

Impact of Website Design, Trust, and Internet Skill on the Behaviour Use of Site Internet Banking in Bandung Raya: A Modification of the Utaut Model

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ABSTRACT

This study aims to determine the effect of expectancy effort, social influence, performance expectancy, website design, experience, Internet banking and Internet usage skill in the use of Internet banking in Bandung Raya, Indonesia. Partial Least Square was used to examine the model used in this study. The results show that expectancy effort does not have a significant effect on performance expectancy in the use of Internet banking, social influences do not have a significant effect on performance expectancy in the use of Internet banking but performance expectancy has a significant effect on effort expectancy and social influences in the use of Internet banking. Website design has a significant influence on the behaviour of Internet banking websites. Website design has a significant impact on the use of Internet banking through mediation of performance expectancy. Prior experience has a significant effect on effort expectancy in the use of Internet banking. Prior experience has significant influence performance against expectancy in the use of Internet banking. Prior experience has a significant effect on website design in the use of Internet banking. Internet skill does not have a significant effect on performance expectancy in the use of Internet banking.

Keywords: Website design, Internet banking, PLS (Partial Least Square), UTAUT, Internet skill

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INTRODUCTION

Every innovation in Indonesia's banking world is supported by users and today, this certainly includes the many internet and mobile phone users as well. Retail financial services are a widely studied area of technological transformation. The

Internet has sparked an IT-based revolution in the financial services sector that has radically altered the way banking services are delivered. This development, referred to as Internet banking (IB), has enabled busy people to complete their financial activities in a cost-effective and efficient manner at any time of the day, regardless of their physical location (Makris et al., 2009). This use of the Internet in financial services and banking, referred to as Internet banking (IB), has also allowed bank customers to engage in a vast array of financial services such as paying bills, checking account information, transferring funds and utilising investment and check services through bank websites (Tan & Teo, 2000). Nowadays, the banking industry must provide added value in their services in order to survive.

There have also been benefits for the financial institutions. Banks spend a great deal of money on IB because it reduces cost relative to other forms of banking and provides more timely and complete customer information (Gerrard & Cunningham, 2003). It also increases service quality, which is necessary for survival in competitive markets (Rouibah et al., 2009).

Financial service providers must aim to have a comprehensive understanding of how their customers feel about this technology (Lassar et al., 2005). An important factor that influences customer adoption and use of IB is their attitude towards the technology. By identifying the expectations and wants of customers, and understanding their motivations for adopting (or not adopting) IB, bank managers and policy-makers can

develop strategies to improve the adoption of such technology (Hanafizadeh et al., 2014).

Indonesian Banking Overview

The banking industry in Indonesia today is dominated by a few large banks such as Bank Mandiri, BCA and BRI. Table 1 shows the amount of assets owned by banks in Indonesia compared to total assets of national banks. Note that the 10 largest banks in Indonesia have a shared 61.64% of the total banking assets in Indonesia.

Table 1
Ten Biggest Banks di Indonesia (in Million rupiah)

Bank Name	Total Assets (Million)	% Accumulative
Bank Mandiri	733,009,762	22.58%
BRI	626,182,926	41.86%
BCA	496,304,573	57.15%
BNI	386,654,815	69.06%
CIMB Niaga	218,866,409	75.80%
Bank Danamon	184,237,348	81.47%
Bank Permata	165,833,922	86.58%
Bank Panin	164,055,578	91.63%
BII	140,546,751	95.96%
BTN	131,169,730	100.00%

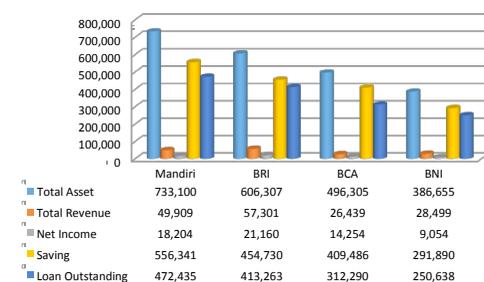


Figure 1: Financial data of the top four banks in Indonesia (in billion rupiah)
Source: Annual Report of each bank

