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EXAMINATION OF CRITICAL FACTORS EFFECTING ADOPTION OF INTERNET BANKING: A CASE OF PAKISTAN

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KEYWORDS	ABSTRACT
Adoption of Internet Banking, Performance, Pakistan, Time & Financial Risk	This research aims to quantify the perceived performance, time, and financial risks of Internet Banking adoption in Pakistan's growing economy. Through a standardized questionnaire, the data were obtained from 500 internet banking customers about the barrier to Internet Banking (IB) adoption. Examining the link amid exogenous and endogenous factors, this research applied structural equation modelling. A strategy for analyzing the influence of performance, time, and financial risks on the adoption of online banking. The results of the research indicate that all factors continue to have negative relationship with IB adoption. In addition, the findings indicated that end-users refrain from adopting IB because they believe even slight errors when running the new IB system might result in catastrophic losses. The results are thus significant for users adopting the internet banking in particular contexts toward adaptation and utilization of different online facilities aimed at providing the awareness to customers about online banking.

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INTRODUCTION

The term "Internet banking" (IB) refers to practice of conducting financial transactions over the Internet instead of physically visiting a bank. This can include both traditional banking activities like transferring money and checking account balances, as well as more modern innovations like paying bills and making deposits (Frust, Lang, & Nolle, 2000; Chan, 2004). The internet's rapid expansion and rising popularity provide both, the new possibilities and challenges for businesses of all stripes since they strength established companies to modify their methods of operation and focus on evolving new ways to get their wares to customers (Mukherjee & Nath 2003). More so than in any other industry, importance of the internet

to financial institutions has been affirmed by academics (Tan & Teo, 2000; Chau & Lai, 2003). In context of consumer behavior, perceived risk may be defined as "reduced confidence in product or service with its prospective downsides that may affect purchase of this product" (Littler et al., 2006). The researchers have used this idea to characterize perceived risk as a composite of some dimensions. Social, physical, performance, security, financial, psychological and privacy risks are all included here (Jacoby & Kaplan, 1972; Kaplan, Szybillo, & Jacoby, 1974; Roselius, 1971).

This research was grounded on the idea of perceived risk. According to payment system review report, published in March of the fiscal year, 2020 by State Bank of Pakistan (SBP) registered internet banking users are up from 1.8 to 3.8 million in 2015-2020 third quarter with a growth of 47.4% (SBP, 2020). Although this increase in the internet banking users is lower than other Asian economies (Bashir & Madhavaiah 2015). Besides this, Pakistan yet retains the potential to increase its number in the couple of years. In order to accommodate the obstacles that discourage end-users from embracing online banking, it is suggested that financial organizations and notably banks, conduct regular consumer demand surveys (Podder, 2005). In the past, the academic literatures have emphasized various elements in parallel to internet adoption research. In this connection, these include trust, contentment, innovation, security, customer loyalty, brand image and website design (Raza & Hanif, 2013; Rahi et al., 2019). However, at this time, no one has been able to establish any kind of the trend about IB adoption in Pakistan. It was suggested that we do research on the impact of performance, financial, and time risks on the uptake of internet banking in developing countries like Pakistan.

LITERATURE REVIEW

Technology Acceptance Model (TAM) focus on new technology adoption and backed by theory of Reasoned Action that pays attention to intentions and attitudes of customers (Davis, Bagozzi & Warshaw, 1989). TAM based on the two fundamental believes that are perceived ease of use and usefulness. The focus of perceived ease of use is on the degree which is expected by the users to have the target system which allows them to be free of effort. It can be said that consumers are likely to be willing to accept internet technology if they are easy with its use and it is also reducing their effort for doing a particular task. The perceived usefulness has its focus on user's subjective probability which is using specific system to increase the performance of the users in a particular activity. This notion of TAM has been interpreted as use of computer innovation is determined by behavior intention (Ariff, Sylvester, Zakuan, Ismail, & Ali, 2014; Hassan, Kunz, Pearson, & Mohamed, 2006). The negative influence of the perceived risk (economic, performance, and financial factors) on the e-commerce adoption has been reported (Crespo et al., 2009). The usefulness of internet technology can shape the good consumer behavior. The level of experience to use technology is likely to shape the consumer adoption behavior regarding the e-commerce (Chang & Tseng, 2013).

