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A Survey on Perceived Risk and Intention of Adopting Internet Banking

Fadare OA

**Department of Information Communication Technology, Universiti Utara
Malaysia, Malaysia, Tel: +601126525548**

Email: fadareolusolade@yahoo.com

Abstract

The rise of internet usage with the huge discovery creativities of internet banking already drew the attention of researchers towards the direction of internet banking. However, the intention to use internet banking has been hindered by the risk perceived by the customers in using the internet banking amenities. Therefore, this study aimed to examine the impact of perceived risk on intention to use internet banking. Also to investigate the effect of performance risk, social risk, time risk, financial risk and security risk on the intention to use internet banking. This study uses quantitative method, where by data collected was analysed with several statistical tools in SPSS 22.0 including descriptive analysis, Pearson correlation and regression analysis. The analysis of the data is based on the sample of 120, from the population of Nigeria Postgraduates students in the University Utara Malaysia and a self-administered questionnaire was conducted. The respondents were randomly selected. The findings from the hypothesis tested in this study showed that perceived risk; performance risk, social risk, time risk, financial risk and security risk negatively influences intention towards the use of internet banking in this study. In addition, the findings shows that perceived risk (PR) among all other variables contributes more in explaining intention to use internet banking.

Keywords: **Perceived risk; Internet banking; Social risk; Performance risk**

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INTRODUCTION

The word internet banking implies the delivery of information and services rendered from bank to its clients, with the aid of a computer. More advanced amenity is one which grants clients with the opportunity to enable them in gaining access to their accounts, performs transactions, and also buy product online with the aid of the internet [1]. Internet banking is another opportunity for banks to convey their amenities and for clients to be able to receive services [2]. This implies those customers that use internet banking are connected via computer internet, while those customers making use of mobile banking are through wireless devices [3].

In the developing countries, numerous features can be cited for the practices and non-usage of internet banking services. Ezeoha [4] contend with the adoption of internet services in Nigeria is so sluggish compared to that of developed countries and some part of African continent. In Nigeria, internet banking services is categorized as a new innovation. Therefore a sensible topic to be treated for the quality and quantity in Nigeria banking sector can be heightened for future purpose. Despite the facts that online banking offers numerous benefits like quicker transaction, speediness and subordinate supervision dues [5], there are still large number of clients who did not support the adoption of internet banking.

Pavlou [6] stated that perceived risk is suggested as a projecting obstacle to customer acceptance of internet banking [7]. In the setting of internet banking, risk can be seen either via system and information exchange attacks or it can also be seen via illegal access to the account by untruthful or imperfect verification. Therefore, perceived risk may be concerned with numerous problems from economic losses to confidentiality issues.

Likened to online purchase, adoption of internet banking is classically more multifaceted, as it pledges a lengthy tenure connection among the user and internet banking services. A considerable measure in question for clients as they consider going into business link with reserved, unidentified internet banking services, while customer perception towards the risks of adopting internet banking have already been deliberated on by several researchers [8,9] perceived risk mutable it has already been exhibited been a sole concept which have flops to imitate the actual features of perceived risk and clarify the reasons in which customers fight banking services. Although, numerous study projects already engrossed the causes which influence the adoption of information technology or the internet during the past era Heijden [10]; Taylor et al. [11] partial experiential work which captures the achievement aspects or the positive aspects in internet banking in other to be of help to form a tactical agenda.

Based on several study such as Westin et al. [12]; Cranor et al. [13] secrecy problems already verified vital barricades to the usage of internet services. Users like to direct what sort of information is been collected, and for what purposes, to what extent, how long the information is documented, and what is the main purpose their files are treated [14]. For a solid theoretical source to be provided for inspecting the adoption of internet banking services the study emphasize on two thoughts of reasonable act technology acceptance model (TAM). Davis et al. [15] the theory of planned behaviour (TPB) Azjen [16] posit five types of risk; which are security risk, financial risk, social risk, time or convenience risk, and performances risk. All these risks are associated with internet banking. The problem internet banking as discussed Durkin et al. [17], Haque et al. [18] stated that the acceptance and usage of internet banking services by most banking clients is still inconsequential regardless of the massive savings on the internet banking know-how by countless monetary institutions all over the world. The inconsequential result is due to the perceived risk intricate in using the internet banking services