Based on the total net income of the top four banks, BRI is currently ranked first with revenue in the amount of Rp. 57,301 trillion and a net income of Rp.21,160 trillion. Bank Mandiri is ranked second with a large net profit of Rp.18,204 trillion and a total revenue of Rp.49,909 trillion while the total revenue of BCA and Bank BNI is Rp.26,439 trillion and Rp.28,499 trillion, respectively. But in total assets, customer deposits and bank loans are ranked the highest, with total assets of Rp.733,100 trillion, Rp.556,341 trillion in customer deposits and Rp.472,435 trillion in loans granted. BRI Bank ranked second in the amount of Rp.606,370 trillion in total assets, Rp.454,730 trillion in customer deposits and Rp.413,263 trillion in loans. BRI is followed by BCA and BNI, ranked respectively as third and fourth. With total assets amounting to Rp.496,305 trillion, BNI have customer deposits amounting to Rp.386.655 trillion, while Bank BCA has customer deposits

amounting to Rp. 409.486 trillion and Bank BNI has customer deposits amounting to Rp.291,890 trillion. BCA has Rp.312,290 trillion in loans granted while Bank BNI has Rp.250,638 trillion.

Internet banking services offer many conveniences but most customers in Indonesia are still attached to conventional banking, which includes using ATMs or queueing at bank counters.

Table 2 shows that in 2013, BRI's ATM transactions amounted to 823.2 million rupiah, while its SMS banking transactions amounted to 57.7 million rupiah and its internet banking transactions amounted to 16.1 million rupiah. Similarly, the number of Mandiri's ATM transactions in 2013 amounted to 912 million rupiah, while its SMS banking transactions amounted to 146.9 million rupiah and its Internet banking transactions amounted to 310 million rupiah. BCA's ATM transactions in 2013 amounted to 1461.5 million rupiah, while its SMS

Table 2
Number of ATM, SMS and Internet Banking Transactions in 2013

Bank	Year	ATM	SMS Banking	Internet Banking
BRI	2011	482.7	24.3	6.9
	2012	523.9	31.8	9.8
	2013	823.2	57.7	16.1
MANDIRI	2011	695.38	87.69	197.99
	2012	828	120.2	314.6
	2013	912	146.9	310.8
BCA	2011	1004.8	223.6	607.7
	2012	1212.2	308.6	888.4
	2013	1461.5	408.1	895.9
BNI	2011	390.1	53.6	3.7
	2012	483.4	83.9	5.5
	2013	573.4	130.2	8.9

banking transactions amounted to 408.1 million rupiah and its Internet banking transactions amounted to 895.9 million rupiah. BNI saw 573.4 million rupiah ATM transactions, 130.2 million rupiah SMS banking transactions and 8.9 million rupiah Internet banking transactions made in 2013.

Since the new millennium, Internet banking has been developed in numerous countries. By offering Internet banking services, traditional financial institutions seek to lower operational costs, improve consumer banking services, retain consumers and expand their share of customers. Recent evidence suggests that an Internet-based consumer banking strategy may be more effective and more profitable as well as draw more loyal and committed consumers compared with traditional banking. Thus, contemporary banks now regard the Internet channel as equally important to traditional channels of branches, ATMs, telephone banking and call centres (Gartner, 2003a). In the new banking environment, Internet banking is increasingly managed as an operational activity and is an important component of a multi-channel strategy (Black et al., 2002). There is extensive diffusion of consumers in Internet banking in various countries (Lichtenstein & Williamson, 2006).

RESEARCH QUESTIONS

Attempts to model e-commerce adoption often utilise behavioural models, such as the technology acceptance model (TAM). To model e-commerce adoption, behavioral models, such as TAM, are generally used.

But few studies have considered customer acceptance of Internet banking and even fewer have assessed models across the market. Proponents of the theory of reasoned action (TRA) and its derivatives (Fishbein & Ajzen, 1991) and TAM and the theory of planned behaviour (TPB) (Ajzen, 1991), acknowledge the attached limitations that have resulted in proliferation of explanatory variables (Moon & Kim, 2000).

This study sought to investigate factors that influenced Indonesian bank customers' adoption of four major banking channels i.e. branch banking, ATM, telephone banking and internet banking. Specifically, it aimed to focus on the influences of demographic variables and psychological beliefs related to the positive attributes possessed by the channels. This study was aimed at analysing the factors that affected Indonesian bank customers' adoption of four major banking channels i.e. branch banking, ATM, telephone banking and Internet banking. This study looked especially at the demographic variables and psychological beliefs about the positive attributes possessed of the four channels.