Experienced users of technology are likely to be encouraged to use e-commerce solutions with a low level of marketing effort. Electronic customer relationship management refers to the comprehensive marketing strategy which is obliged to involve the integration of process, technology and business activities around the consumers which may be offered by companies on their sites (Wu & Ke, 2015). Consumer satisfaction plays a crucial role to shape positive behavior among customers to move toward internet technology adoption. Online customers are expected to be more concerned with the received quality in return for the price paid and time of delivery (Wang, Wang, & Dong, 2010). It has been reported that E-CRM is obliged to develop good level of mechanism for forming active and passive relationships with customers. The role of ECRM is primary to develop the good level of the attitude among the customers to adopt internet technology (Samadi & Yaghoob-Nejadi, 2009; Sims & Xu, 2012). It can be argued that when there will be potential adoption of the internet technology then there will be high chances of getting the control over the potential outcomes. All the areas are likely to be managed systematically via making a connection over internet technology.

Further, Khedmatgozar and Shahnazi, (2018) examined factors influencing corporate internet banking adoption (CIB) concerning perceived-risk theory. The hypothesis of the study was analyzed by utilizing (CFA) "confirmatory factor analysis." There was significant association found between all risks taken in study with CIB. The main elements reducing the intention to adopt internet banking services involve financial, performance and time risks. By keeping an eye, on the literature, current study has followed the Perceived-Risk Theory. In context of Pakistan previous literature heighted major factors to analyze internet banking adoption in Pakistan like according to Raza and Hanif, (2013) perceived ease of the use, government support, and intention to use security and trust later, Raza et al., (2015) trust and quality of transactions as major influencing factors , further, Rahi et al., (2017) assurance as the most influencing factor. Rahi et al., (2019) advocated the customer loyalty, brand image, website design, and customer service as significant factors for IB adoption. The results significantly contributed to banking literature however, no one yet conclusively draws a pattern on IB adoption in the case of Pakistan. This notion grasps our attention to investigate the effect of performance, financial, and time risks on the internet banking adoption in Pakistan, and we conceptualized that performance risk, time risk, financial risk, negatively impact internet banking adoption.

H1: The performance risk has a negative impact on the internet banking adoption
H2: The financial risk has a negative influence upon the internet banking adoption
H3: The time risk has the negative influence upon the internet banking adoption

RESEARCH METHODOLOGY

The current study is quantitative and explanatory in nature. Data is collected from both the internet banking users and non-users to examine insight of behavior toward IB adoption.

To investigate the significant relationship among variables we have conducted a self-administered questionnaire adapted from (Aydın, 2014; Khedmatgozar, & Shahnazi, 2018; Roy et al., 2017). The questionnaire consisted of the demographic and variable values of study. A five-point Likert scale was used to collect the data and the scale is ranging from "strongly disagree=1" to "strongly agree=5" Total of 44 items are used to measure all variables.500 self-administered questionnaires were delivered in person and through mail to collect the data. In this linking, the target population of the study consisted of cities of Punjab Province namely, Lahore and Islamabad. Thus, a total of 500 internet banking user were selected for the study through convenience sampling method. The structural equation modeling technique was used to examine the relationship between desired exogenous and endogenous variables.

RESULTS OF STUDY

Reliability Analysis

Our results show significant values of alpha as both endogenous and exogenous variables have values more than 0.70. Reliability analysis showed that the Cronbach's alpha values for all the variables were lying within the acceptance range i.e. .709 to .972, as shown in the (Table 1) below:

Table 1 Reliability Analysis

SN	Variables	Cronbach's Alpha (α)
1	Internet Banking adoption	0.972
2	Performance Risk	0.752
3	Time Risk	0.709
4	Financial Risk	0.938

Path Analysis

Results of the study show that the variables retain significant negative relation with the IB adoption while one of five rejected to support the proposed variable. Particularly, privacy risk has a negative impact on IB adoption as β coefficient is -0.212 and lies in the critical region of -4.119 with p-value of 0.00. Customers do not avoid banking adoption as they perceive that IB adoption is good in performance and time management and no financial risk involved in IB adoption. Study results endorse perceived risk theory see for instance (Khedmatgozar & Shahnazi, 2018; Roy et al., 2017).

Table 2 Path Analysis Results with Coefficient & Associated P-values.