LITERATURE REVIEW

Internet banking

Internet banking also known as electronic banking, It can also be termed online banking. Internet banking system offers electronic distribution of banking products and services to all its clients comprise computerized teller machine (ATM) exchanges, web banking exchanges, phone banking, and online account opening. Internet banking is essential for long period existence of banks in the realm of electronic commerce [19]. Internet banking business sector is predicted to rise as fast as possible in the few years to come, anticipated to ascend as quick as could reasonably be expected in the few years to come, influencing the game changer benefit by customary branch banks [8,20]. Internet banking is consequently accepted to progress consumer loyalty as it can offer earlier, cooler, calmer and other more dependable administrations through a solitary stage, if access the bank website. Actually, investigation by Arthur [21] discovered that crudely 50% of consumer would first investigate with their current banker in case if they are in need of a new monetary product. Hence, if properly allied, internet banking provides a superb chance for cross retailing banking facilities and goods and therefore, enriches the banks modest location, experiences shopper requests better, generates fresh spreading channel, also expand the business picture and lessen price Currie [22], Lam et al. [23].

From the Figure 1, Sai [24] listed are some of the internet banking transaction which involves ATM, telephone banking, smart card, internet banking, mobile banking, and electronic transfer, it insufficient for a bank to reason concerning the welfare of internet banking neither is it adequate for a bank to discourse internet banking enlargement problems.

One of the advantages of banks going online is the prospective reserve funds in the expense of conserving an old-style branch network [25]. Turban et al. [26] specified that internet banking is tremendously advantageous to clients due to the fund in expenses, period and space it provides, its swift answer to grievances, and its distribution of better-quality facilities, in which all the benefit makes it easier for convenient banking. Internet banking acceptance already multiplied exceptional consideration in educational studies study in the most recent five years; for example, banking diaries have dedicated distinct matters on the subject. The Technology Acceptance Model, TAM [27] already turn out to the qualify model of IT acceptance, predicting the magnitude to the extent of which a crispy IT is utilized. Suh et al. [28] directed an enquiry based on the technology acceptance model (TAM) to examine client acceptance of internet banking. They demanded TAM as a suitable model for describing acceptance in the circumstance of internet banking.

Factors influencing the adoption of internet banking

Internet banking services channels of customer intention to adopt online banking have been affected by the front position of numerous study works in the advance world [29,30]. By and by, there is all that much restricted distributed works that explore the influences affecting the adoption of internet banking from the perspective of clients in the setting of increasing nations like Nigeria. Until now there are still no much studies on the adoption of IB, a significant exemption to this study is directed by Gardachew [31] who concentrated on electronic banking practices, chances and difficulties in Ethiopia.

Grethen posit that privacy, honesty, and also verification are vital structures in the banking sector and they have been positively succeeded the world over in pre-internet period, communication crossway on an open and thus unconfident station in a way that the internet might not be the superlative base for customer relations as reliance might partly be misplaced. Here are the selected disadvantages of online banking which include: bank relationship, transaction issues, services issues, security [32]. It is getting to be progressively hard to disregard Technology Acceptance Model (TAM) as an apparatus to test technology adoption in the surviving literature. Essentially TAM is already being mostly utilized to test clients' aim, intention to acknowledge or to decay the utilization of a specific innovation and for the matter of internet banking adoption [33].

Customer Intention to Use Internet Banking

Aderonke et al. [34] discovered that most internet customers make use of it just because of its convenience and saves time and suitable for all their transactions desires. More so, the network security and the security of the system when it comes to confidentiality are the main disquiets of the consumers and institute restriction to potential users.

