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Factors Affecting the Adoption of Mobile Banking in Pakistan

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Abstract: The continuous growth of technological innovations especially in the banking sector have stirred competition which has changed the way businesses operate resulting in the introduction of mobile banking in Pakistan. This study was conducted in order to analyze the factors that affecting the adoption of mobile banking in Pakistan. A questionnaire was developed and then distributed to University Students and in market of Dera Ghazi Khan Punjab, Pakistan. Using primary data collection method, from the 160 questionnaires that were distributed 146 questionnaires was successfully returned and response rate 91.2 %. Each variable was measured using 7-Point Likert Scale. The results suggested that perceived cost, perceived trust, perceived risk and perceived ease of use are the determinant factors in affecting consumers' adoption decisions. It's been recommended that banks in Pakistan invest massively in mobile banking and other information technology innovations in order to further promote efficient service delivery and increase adoption of mobile banking services.

Keywords: Perceived Cost, Perceived Trust, Perceived Risk, Perceived Ease of Use, Mobile Banking.

1. Introduction

The junction of telecommunication and banking services has created opportunities for the materialization of mobile commerce, in particular mobile banking. Mobile banking is an innovative technology that has gained popularity in Pakistan and other parts of the world. The adoption of mobile banking has brought about changes in banking operations following the advancement of mobile communication techniques and the collaboration with mobile service providers as a result, the mobile banking technology has become more conductive to individuals and banking sector. The service offered, when using mobile banking is such as withdrawal, deposits, transfer money to another account and bill payments. Mobile banking is defined as "a feed where by the consumer communicates with a bank using a mobile device, such as a mobile phone or personal digital assistant. In that sense, it can be seen as a subset of electronic banking and an extension of internet banking with its own unique characteristics (Laukkanen & Pasanen, 2008). It is one of the newest

approaches to the concern of financial services through information computer technology (ICT), made possible by the extensive adoption of mobile phones even in low income countries (Anderson, 2010). It is useful for the customer in a lot of aspects, for example transactions like checking account balances or transferring money from one account to another could be done without the need of going physically to the bank grounds, eliminating the limitations of the space and time because customers purely can check out their accounts details, get their bank statements, perform transactions like transferring money to other accounts and pay their bills sitting in the ease of their homes and offices (Mishra & Sahoo, 2013). Mobile banking services have managed to provide freedom of time along with cost savings to its users and room for market growth for the service providers (Lee et al, 2007). The largest mobile banking service providers in Pakistan are Telenor with EasyPaisa (Easypaisa, 2009) Mobilink with Mobicash (Mobicash, 2014) Ufone with UPaisa (UPaisa, 2014) and Zong with PayMax (PayMax, 2015). In Pakistan, cell phone diffusion is high. In a latest statistics published by Pakistan Telecommunication Authority cell phone subscribers has reached over 152 Million (PTA, 2018).

2. Literature Review

Mobile banking is an electronic banking system which allows customers to get access to their bank accounts via SMS (supported by telecommunication networks), website of the bank (internet) and smart phone applications. The service offered when using mobile banking is such as withdrawal, deposits and bill payments. Mobile banking as a situation whereby the customer interacts with a bank via mobile device, such as mobile phone and Personal Digital Assistant (PDA) (Barnes & Brian, 2003). Mobile banking has enormous potential as it chases the success of internet banking (Brow et al, 2003). Pakistan is a relevant setting based on its emerging growth of m-commerce. The results can easily be generalized to similar emerging economies. The emerging countries with greater segment of less educated and poorer individuals have higher potential for the widespread acceptance of m-banking based on the underlying concept that poor people likely to use m-banking more than the rich people (Ivatury, Ignacio and Gautam, 2008). Here we investigate previous researches and got some details that is mentioned one by one including mobile banking idea.