The theoretical goals of this research were:

1. To contribute to the literature on Internet-banking by exploring and analysing current knowledge on Internet banking;
2. To determine some important factors that influence the adoption of Internet banking in Indonesia;

3. To compare the adoption of Internet banking adoption across various strata of the population (cultural) living in both developed and developing countries (Netherlands and Indonesia).

The practical goals of this study were:

1. To provide insight into the banking industry to direct the clients to use Internet banking;
2. To provide bankers the benefit in assessing their website quality perception by actual users.

The specific research question addressed in this study was:

What impact do Internet skill, trust, prior experience and website quality have on performance expectancy, effort expectancy, social influence and Internet banking usage?

LITERATURE REVIEW

Technology Acceptance Models

According to Anderson (2010), Mobile banking (M-Banking) has the potential to provide simple banking and electronic transaction services for unbanked customers in the development of markets. However, when activating mutual markets, the solutions of M-banking raise questions in the minds of the regulators of the distant communication industry, particularly about the privacy of the communication network. Previous studies have revealed

that some users choose to use technology to avoid direct communication with the staff offering those services or with other clients (Meuter et al., 2000). No significant study has been conducted in the area of M-banking and only behavioural aspects and different factors of mobile services have been investigated by researchers in different ways. Nonetheless, a number of researchers have studied behavioral aspects and different factors of mobile services from numerous distinctive points of view. Laforet and Li (2005) investigated the factors affecting the adoption and use of Internet banking in China. They studied the factor of gender and concluded that most users of Internet banking in China are men. Also, security is among the factors affecting the adoption of M-banking, whereas factors such as risk, computer, skills needed to use new technologies and the culture are factors inhibiting the adoption of M-banking in that country.

Hanafizadeh et al. (2014) have attempted to answer the question whether bank customers' awareness of the services and advantages of IB is effective in reducing the negative effect of customers' perceived risk on their intention of IB adoption. The results indicated that IB awareness acts as a factor reducing all dimensions of the perceived risk (including time, financial, performance, social, security and privacy). In addition, they found that except for social risk, other dimensions of the perceived risk have significantly negative effect on the intention of IB adoption. Al-Somali et al. (2009) investigated the acceptance

of online banking in Saudi Arabia. The findings of this study refer to the quality of internet connection. The awareness of online banking and its benefit, the social influence and computer self-efficacy have significant effects on the perceived usefulness and perceived ease of use of online banking acceptance. In this study, education, trust and resistance to change also have a significant impact on the attitude towards the likelihood of online banking adoption.

Khalfan et al. (2006) investigated factors influencing the adoption of Internet banking in Oman. The findings of this study showed that the issues of security and data confidentiality were a major barrier in the adoption of Internet banking. Top management support was also an inhibiting factor in the adoption of electronic commerce applications. According to this study, banks in this region were 'quite slow' to launch e-banking services. While they are convinced that online services reduce overheads significantly, a mixture of factors such as customer insecurities, technology investment costs and lack of market-readiness have all conspired to make e-banking 'unattractive'. Nasri and Charfeddine (2012) conducted a study about the factors affecting the adoption of Internet banking in Tunisia. They used the technology acceptance model (TAM) and theory of planned behavior (TPB). Their model employed security and privacy, self-efficacy, government support and technology support, in addition to perceived usefulness, perceived ease of use, attitude, social norm, perceived behaviour control

and intention to use Internet banking. These factors had various effects on Internet banking adoption.

Riquelme and Rios (2010) investigated the moderating effect of gender in the adoption of mobile banking. This study sought to test the factors that can influence adoption of mobile banking among current users of internet banking in Singapore and used gender as a moderating variable. The findings of this study showed that usefulness, social norms and social risk were the factors that influenced the intention to adopt mobile banking services the most. Ease of use had a stronger influence on female respondents than on male respondents, whereas relative advantage had a stronger effect on the perception of usefulness on male respondents. Social norms (or the importance of others in the decision) also influenced adoption more strongly among female respondents than among male respondents. Abdul-Hamid et al. (2007) conducted a comparative analysis of Internet banking in Malaysia and Thailand. The results of this study indicated that both nations were dissimilar in providing basic services offered by their commercial banks. Lack of effort in educating consumers about Internet banking further affected the usability of Internet banking in both countries.