Customer intention to use internet banking might be unhurried with the proclamation: "I have intention or desire to utilize Online Banking whenever I step outside to pay my bill online later on. Aderonke [34] focused on the acknowledgement and utilization of the internet banking benefits by managing an account client. This is unimportant notwithstanding the tremendous ventures on the online technology by different monetary establishments everywhere throughout the world.

Customers already started in perceiving the service of internet banking through the use of the internet as a major good-looking feature than any other key manufactured goods features of the bank, customer already begin in assessing the banks based on the suitability and luxury it offers to them [35]. Bankers now start in emerging numerous product structures and services making use of internet application. It has been expressed that apparent handiness and convenience are the most discriminating serious variables in anticipating whether an innovation has a tendency to be utilized or not [36]. It was observed that convenience had a fundamentally solid connection with intention to use internet banking technology [27,37].

Perceived risk

Several researchers requested that consumer's perceived risk is a type of a multi-dimensional concept, perceived risk is term as consumer personal prospect of misery, a loss in chase of a preferred result, also as internet banking which is subjectively strong-minded hope of loss by an online bank user in considering a precise deal. Jacoby et al. [38] Roselius [39] Roboff [40] realised that individuals have a feeble knowledge of internet banking risks while they are mindful of the dangers. To be more exact, privacy and security were originate to be substantial hindrances to the adoption of internet banking in Australia [41]. The notion of customer perceived risk has been extensively managed in e-channel utilizing IT devices and has been revealed to impact clients intention and attitude [42].

Progressing monetary dealings on the internet present countless risks for consumers, above and over the deal procedure itself being perceived as risk [43]. In the internet surroundings, unlawful deeds can be achieved with tremendously high haste, furthermore, deficient with regards to any physical contact [44]. Whenever an unofficial fellow is capable to get in touch to a consumer's internet banking folder, terrific economy information can cause a lot of economic losses. The most vital aspects of internet banking are probable to be security risk associated to the possible loss because of shortages in the functioning system or embezzlement of resources via illegitimate exterior entry [45-48].

Performance risk

Clients assessment of performance risk is taking into account their understanding and reasoning capacities in a convinced item area [45].

Asymmetry in internet banking data and the absence of individual contact avert the customer from properly assessing the attributes of the item, lessening certainty. Probability of the failing and not executing as it was considered and promoted and therefore deteriorating the preferred benefit [49]. A way product and services deliver benefits as perceived by a consumer [50] can also be referred to as a terror of loss that can also be incurred when a variety, product or dealer do not accomplish as projected [51]. Performance risk implies losses sustained by shortages or faulty of internet banking websites. Customers are frequently anxious that collapse of system servers or termination from the web will transpire while leading transaction because the circumstances might outcome in unanticipated fatalities [52].

Social risk

Social risk is the anxiety of the likelihood of enticing in unfavourable consideration and reaction from obtaining a specific item. The social wellbeing of the client who utilizes internet banking administrations may be influenced due to the positive or negative impression of internet banking administrations by people, family, or companions [45]. Clients state of mind to the diverse technique for obtaining rely on upon their attributes, the individuals who most regard social connections being the most hesitant to build up an uplifting mentality or optimistic approach to internet banking. The absence of human collaboration can be an obstruction to the utilization of innovation centred facilities.

Social risk denotes the option that making use of internet banking might outcome in condemnation of one's family or group, it also an impending loss of rank in one's communal gathering as an outcome of adopting item and administration, looking untrendy. It is likely that one's social stand-up might be improved or reduced subject on how internet banking is regarded. It can be those individuals have unfavourable or positive perception of internet banking. In other words, the opinions of its adopters not accepting internet banking might have negative or positive implications.