2.1 Perceived Cost

The degree to which an individual views that utilising cell phone banking will incur cost is defined as perceived cost (Luarn and Lin, 2005). These costs could normally include the cost of the mobile device, network charges, and transaction charges for bank costs as well as costs for data sent via the network infrastructure. The factor that had the least impact on cell phone banking acceptance in comparison to other

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attributes which included perceived usefulness, perceived risk and compatibility, was perceived cost (Wu & Wang, 2005). A qualitative study was performed on the same attributes which suggested that perceived cost is usually a significant factor when there is an initial introduction of technology (Wu & Wang, 2005). However, this could be explained by the fact that the respondents in the analysis by (Wu & Wang, 2005) was done with people who had earning levels that was relatively high and not at the lower end of the income scale. This income value was estimated to be around US \$650 per month. This level of income can be seen as having a reasonable financial status and imply that people could obtain adequate money to utilise cell phone banking (Wu & Wang, 2005). In contrast to this, lower income groups are more price sensitive and have a lower income at their disposal (Wolverton, 2002). In developing economies the main focus of the poor is on basic necessities such as household items and food. Expenses on other substance are measured a luxury and therefore spending on information technology goods will be much lower. In this context of lower income groups it should be noted that perceived costs would be a major factor that influences cell phone banking adoption. As perceived cost is one of the attributes used in this research it is likely that the perceptions of cost around cell phone banking would have a positive influence on adoption.

2.2 Perceived Trust

The literature review indicates that there exists a significant relationship between perceived trust and behavioral intention to use mobile banking (Talukder et al, 2014); (Koksal, 2016). Trust is found in the literature to significantly influence mobile banking adoption and its continued use (Kim et al, 2009); (Nel and Boshoff, 2014); (Koksal, 2016). (Koksal, 2016), argues that the role of trust is amplified in the presence of risk and they are reinforcing components of decision making. Trust once established will reduce perceived risks and uncertainty increasing intention to adopt mobile banking. Trust in mobile banking depends on the user acceptance of internet technologies for the execution of financial transactions and recognition of the financial institution as reliable this dependence on technology for transaction execution creates uncertainty making trust a crucial component of mobile banking (Talukder et al, 2014).

2.3 Perceived Risk

Many studies have focused on consumer risk perception and were done in relation to banking online (Tan & Teo, 2000), however the risk perception attribute is structured in terms of being a solitary trait and therefore does not highlight an accurate reflection of the perceived risk characteristics (Lee M.-C. , 2009). A study was conducted by (Lee M.-C. , 2009) regarding perceived risk which linked to online or internet banking. The perceived risk attribute was split into five areas which included time risk, security risk, financial risk, performance risk, and social risk. This break down illustrated a detailed view of the traits relating to internet

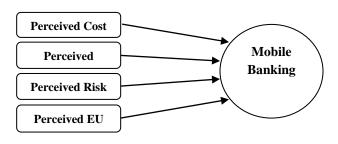
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banking and provided a better understanding of the concepts (Lee M.-C., 2009). Mobile banking may be considered an extension of Internet banking, but with its own unique characteristics given that a cell phone is used rather than a web browser on a personal computer (Barnes & Brian, 2003). It was established that performance risk, security risk, social risk, financial risk and time did not have a positive impact on online banking adoption (Lee M.-C., 2009); (Lee et al, 2007). The risk that did not have a major impact on the intent to utilize online banking was social risk (Lee, 2009). It was further found that the ease of use needs to be highlighted when a new technology is deployed and is seen to be a high risk by users (Im et al, 2008). In contrast it was found that the usefulness of technology needs to be emphasized when technology deployment is seen as low risk by users (Im et al, 2008). It was identified from research conducted by (Tan & Teo, 2000) that perceived risk is a major factor that impacts internet banking adoption. These results were applied in the cell phone banking environment by (Brow et al, 2003) and it was established that perceived risk is indeed a critical factor that affects the adoption of cell phone banking, even though perceived risk was used a single attribute. In terms of this research all risk factors will be focused on as preceding occurrences of perceived risk. The proposition as indicated in the literature review is that social risk, financial risk, security risk, performance risk and time risk would probably result in a negative impact on cell phone banking adoption.

2.4 Perceived Ease of Use

Previous studies illustrate a positive relationship between perceived ease of use and the intention to adopt mobile banking (Ramlugun & Issuree, 2014); (Talukder et al, 2014); (Shaikh & Karjaluoto, 2015); (Yu et al, 2015); (Koksal, 2016); (Alalwan et al, 2016). The researcher posits that if mobile banking is easy to learn and use, individuals intention to adopt it will be positively impacted.

Based on the above, the model of the study was constructed as illustrated in figure (i).



