 259-261.

49. Mbrokoh AS (2015) Factors that Influence Internet Banking Adoption in Ghana. University of Ghana.

50. Comrey A, Lee H (1992) Afirst course in factor analysis. Hillsdale, NJ: Erlbaum.

51. Udo GJ, Bagchi KK, Kirs PJ (2010) An assessment of customers' e-service quality perception, satisfaction and intention. International Journal of Information Management 30: 481-492.

52. Henseler J, Ringle CM, Sinkovics RR (2009) The use of partial least squares path modeling in international marketing. Advances in international marketing 20: 277-319.

53. Fornell C, Larcker DF (1981) Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of Marketing Research 382-388.

54. Chin WW (1998) Commentary: Issues and opinion on structural equation modeling: JSTOR.

55. Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL (2010) Multivariate Data Analysis 7.