Time risk

Combination of time lost and effort consumed in acquiring any item and services [53]. At the point when additional time is mandatory in a way to study how to get to any certain administration, risk perception upsurge. Customers are also said to perceived risk when currency transferal is not comprehended in time and errors take place during the period of the transaction turning to period loss perception [45]. Inconvenience and time may refer to a loss sustained because of the postponement of getting payment or the effort of steering (discovery suitable services and hyperlinks). Two foremost reason of displeasing internet banking experiences that may be considered as a time risk involving a confused site and pages which are so lazy it couldn't be possible download [54]. It can be interrelated to the dimension of time included in holding up the knowledge how to perfume internet banking websites, time may be lost when consumer is settling on a terrible buying choice by squandering time looking into and making the purchase, learning ways of using the product just to have substitute it if it do not accomplish to anticipations.

Financial risk

Financial Risk also implies monetary risk which is the likelihood of economic losses during the process in online purchase or shopping [55]. In another way round FR is the loss of money as an outcome of buying product and facilities [56]. Risk insight of internet banking users mainly cultivates out of the IT gaps and the subsequent losses experiences in deceitful entrance to customer accounts [45].

It is also referred to as prospective for economic loss payable to transaction mistakes or the bank account misappropriation. For instance, untrustworthy merchants convey insufficient items or even neglect to convey items to clients. Sometimes, people spend cash to overhaul challenging items. Then again, Master card details of people can be lifted when deal happen over the Internet [58].

Security risk

Security risk has been expressed in various studies that the utmost trial to the internet banking will be captivating the belief of clients concerning the problems of security [59,60]. Security risk happen when customers is about to transfer money from their account or from their secluded economic information which can be view by others deprived of their consents, this concern create security risk [45].

Security risk is the core hindrance in making use of the internet banking. Polato, Åÿlu et al. [61] has already been recommended that better quality security in defending individual information can escalate the partiality for making use of internet banking. Security/privacy risk is categorised as a prospective forfeit owed to fraud or a hacker bargaining the security of an internet bank user [62]. Phishing is an alternate original misconduct aptitude in which phishers tries to deceitfully obtain delicate data, for example, usernames, passwords and MasterCard subtle elements, as a dependable object in an automated message.

Effect of Perceived Risk on Intention to Use Internet Banking

Studies indicated perceived risk as a critical factor and its relationship to the internet banking adoption [61,63,64]. Past study has discovered the risk connected with fatalities misfortunes from the internet banking exchange is more noteworthy than in customary situations [65-67].

Bauer [68] initially presented the idea of perceived risk. He characterized risk as far as the instability and outcomes connected with a consumer' activities. For instance, consumer investigators characterize perceived risk as a customer's view of the indecision and unfriendly outcomes connected with purchasing an item (or facility) [69]. Perceived risk increments with vulnerability and size of the related negative result.

Perceived risks in a few studies have been regarded as a multidimensional theory. Prior effort has demonstrated that perceived risk comprises of various sorts of risk, containing performance risk, social risk, time risk, monetary risk and security risk [38,39,70]. Zimund affirmed the significance of risk connected with the chance expense of settling on a purchase choice. It was realised that clients require more data to settle on further risky choice [71].

Research Conceptual Framework

This research is centred on perceived risk and intention of adopting internet banking among the postgraduate student of UUM. Past researchers have identified relationships among the independents variables of this study perceived risk, performance risk, social risk, time risk, financial risk, and security risk and the dependent variable intention to use. The framework provided below explains the relationship between the risks perceived in using the internet banking and the intention to use the internet banking. This research is of the opinion that the increase in the risk perceived by the potential customers will decreased the intention to utilize the internet banking services. Thus, it is hypothesized that there is a negative relationship between perceived risk and the intention to use internet banking services (Figure 2).

Research Hypotheses

The following are the specific hypothesis that depicts the framework of this research:
H1: Perceived risk negatively influences intention towards the use of internet banking.
H2: Performance risk negatively influences intention towards the use of internet banking.
H3: Social risk negatively influences intention towards the use of internet banking.
H4: Time risk negatively influences intention towards the use of internet banking.
H5: Financial risk negatively influences intention towards the use of internet banking.
H6: Security risk negatively influences intention to use online banking.