Research Model

Figure (i)

Problem Statement

Banks are instrumental systems for economic development of any country. One of the most innovative technological changes in the banking industry in Pakistan was the introduction of mobile banking. In Pakistan, many banks have implemented mobile banking technology services but are yet to gain a larger customer adoption rate. Therefore the study sought to find out from the consumer perspective, the factors that affecting consumer adoption of mobile banking services in Pakistan with special reference to perceived cost, perceived trust, perceived risk and perceived ease of use.

Hypothesis

H1. Perceived cost will have a positive influence on adoption of mobile banking.

H2. Trust will have a positive impact on adoption of mobile banking.

H3. Perceived risk will have a negative impact on adoption of mobile banking.

H4. Perceived ease of use will have a positive influence on adoption of mobile banking.

Research Objective

The purpose of present study is to determine the major factors that contribute towards adoption of mobile banking as electronic financial services among commercial bank in Pakistan.

3. Research Methodology

The present study aims to examine factors that can have impact on adoption of mobile banking services among banks customers specifically who are current users of online banking services in Pakistan. The inquiry also aimed to discover whether there would be a relation between demographic variables such as respondent's gender, age, education, occupation, income level and mobile account experience which used in this study, and their enthusiasm to adoption of mobile banking services. The survey divided in two parts. First part includes questions for demographic information of participants' gender, age, education, occupation, income level and mobile account experience, second part, the most important part consist of 19 brief statement measuring various dimensions under a study on 7-Point Likert Scale from being 1 Strongly Disagree to 7 Strongly Agree. Data collected from the students, public employees, private employees and self employees. For data collection 160 questionnaire were distributed in Dera Ghazi Khan Province of Punjab, Pakistan by applying convenience sampling method. The survey was conducted during the period of January 25, 2019 to February 20, 2019. The total 146 questionnaires were successfully returned and response rate is 91.2 %.

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4. Data Analysis

The following Table No.1 show the demographic information of respondents who contributed in this study. Out of 146 respondents 65.8 % are male and while reset 34.2 % are female. Regarding age group of sample, 9.6 % respondents are less than 20 years, 72.6 % are between 20 to 25 years, 14.4 % are between 25 to 30 years, 2.1 % are between 30 to 35 years and 1.4 % respondents are more than 35 years old. Regarding education background, 0.7 % respondents have secondary school certificate, 2.7 % have diploma, 51.4 % have bachelor degree, 43.8 % have master degree, 0.7 % have Ph.D and 0.7 % respondents have other qualification. The distribution of respondents according to their occupation show's that 86.3 % respondents are self employees. In term of monthly income show's that 34.2 % respondents earn less than 20,000 PKR, 21.9 % earns between 20,000 to 30,000 PKR, 14.4 % earns between 30,000 to 40,000 PKR, 12.3 % earns between 40,000 to 50,000 PKR and 17.1 respondents have experience less than one year, 27.4 % have between 1 to 4 years, 20.5 % have more than 4 years and 18.5 % respondents have other experiences.



Variables	Categories	haracteristics of Responden Frequency	Percentage
t al lavies	Male	96	65.8
Gender	Female	50	34.2
Genuer	Total		
	Below than 20 Years	140	100 % 9.6
	20 - 25 Years	106	72.6
Age Group	25 - 30 Years	21	14.4
Age Oloup	$\frac{23-30}{30-35}$ Years	03	2.1
	More than 35 Years	02	1.4
	Total	146	1.4
	Secondary School	01	0.7
	Diploma	01	2.7
	Bachelor	75	51.4
Education	Master	64	43.8
Education	Ph.D	01	43.8
	Other	01	0.7
	Total	146	100 %
	Student	126	86.3
	Public Employee	03	2.1
Occupation	Private Employee	08	5.5
	Self Employee	09	6.2
	Total	146	100 %
	Below than 20,000 PKR	50	34.2
Monthly	20,000 – 30,000 PKR	32	21.9
Income	30,000 – 40,000 PKR	21	14.4
	40,000 – 50,000 PKR	18	12.3
	More than 50,000 PKR	25	17.1
	Total	146	100 %
	Under 1 Year	49	33.6
Account	1 - 4 Years	40	27.4
Experience	More than 4 Years	30	20.5
	Other	27	18.5
	Total	146	100 %
Source: This Study			

 Table No.1 Demographic Characteristics of Respondents

Source: This Study

The data analysis was done using the software Statistical Package for Social Sciences (SPSS) version 20. Cronbach's Alpha was used to determine the internal reliability of the variables. The acceptance level of Cronbach's Alpha Index should exceed 0.60 (Nunnally and Bernstein, 1994). The value of Cronbach's Alpha comes above the standard value of 0.60 which shows that our questionnaire data is reliable and we can apply different statistical tests and interpret the results. Table No.2 showed the result of reliability analysis.