			Estimate	S.E.	C.R.	P	Supported
IBA	<---	AF	-.321	.059	-5.433	***	Accepted
IBA	<---	FR	-.267	.083	-3.221	***	Accepted
IBA	<---	TR	-.335	.101	-3.303	***	Accepted

Secondly, end-users move away from adoption of IB as they assume that minor mistakes could lead to the major losses while operating the new IB system. Time risk has shown the higher β coefficient as -0.335 with 0.101 as standard error and significant p-value. IB users avoid opting for the new system as many of the respondents reveal that they have no time to understand the new operating system. While answering the questions, they responded that new IB system may need more time to understand as it is quite difficult from paper as well as other modes of the banking. Additionally, they reveal that in case of any hurdle, misconception, an issue they need much time to understand and resolve. It is acceptance of our hypothecated objective as time risk restricts customers from the adoption of the new internet banking system. These outcomes are also supported through an extensively discussed theory of perceived risk as well technology acceptance model (TAM) which is advocated as adoption of the theory of reasoned action (TRA) (see, for instance, Bashir, & Madhavaiah, 2015).

While responding to financial risk, they reveal that we do not adopt IB as it can create a loss of amount due to entrance of wrong account number, transaction error, and hacking of accounts. This may serve to severe loss to their low incomes. These results are supported by both prevailing literatures as well as theory of PRT see for example (Moradi, Ghomian, & Sarjanian, 2012; Alam, Musa, & Hassan, 2009). Finally, answering to performance risk it was argued that due to the technological advancement, unique products, and trust it is difficult to adopt IB. in this linking, it is revealed that lack of trust in transaction patterns rigid their behavior toward IB adoption. The outcomes of the study reveal that these risks demoralize non-users and therefore, users the restrict themselves from IB adoption. While answering question, they responded that new IB system may need more time to understand as it is quite difficult from paper as well as other modes of the banking. Overall, these results are an indication of the significant relationship between internet banking adoption and predictor variables. The structural model also provides correlation between predictor variables. Consequently, it is presented that no predictor variable has correlation coefficient of more than 0.60.

DISCUSSION

Results of the study revealed that coefficient values are less than 0.6 that depicts no issue of autocorrelation among predictor variables. The p-value shows the significant relationship among predictor as well as dependent variables. Further, performance risk, financial risk, time risk, privacy risk has negative relationship with internet banking adoption as supported by Khedmatgozar and Shahnazi, (2018). While social risk is insignificant to the IB adoption. To analyze the reliability and validity of the data, we run factor analysis, i.e., CFA and EFA. To perform the EFA, we run KMO and Bartlett's test, and results revealed a .782 KMO value above the threshold of 0.50 for KMO. Bartlett's value was also significant, with a p-value of 0.000. IB users avoid opting for new system as many of the respondents reveal that they have no time to understand new operating system (Moradi, Ghomian, & Sarjanian, 2012).

EFA eigenvalues were found greater than 1, and percentage of variance remained more than 60%. Further, the value of Cronbach's alpha meets the threshold of 0.7, as suggested in academic literature.

The research revealed that end-users move away from adoption of IB as they assume that minor mistakes could lead to major losses while operating new IB system. Time risk has shown a higher β coefficient as -0.335 with 0.101 as standard error and significant p-value. Time is key factor in banking adoption patterns. While answering questions, they responded that new IB system might need more time to understand as it is quite difficult from paper and other banking modes. Further, they reveal that in case of any hurdle, misconception, issue, they need much time to understand and resolve it. Furthermore, time factor retains a positive association as the β coefficient of time risk is 0.22 and has a 0.038 standard error of the estimate. TR lies in critical region and has a significant p-value at 90% of confidence interval. Thus, accepting our hypothecated objective as time risk restricts customers from adopting the new internet banking system. These results are also supported through the extensively discussed theory of perceived risk as well technology acceptance model (TAM), which is advocated as adoption of theory of reasoned action (TRA) see for instance (Bashir, & Madhavaiah, 2015).

CONCLUSION

This study investigates the impact of performance, privacy, social, time, and financial risk on internet banking adoption. Internet banking is considered a modified mode of banking channel that reduces cost and makes it efficient for both, the individuals and businesses. IB adoption gains significant popularity in both academic as well as banking markets. Thus, this study is deductive, and we have utilized the structural equation modeling technique to analyze relationship between predictor and dependent variables. Our results reveal that all data sets are normally distributed as Skewness and kurtosis values meet threshold of + 1 and + 2, respectively. There is substantial association between predictor and dependent variables, as shown by the p-value. Moreover, there is a negative correlation between the use of the internet for banking and presence of performance, financial, time, and privacy risks. Thus, the present study provides significant information through application of tools to examine diverse nature of relationships to produce new knowledge and contribute the existing knowledge database.

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