RESEARCH METHODOLOGY

Sekaran [72] stated that the choice of research design in a study depends on the nature of the research questions being considered by the researcher. As a result of the nature of the questions addressed in this research, a quantitative research design is considered appropriate for this study. Research methodology involves four different phases: the definition of the problem, data collection, data analysis, and reporting. Therefore, gathering information about the problems or issues of the research involves an exploratory study which is conducted via thorough literature review to gain familiarity about the research issues. As such, the definition of the problem in this study involves an exploratory study via literature review to understand the background to the study after which a research proposal is drafted.

These are designed and tailored to precisely answer the research questions, test the hypotheses and achieve the research objectives. Data Collection instrument is done by using an adapted questionnaire from the previously related study Ming-Chi Lee [62].

Population and sampling

The population used in this study is Nigeria graduate students of Universiti Utara Malaysia (UUM) comprising of both the Master students and PhD students. The population comprises of Nigeria post graduate students with internet banking. According to Krejcie et al. [73] a population range between 180-190 will have a sample size of 120. After confirming the total number of the UUM student from the student affairs department Unit Perancangan Korporat 2011 which revealed that there are 5,389 postgraduate students studying in UUM and the total number of Nigeria postgraduate's student is 670. Therefore, a representative sample of 120 students was surveyed in UUM. This is justified by Sekeran [74].

Respondent's profile

The very initial stage of this study analysis is to understand the demographic background of the respondents. Thus the necessity for analysing the questions that is included in the questionnaire purposefully to examine respondent demographic profile. Age was included as one of the questions needed to understand respondents' demographic features and the descriptive result revealed that 59 (49.2%) students among the respondents are between the ages of 19 to 30. 56 (46.7%) fall in the age of 31 to 45.4 (3.3%) students among the respondents are between the age of 46 to 60 and just 1(.8%) respondents are greater than 60 years old and above. Hence, the descriptive analysis of gender revealed that 90 (75.0%) males responded to the administered questionnaire and 30 (25.0%) are females out of those that responded to the administered questionnaire. Amongst the demographic features is the education level of the respondent is 120 (100.0%).

The descriptive analysis of marital status revealed that 54 (46.7%) single responded to the administered questionnaire and 66 (53.3%) are married out of those that responded to the administered questionnaire. Based on the survey, descriptive analysis of occupation shows that 66 (55.8%) employed responded to the administered questionnaire and 54 (44.2%) are unemployed out of those that responded to the administered questionnaire. According to the survey, result shows that 120 (100%) of the respondents' do have a bank account. It is also revealed that 111 (92.5%) are students who make use of internet banking, while 9 (7.5%) are students who do not use internet banking. A none-structured question was also asked in the Part A of the study questionnaire, purposefully for the respondents to record their internet usage habits. The research recorded and examines computed frequencies of the internet usage habits recorded by the respondents.

It is revealed that 55 (45.9%) are student respondents who usually make use of internet banking transaction (IBT), while 65 (54.1%) are student response who frequently make use of internet banking transaction (IBT). It was found that 82 (68.3%) students do normally access there internet banking in the school (AOIB), in filling the questionnaire and the remaining 38 (31.7%) students do normally access there internet banking at home (AOIB). It is revealed that 73 (60.8%) are student respondents who make use of personal computer to have access to their computer (DTC), while 47 (39.2%) are student response who make use of mobile phone to have access to their computer (DTC).

It was also realised that 71 (59.2%) students respondents who do encounter problem frequently in using their Internet Banking (PEIB), in filling the questionnaire and the remaining 49 (40.8%) students respondents who do not encounter problem frequently in using their Internet Banking (PEIB). According to the survey, result shows that 84 (70.0%) of the respondents' do make use of internet banking from more than one bank frequently (UIB), Meanwhile the remaining 36 (30.0%) respondent's do not make use of internet banking from more than one bank frequently (UIB).