Scale	N of Items	Cronbach's Alpha
Perceived Cost	4	0.745
Perceived Trust	4	0. 629
Perceived Risk	4	0.667
Perceived Ease of Use	3	0. 813
Mobile Banking	4	0.682

 Table No. 2 Reliability Coefficients

Source: This Study

Table No.3 reported the results of correlation analysis, which examined the relationship between the variables under study. The variables perceived cost (r = 0.845), perceived trust (r = 0.916), and perceived use of ease (r = 0.764) had strong positive correlation with the adoption of mobile banking in Pakistan. The variable perceived risk (r = -0.628) was found to have strong negative correlation with dependent variable, mobile banking. It's also indicated a preliminary support for the significant relationships between adoption of mobile banking services and independent variables.

		PC	PT	PR	PEU	MB
	Pearson Correlation	1				
Perceived Cost	Sig. (2-tailed)					
	Ν	146				
	Pearson Correlation	$.508^{**}$	1			
Perceived Trust	Sig. (2-tailed)	.000				
	Ν	146	146			
	Pearson Correlation	.079	.087	1		
Perceived Risk	Sig. (2-tailed)	.000	.000			
	Ν	146	146	146		
	Pearson Correlation	.412**	.353**	.169**	1	
Perceived Ease Use	Sig. (2-tailed)	.000	.000	.000		
	Ν	146	146	146	146	
	Pearson Correlation	.016	023	.047	.085	1
Mobile Banking	Sig. (2-tailed)	.845	.916	623	.764	
	Ν	146	146	146	146	146

Table No. 3 Correlations Matrix

**Correlation is significant at the 0.01 level (2tailed). Source: *This Study*

Multiple regression analysis is usually used by researchers to examine the relations between a set of independent variables and a single dependent variable (Hair et al, 2005). The concern of this model is whether the independent variables perceived cost, perceived trust, perceived risk and perceived ease of use influence have an impact on dependent variable adoption of mobile banking in Pakistan, as hypothesized by researchers. Table No.4 showed the result of regression analysis.

Model	R= 0.892	3	R-Square= 0	R-Square= 0.730		Adj. R Square = 0.727		
Model	F-Value=	= 226.329	Sig. = 0.000	Sig. = 0.000				
Model	Unstandardized		ized Coefficients	Standardized Coefficients		t	Sig.	
		В	Std. Error	Beta				
(Constant)		2.123	0.413			6.146	0.000	
Perceived Cost		0.209	0.077	0.273		5.476	0.000	
Perceived Trust		0.168	0.077	0.196		4.691	0.000	
Perceived Risk		-0.171	0.077	-0.182	2	-3.167	0.000	
Perceived EU		0.287	0.076	0.336		6.434	0.000	

Source: This Study

Table No.4 showed statistically significant (p-value < 0.01) relationships between the four independent variables (Perceived cost, Perceived trust, Perceived risk and Perceived ease of use) and dependent variable adoption of mobile banking. The coefficient of correlation R was 0.893 and coefficient of determination R2 is 0.730. Thus, the four independent variables significantly explained 73.0% of variance in the consumers' adoption of mobile banking in Pakistan.

5. Discussion

The first hypothesis **H1**, perceived cost found to have significant positive influence (t = 5.476, p-value < 0.01) on adoption of mobile banking in Pakistan. The finding was consistent with past studies conducted related to adoption of mobile banking (Wu & Wang, 2005); (Karnani, 2009).

H2, perceived trust was found to have significant positive impact (t = 4.691, p-value < 0.01) on adoption of mobile banking. The finding was also consistent with the results of other researchers studies by (Kim et al, 2009); (Nel and Boshoff, 2014); (Koksal, 2016).