Trust

Trust refers to "an individual's belief of how others will behave based on the individual's expectation" and "an expectation that others one chooses to trust will not behave

opportunistically by taking advantage of the situation” (Gefen et al., 2000a). Grazioli and Jarvenpaa (2000) and Luhmann (1979) (as cited in Gefen et al., 2000a) stated that trust is a people’s expectation that others will comply. In online shopping, users feel fearful about transacting with e-vendors whom they cannot see. Hoffman, Novak and Peralta (1999) indicated that the critical obstruction in e-commerce was the fear of the lack of standards for secure payment, the lack of profitable business models and fraudulent use of personal data. Trust helps decrease these fears and facilitate transaction in e-commerce by reducing fraud, uncertainties and potential risks (as cited in Gefen et al., 2000b; Pavlou, 2003).

Many recent research indicate that trust is another key construct of TAM. Most research has found that trust influenced behavioral intention (Gefen & Straub, 2003; Gefen et al., 2003), but trust causality will not take advantage of customers based on the situation (Gefen et al., 2003a).

However the potential of Internet banking remains beneficial to banks and their customers. The primary advantages to banks include cost savings, time savings, achieving new segments of the society, effectiveness of operations, improvement of the bank’s status and better customer service and client satisfaction (Alsajjan & Dennis, 2010). Clients of online banking become motivated through trust, which plays an important role in improving the level of the availability of Internet banking in the online environment. In contrast with

offline banking, the concept of trust is a vital consideration in online banking as it requires the sharing of essential files and important information.

RESEARCH METHODOLOGY

In this study, the provision of personal services was specified more clearly as the provision of financial services, provision of financial information and provision of professional financial consultation. Clarity of service instructions was added as a separate factor. All in, 11 dimensions were used in this study:

- (1) efficiency of the services delivered by the channel;
- (2) convenience of the location of the channel;
- (3) convenience of the operating time of the channel;
- (4) speed of the service provider/system in delivering services;
- (5) provision of financial services;
- (6) provision of financial information;
- (7) provision of professional financial consultation;
- (8) ease of use;
- (9) clarity of service instructions;
- (10) security of customer information; and
- (11) accuracy of transaction information.

According to the theory of reasoned action (Ajzen, 1991), adoption of a banking channel is positively associated with beliefs

about the extent to which the channel possesses positive attributes. Therefore, we proposed the following hypothesis:

H1. There are positive associations between the adoption of a banking channel and the beliefs about the extent to which the banking channel possesses the 11 specific attributes identified in this study.

Questionnaire

The questionnaire included three sections. The first section was on the beliefs about the banking channels on the 11 attributes identified above. The beliefs about each of the four banking channels with respect to each of the 11 attributes were measured on a 7-point Likert scale. A larger number represented a stronger belief that the channel possessed the attribute in question. The second section examined the extent to which each of the four banking channels was adopted. Four banking services were provided by all four banking channels:

- (1) checking account balances;
- (2) payment of credit card bills;
- (3) payment of bills of telephone services, water, electricity, school fees etc.; and
- (4) transfer of funds among accounts.

For each banking service, the respondent allocated a constant sum of 100 points to the four banking channels to reflect how often the respondent used the four banking channels. The third section recorded demographic information including gender,

age, monthly household income, educational level and occupation. It took less than 10 minutes for all of the respondents to complete the questionnaire. If a respondent had not used a particular channel before, the questions pertaining to beliefs about that channel would be treated as having missing values, and the levels of adoption would have a value of zero.

Non-probability sampling was used, where respondents were not given equal opportunity for answering the question. The sampling technique used in this research was purposive sampling. The population in this study was the base of Internet banking customers of Bank Mandiri, BCA, BNI and BRI in Bandung Raya. The sample in this study was 250 respondents. The scale of measurement used a Likert-type scale interval.

The data analysis technique used was PLS (Partial Least Square) to explain the relationship construct and to emphasise the understanding of the value of the relationship. PLS can also be used to describe the relationship between the presence or absence of latent variables. For convergent validity, a development of measurement scale loading value of 0.50 to 0.60 was considered sufficient (Ghozali, 2011). All values in the model with sufficient loading with values ranging from 0.500 to 0.838 can be seen in Appendix 1. The reliability of all the constructs can be seen from the composite reliability and construct validity. The value composite reliability of >0.70 may be taken to mean that the value of the composite reliability was acceptable (Ghozali, 2011).