TEST FOR MULTI-COLLINEARITY

Multicollinearity demonstrates a circumstance in which there is high linear relationship between the independent variables [75]. The presence of Multicollinearity does not show a good regression model. Multicollinearity can be identified by inspecting the tolerance value, variance inflated factor (VIF) and the condition index. The tolerance value of 0.1 or lower and a VIF value higher than 10 shows Multicollinearity threat [76]. In this study, the tolerance value are higher than the threshold value of 0.1, the VIF value is lower than the threshold value 10, while the condition index are lesser than 30, which shows that Multicollinearity is not a threat in this study.

Pearson correlation analysis

Correlation analysis indicates the strength and the direction of a bivariate relationship [77]. Pearson moment correlation coefficient, in this study, was used in determining the bivariate relationship among the independent variables (perceived risk (PR), performance risk (PFR), social risk (SR), time risk (TR), financial risk (FR), security risk (SER) and the dependent variable, intention to use (IU). Correlation co-efficient of value indicates no strength, 0.1 – 0.3 is weak, 0.4 – 0.6 is moderate, 0.7 -0.9 is strong, while 1 indicates a perfect relationship [78]. Table 1 presents the findings of the Pearson correlation analysis.

Table 1 shows the correlation coefficient result of the hypothesized relationships. Perceived ($r = 0.258$) has a weak positive relationship with intention to use (IU) with correlation coefficient. Performance risk ($r = 0.221$) was found to possess a significant weak positive relationship with intention to use. Also social risk ($r = 0.125$) has a weak positive relationship with intention to use (IU).

In addition, time risk (TR) has a weak negative relationship with intention to use (IU). Financial risk (0.155) has a weak positive relationship with intention to use (IU) while, security risk ($r = 0.035$) has a weak positive relationship with intention to use (IU).

Multiple regression analysis

Upon the completion of the correlation analysis, multiple regressions was also employed by the researcher to determine the effect of each independent variable (PR, PFR, SR, TR, FR and SER) to explaining the variances in the dependent variable (IU). The multiple regression analysis result shows R^2 Adjusted = 0.169 which reveals that the predictors contributed 16.9% variance level in explaining intention to use. The result of the F-test revealed a significant relationship between the independent variables and the dependent variable representing the overall model by the equation: ($F(7, 120) = 5.033, P < 0.05$). As depicted by Table 2 below, the result shows that perceived risk (PR) indicated by a beta value of ($\beta = 0.287$) has a larger contribution to explaining the variance in intention to use than performance risk (PFR), social risk (SR), time risk (TR), financial risk (FR), security risk (SER) with beta value ($\beta = 0.244, -0.82, 0.351, 0.227,$ and 0.215) respectively.

Furthermore, the regression analysis shows a significant effect of perceived risk (PR) ($\beta = 0.287, t = 3.033, P < 0.05$) on intention to use while performance risk (PFR) show an evidence of significant relationship ($\beta = 0.244, t = 2.434, P < 0.05$) with intention to use. Additionally, social risk failed to show an evidence of significant relationship ($\beta = -0.082, t = -0.827, P > 0.05$) with intention to use. Also time risk (TR) show an evidence of significant relationship ($\beta = 0.351, t = 3.640, P < 0.05$) with intention to use. Likewise, financial risk (FR) show an evidence of significant relationship ($\beta = 0.227, t = 2.153, P < 0.05$) with intention to use. Moreover, security risk (SER) show an evidence of significant relationship ($\beta = 0.215, t = 2.146, P < 0.05$). Thus, Hypotheses H1, H2, H4, H5, and H6 are accepted while hypothesis H3 not accepted. Table 2 presents the result of regression analysis.

DISCUSSION

The discussion of the findings in this study will be discussed based on the hypothesized relationship in this study. The following section presents the discussion on the relationship between perceived and intention to use IB.

The effect of perceived risk on the intention to use internet banking

In pursuit of this objective, hypothesis H1 which posited that perceived risk negatively influences intention towards the use of internet banking, the regression analysis shows a significant effect of perceived risk (PR) ($\beta = 0.287, t = 3.033, P < 0.05$) on intention to use which was accepted in this study, also the result from the descriptive analysis shows that the respondent slightly agree to have intention to use internet banking. While, the result from the Pearson correlation analysis found that perceived risk has a weak positive significant relationship with intention to use internet banking.