H3, perceived risk was found to have significant negative impact (t = -3.167, p-value < 0.01) on adoption of mobile banking. The finding was in line with other previous studies by (Al-Jabri & Sohail, 2012); (Tan & Teo, 2000); (Luo et al, 2010); (Koenig-Lewis et al, 2010);(Gu et al, 2009).The consumers supposed higher risks and ambiguity such as loss of data and misuse of financial information would discourage them in the adoption of mobile banking.

H4, perceived ease of use was found to have significant positive influence (t = 6.434, p-value < 0.01) on adoption of mobile banking. The finding was consistent with past studies conducted related to adoption of mobile banking services (Chung & Kwon, 2009); (T.G.Kim et al, 2008).

6. Conclusion

As avowed earlier, nowadays one of the major concerns for financial institutions and commercial banks is to offer better and fast services to the customers. Due to close contest between commercial banks they have been trying to offer safe and locked services in order to keep competitive in the market. Furthermore, technology is the basic competitive benefit for financial organizations and is predictable to stop growing. If there was not improvement in information technology services for banking system they could not attain what they have achieved today. Mobile phones are becoming as important as wallet for individuals and also they are easier to take for applying banking transactions instantly without concerning about time and place (Shin, 2009).

The scale of this study was to find out the key determinants that pressure adopting mobile banking among customers of Pakistani banks. The model of the study was built on the incorporated technology acceptance model. The results illustrated that customers of banks in Pakistan will be more likely to adopt m-banking service if they find it easy to be used with no much necessary efforts. Also; they will intend to use the service if the bank was trustable and provides them privacy and protection for their information.

Limitations

Limitations of this study consist of sample size and population. Dera Ghazi Khan is only the city selected for collecting responses from customers of banks. Further, due to time constraints only 160 questionnaires were distributed and response of 146 people was received. Although response rate is sufficient yet for external validity i-e generalization of results to province of Punjab or Pakistan there is need to increase population and sample size.

Recommendations

Future studies can be conducted by increasing sample size and selecting more population for increasing generalization of study. The contribution of demographic factors such as age and gender toward the adoption of mobile banking services was not given much importance in this study; future researchers may investigate the influence of demographic factors in adoption of mobile banking services.

References:

- 1) Alalwan, A.A., Dwivedi, Y.K., Rana, N.P.P & Williams, M.D. (2016). Consumer adoption of mobile banking in Jordan. *Journal of Enterprise Information*, 29 (1), 118-139.
- 2) Al-Jabri, I.M., & Sohail, M.S. (2012). Mobile banking adoption: Application of Diffusion of Innovation Theory. *Journal of Electronic Commerce Research*, *13* (4), 379-391.
- 3) Anderson, J. (2010). M-banking in developing markets: competitive and regulatory implications. *Emerald*, *12* (1), 18-25.
- 4) Barnes, S.J. & Brian, C. (2003). Mobile banking: Concept and potential. *International Journal of Mobile Communications*, 1 (3), 273-288.
- 5) Brow, I., Cajee, Z., Davies, D. & Stroebel, S.(2003). Cell phone banking: predictors of adoption in South Africa an exploratory stud. *International Journal of Information Management*, 23 (5), 381-394.
- 6) Chung, N. and Kwon, S.J. (2009). The Effects of Customers' Mobile Experience and Technical Support on the Intention to Use Mobile Banking. *Cyber Psychology and Behavior*, *12* (5), 539-543.
- 7) *Easypaisa*. (2009). (Telenor.Limited) Retrieved December 15, 2018, from Telenor Microfinance Bank: www.easypaisa.com.pk
- 8) Gu, J. C., Lee, S. C., and Suh, Y. H. (2009). Determinants of behavioral intention to mobile banking. Expert Systems with Applications , *36* (9), 11605-11616.
- 9) Hair, J. F. Jr., Anderson, R., Tatham, R., and Black, W. C. (2005). *Multivariate Data Analysis*. Upper Saddle River, NJ, Prentice Hall.
- 10) Im, I; Kim, Y. & Han H. (2008). The effects of perceived risk and technology type on users' acceptance of technologies. *Information & Management*, 45 (1), 1-9.
- 11) Ivatury, Ignacio and Gautam. (2008). *The early experience with branchless banking. CGAP Focus Note,*(46). Washington: http://www.cgap.org.
- 12) Karnani. (2009). *Stanford Social Innovation Review*. Retrieved from Romanticizing the Poor: http://www.ssireview.org/pdf/Romanticizing thePoor.pdf
- 13) Kim, K.K., Prabhakar, B. and Park, S.K. (2009). Trust, perceived risk, and trusting behaviour in internet banking. *Asia Pacific Journal of Information Systems*, 19 (3), 1-23.
- 14) Koenig-Lewis, N., Palmer, A. and Moll, A. (2010). Predicting young consumers' take up of mobile banking services. *"International Journal of Banking Marketing*, 28 (5), 410-432.
- 15) Koksal, M. H. (2016). The intentions of Lebanese consumers to adopt mobile banking. *International Journal of Bank Marketing*, *34* (3), 327-346.
- 16) Laukkanen, T & Pasanen M. (2008). Mobile banking innovators and early adopters: How they differ from other online users? *Journal of Financial Services Marketing*, *13* (2), 86-94.
- 17) Lee, K.S., Lee, H.S., and Kim, S.Y. (2007). Factors influencing the adoption behavior of mobile banking: a South Korean perspective. *Journal of Internet Banking and Commerce*, *12* (2).
- 18) Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8 (3), 130-141.