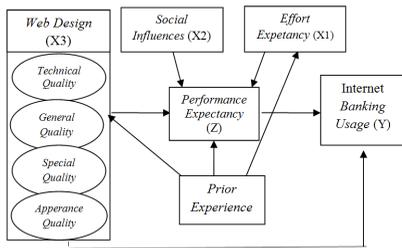


Figure 2: Research model

The current research attempted to answer specific questions pertaining to the relationships among the Unified Theory of Acceptance and Use of Technology (UTAUT) construct: PE, EE, SI and Usage. These constructs, as demonstrated in the conceptual framework, resemble other constructs in the eight models comprising the aggregated model. To a certain extent, the UTAUT constructs are similar to those comprising the TAM model. Hence, the research addresses the nature of these relations.

UTAUT models used in this study consisted of variable expectancy effort, social influence and website design as an independent variable. Performance expectancy was used as an intervening variable, prior experience as an antecedent variable and Internet banking usage as the dependent variable. Ibrahim and Mustafa (2013) proposed a link between expectancy effort and performance expectancy and also between social influences and performance expectancy. UTAUT is defined as the extent to which an individual believes that using the system will help one in achieving better performance and is similar

to models such as perceived usefulness or Technology Acceptance Model TAM (Venkatesh et al, 2003). Effort expectancy UTAUT construction is defined as related to perceived ease of use (PEOU) of the system, such as TAM. TAM shows the influence of external factors on the intention mediated by PEOU and PU (perceived usefulness) (Venkatesh et al., 2003).

Performance expectancy mediates the relationship between business expectations (effort expectancy), social influence (social influences) and Internet banking usage. Aladwani and Palvia (2002) associated dimensions of perceived website quality for the purpose of researching web design variables, where the variable was a substitute for the facilitating condition in the original UTAUT model. Aladwani (2006) stated that website design and its characteristics are a form of technical support for online behaviour and the stipulated quality website design has a considerable impact on the behaviour of individuals or the web. The system design also shows an indirect effect on intention to use through usability and ease of use (Lee & Lin, 2005). Ibrahim and Mustafa (2013) proposed that the elements affect the use of web design mediated by performance expectancy.

Experience was used as an antecedent in previous research. Experience also affects perceived usefulness. Experience in a broad sense means knowledge, and experience here referred to Internet users visiting banking websites and using a variety of value-added services offered by Internet service providers (Nysveen &

Pedersen, 2004). Experience in computer use and knowledge of the Internet as an antecedent perception significantly affect the individual's perception of computer use and web technology. According to Van Deursen and Van Dijk (2010), competency of Internet skills is linked to performance expectancy.

Research Design

Sekaran (2003) argued that research design involves a series of rational decision-making choices regarding the purpose of the study (exploratory, descriptive, hypothesis testing), its location (the study setting), the type of investigation, the extent of researcher interference, time horizon and the level to which the data will be analysed (unit of analysis). In addition, decisions have to be made regarding the sampling design, how data are to be collected (data collection methods) and how variables will be measured and analysed to test the hypotheses (data analysis). According to Sekaran (2003), the methods are part of the design; thus, she agreed with Bryman and Bell (2007) that methods are meant to describe data collection. This study is based on Sekaran's definition of research design, and the study was conducted for the purpose of testing the hypotheses derived from the conceptual framework presented. It is believed that studies employing hypotheses testing usually tend to explain the nature of certain relationships or establish the differences among groups or the independence of two factors or more in a situation. Hypotheses testing offers an

enhanced understanding of the relationships that exist among variables.

The study's horizon refers to conducting a longitudinal versus cross-sectional study. A cross-sectional study, also called a one-shot study, is done when data are gathered just once over a period of time such as days, weeks or months in order to answer a research question. For a longitudinal study, data are collected more than once (Creswell, 2003). According to De Vaus (2001), longitudinal studies are more feasible when there is a need to describe the pattern and direction of change and stability (at an individual level).