This study is in line with previous researches of Roselius [39]. Roboff et al. [40] realised that individuals have a weak knowledge of internet banking risks while they are mindful of the dangers. So many diverse of study already exhibited perceived risk as a very vital factors which influence internet banking adoption which has been negatively related [63].

The effect of performance risk on the intention to use internet banking

In pursuit of this objective, hypothesis H2 which posited that performance risk negatively influences intention towards the use of internet banking, the regression analysis shows an evidence of significant effect of performance risk (PFR) ($\beta = 0.244$, $t = 2.434$, $P < 0.05$) on intention to use which was accepted in this study, also the result from the descriptive analysis shows that the respondent slightly agree to have intention to use internet banking. While, the result from the Pearson correlation analysis found that performance risk has a weak positive significant relationship with intention to use internet banking. This study is in line with previous researches of Kuisma [52] performance risk implies losses sustained by shortages of internet banking websites. Customers are frequently anxious that collapse of system servers or termination from the web will transpire while leading transaction because the circumstances might outcome in unanticipated fatalities.

The effect of social risk on the intention to use internet banking

The third hypothesis H3 in this study social risk negatively influences intention towards the use of internet banking, Additionally, the regression analysis for social risk failed to show an evidence of significant relationship ($\beta = -0.082$, $t = 0.827$, $P > 0.05$) with intention to use in which it was not accepted which, also the result from the descriptive analysis shows that the respondent are neutral to have intention to use internet banking. While, the result from the Pearson correlation analysis found that performance risk has a weak positive significant relationship with intention to use internet banking. The findings indicate that there is no relationship between social risk and intention to use internet banking. Few researchers' assertion that technology based services has in-built preventive influences by not offering collaborating impact with individuals [45]. This is the opportunity of derogate self-esteem and curiosity [53].

The effect of time risk on the intention to use internet banking

In pursuit of this objective, hypothesis H4 which posited that time risk negatively influences intention towards the use of internet banking, the regression analysis shows an evidence of significant relationship of time risk (TR) ($\beta = 0.351$, $t = 3.640$, $P < 0.05$) with intention to use internet banking, which was accepted in this study, also the result from the descriptive analysis shows that the respondent are neutral to have intention to use internet banking. While, the result from the Pearson correlation analysis found that time risk has a weak negative significant relationship with intention to use internet banking.

Time risk can also be identified with the period included in managing with wrong dealings.

The effect of financial risk on the intention to use internet banking

In pursuit of this objective, hypothesis H5 which posited that financial risk negatively influences intention towards the use of internet banking, Likewise, the regression analysis shows an evidence of significant relationship of financial risk (FR) ($\beta = 0.227$, $t = 2.153$, $P < 0.05$) with intention to use which was accepted in this study, also the result from the descriptive analysis shows that the respondent slightly agree to have intention to use internet banking. While, the result from the Pearson correlation analysis found that performance risk has a weak positive significant relationship with intention to use internet banking. This study is in line with previous researches of Kuisma [52] says customers are frightened losing their money while carrying out transaction from their account via the utilization of the internet, it is also referred to as prospective for economic loss payable to transaction mistakes or the bank account misappropriation.

The effect of security risk on the intention to use internet banking

Lastly, the hypothesis H5 in this study security risk negatively influences intention towards the use of internet banking. Moreover, the regression analysis shows an evidence of significant relationship of security risk (SER) ($\beta = 0.215$, $t = 2.146$, $P < 0.05$) with intention to use internet banking, which was accepted in this study, also the result from the descriptive analysis shows that the respondent slightly agree to have security risk in internet banking. While, the result from the Pearson correlation analysis found that security risk has a weak positive significant relationship with intention to use internet banking. Littler [45] assertion security risk is the core hindrance in making use of the internet banking. The belief of so many consumers is that there are susceptible to identity theft whenever they are making use of the internet services [7].