- 19) Luarn, P. and Lin, H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computer in Human Behavior*, 21 (6), 873–891.
- 20) Luo, X., Li, H., Zhang, J., and Shim, J.P. (2010). Examining multi-dimensional trust and multifaceted risk in initial acceptance of emerging. *Decision Support Systems*, 49 (2), 222-234.
- 21) Mishra & Sahoo. (2013). Mobile Banking Adoption and Benefits Towards Customers Service. *Modern* engineering and Management Studies, 2 (1), 2319 2526.
- 22) *Mobicash*. (2014, November). Retrieved December 15, 2018, from Mobilink Microfinace bank: https://www.mobilinkbank.com
- 23) Nel, J. and Boshoff, C. (2014). The impact of crosschannel cognitive evaluations on the continued use intentions of mobile banking. *Management Dynamics*, 23 (4), 2.
- 24) Nunnally, J.C. and Bernstein, I. (1994). Psychometric theory. New York: McGraw-Hill.
- 25) PayMax. (2015, November). Retrieved December 15, 2018, from Askri Bank Limited: akbl.com.pk
- 26) *PTA*. (2018, November 31). Retrieved from Pakistan Telecommunication Authority: https://www.pta.gov.pk/en
- 27) Ramlugun, V.G. & Issuree, H. (2014). Factors Determining Mobile Banking Adoption in Mauritius. *International Journal of Innovative Research and Development*, *3* (1), 193-201.
- 28) Shaikh, A.A. & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and Informatics*, 32 (1), 129–142.
- 29) Shin, D.-H. (2009). Towards an Understanding of the Consumer Acceptance of Mobile Wallet . *Computers in Human Behavior*, 25, 1343-1354.
- 30) T.G.Kim, Lee, J. and Law, R. (2008). An empirical examination of the acceptance behavior of hotel front office systems: an extended technology acceptance model. *Tourism Management*, 29, 500-13.
- 31) Talukde, M., Quazi, A. & Sathye, M. (2014). 'Mobile Phone Banking Usage Behaviour: An Australian Perspective'. *Australasian Accounting, Business and Finance Journal*, 8 (4), 83-104.
- 32) Tan & Teo. (2000). Factors influencing the adoption of internet banking. *Journal of the Association for Information Systems*, 1 (5), 1-44.
- 33) UPaisa. (2014, October). Retrieved December 15, 2018, from U Microfinance Bank: https://ubank.com.pk
- 34) Wolverton, T. (2002). *M-commerce challenges and banking*,. Retrieved June 12, 2012, from Mediatoolbox: http://www.mediatoolbox.co.za/pebble.asp?p=63 &relid=3126
- 35) Wu, J. & Wang, S. (2005). What drives mobile commerce? An empirical evaluation of the revised technology acceptance model. *Information and Management*, 42 (5), 719-729.
- 36) Yu, C., Li, C. and Chantatub, W. (2015). Analysis of Consumer E-Lifestyles and Their Effects on Consumer Resistance to Using Mobile Banking: Empirical Surveys in Thailand and Taiwan. *International Journal of Business and Information*, 10 (2), 198.