Executive summary of the findings

In relation to the five hypothesized relationships in this study, statistical analysis was used to test the relationship and the result found that four hypotheses were supported, while two hypotheses were not supported. Specifically, the result found a statistical weak positive significant relationship between perceived risk (PR) and intention to use (IU), a significant weak positive relationship between performance risk (PFR) and intention to use; also there is a significant weak positive relationship between social risk (SR) and intention to use (IU), there exist significant negative relationship between time risk (TR) and intention to use; while, a significant weak positive relationship between financial risk (FR) and intention to use; lastly, there occur a significant weak positive relationship between security risk (SER) and intention to use. In addition, the findings shows that perceived risk (PR) among all other variables contributes more in explaining intention to use indicating that it is the most important among the factors that influence intention to use among the postgraduates student. The Table 3 below presents the hypothesis of the study.

Implication of the Study

This study contributes both theoretically and practically. Theoretical, this study has been able to examine the link between perceived risk intentions to use. As such, it has donated to the group of knowledge by supporting the previous studies on the established relationship between perceived risk and intention to use internet banking. In addition, it has been able to expand literatures on the issues and trends of internet banking today and indicates the influences that can enhance intention to use internet banking among UUM postgraduate students. More so, the empirical findings of the study have been able to discuss on previous literature study concerning technology acceptance model (TAM) and theory of planned behaviour (TPB)

Practically, this study has provided an avenue for Nigeria government and banking authority to instil and improve on customer adoption on internet banking in Nigeria by pointing out to the bank authorities that perceived risk is an important factor that determines intention to use internet banking users. As such, stable availability of network or circulation of information during maintenance of system should be given optimum attention in order to enhance the intention of customers towards the usage of internet banking.

CONCLUSION

This study was conducted among the Nigeria postgraduate student of UUM and the study make use of perceived risk and it dimension. The researchers were able to draw their conclusion. Under Pearson correlation that perceived risk has a weak relationship with intention to use, Performance risk was found to possess a significant weak positive relationship with intention to use. Also social risk has a weak positive relationship with intention to use (IU). In addition, time risk (TR) has a weak negative relationship with intention to use (IU). Financial risk has a weak positive relationship with intention to use (IU) while, Security risk has a weak positive relationship with intention to use (IU). The findings shows that perceived risk (PR) have the highest value (0.258) among all other variables that exist in Pearson correlation coefficient in which it contributes more in explaining intention to use indicating that it is the most important among the factors that influence intention to use among the Nigeria postgraduates student in UUM.

Also, the multiple regression analysis from this study, also ascertain that perceived risk, performance risk, time risk, financial risk and security risk were all accepted, while social risk is not accepted, so therefore the study argued that the five risk which are accepted are the most important, while social risk is unimportant. the result shows that perceived risk (PR) indicated by a beta value of ($\beta = 0.287$) has a larger contribution to explaining the variance in intention to use than performance risk (PFR), social risk (SR), time risk (TR), financial risk (FR), security risk (SER) with beta value ($\beta = 0.244, -0.82, 0.351, 0.227, \text{ and } 0.215$) respectively.

Lastly, student should be exposed to internet system which lay emphasis on developing internet banking skills and knowledge. Banks administrators and the government should team up to produce and promote a good image of bank as a choice of career. To improve students' intention to use, certain method needs to be adopted and the internet banking policy makers should add more value and reliability to their online transaction for customers by integrating the elements that boost the development of internet banking.

Recommendation for Future Study

There have been some notable limitations that this are beyond the control of this present study. Future researchers are recommended to delve deeper on the effect of perceived risk on intention to adopt internet banking. It is also expected that future studies should survey bigger sample size to enable wider generalization of the study findings. Additionally, future researchers are recommended to validate this present research theoretical framework with a multivariate analytical tool such as SEM or path analysis. Lastly, future researchers are recommended to structure their scope of study longitudinally for the purpose of understanding the influences and changes in students' responses through the change of time.

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