Sampling Technique and Sample Size

The population for this study consisted of individual users of Internet banking services in Indonesia. As technology acceptance research has been criticised for using student samples, which adds limitations to generalisability of findings, this research targeted actual users with no discretionary conditions. A controlled environment where actual behaviour could be measured by electronic observation would have enhanced the generalisability of the findings, but the resources necessary for this option were not available to the researcher. Due to the wide geographical distribution of the samples, it would not have been economical or time-efficient to conduct face-to-face or telephone interviews. Since the base of the consumers was widely spread and in the absence of a sampling frame due to the lack of census or a readily available list of this type of user, this study adopted

the convenience sample approach. Sample size was based on the statistical tool to be used i.e. structural equation modelling technique. Although large samples generally tend to produce more reliable solutions, sample size must be based on the model complexity, expected rate of missing data and the estimation procedures used (Hair et al., 2006). The minimum size of 200 usable responses was the target set for this study, taking into consideration the model complexity and guidelines suggested in past research.

ANALYSIS, FINDINGS AND DISCUSSION

The collection of questionnaires was conducted over one month (May 2015-July 2015). Analysis of the questionnaires revealed that 125 users of Internet banking in Bandung Raya were male while 125 were female. The majority of the Internet users were 21-30 years old and held private jobs. The majority earned an income of Rp.5,000,001-Rp.10,000,000 per month and had a Bachelor’s degree.

The structural model given in Figure 3 shows the t-statistic values obtained from the bootstrap test using the programme, SmartPLS 3. The model had a value of R-Square 70.6% for effort expectancy, 46.7% for Internet banking usage, 67.8% for performance expectancy and 25.4% for website design.

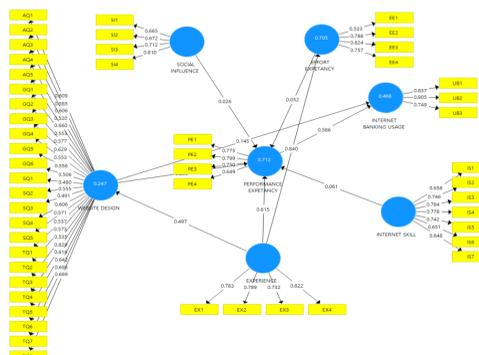


Figure 3: Bootstrap results

The bootstrap results in Figure 3 shows if the effect was significant or not. The constructs had a significant effect when the t-statistic was greater than the t-Table (1.96). The bootstrap results showed that three variables were not significant, namely social influence on performance expectancy, effort expectancy against expectancy performance and Internet skills for performance expectancy.

Performance expectancy (t-statistic=8223) had a significant influence on Internet banking usage. According to Ibrahim and Mustafa (2013), the extent to which an individual believes in using a system is beneficial in achieving performance. In this study, the respondents thought that the use of Internet banking could help to obtain benefits such as speed and convenience. This increased usage behaviour in using Internet banking.

Website design (t-statistic=2.496) had a significant impact, which made it a good substitute technology resource, facilitating the conditions of the UTAUT as in Venkatesh et al. (2003). These results indicated that the respondents chose the quality dimension of website design as a technical quality (TQ) as they felt it was safe, easy to use and accessible. Common quality (GQ) was also believed to be useful and clear. According to Ibrahim and Mustafa (2013), Internet banking must feature useful website qualities such as accessibility, ease of navigation and speed as these are determining factors in the adoption of Internet banking. The perceived benefits of using this substitute technology must also be clear to users. In this study, the respondents thought that the quality of the website design for the banks' website looked safe for them to proceed with Internet banking. They also believed that the websites looked easy to access, offered useful content and that information was clearly visible.

Website design had significant influence on performance expectancy (t-statistic=3.789); this is the same value obtained by Ibrahim and Mustafa (2013). The results of the study were the same as those obtained by Pikkarainen et al. (2004) i.e. that perceived benefits are the main factor in the acceptance of online banking. In this study, this result can be attributed to the users' agreement that the content of the banks' websites was useful and of good quality.

Experience was the most influential variable in this study (t-statistic=22.249). According to Ibrahim and Mustafa (2013), experience develops confidence and leads to ease of use (Venkatesh & Davis, 1996). Experience has a major influence on effort expectancy; as the respondents in this study were actual users, it can be assumed that they had experience in using the Internet banking system. Experience also affects perceived usefulness and whether the user will continue to use it in the future.

Experience also had significant influence on performance expectancy (t-statistic=5.488). According to Ibrahim and Mustafa (2013), mediation of performance expectancy makes it possible to make judgments about the users' gains in improved performance. In this study, it was assumed that the respondents had at least two years' experience in using the Internet, signifying that they probably already believed that using the system would create a beneficial increase in performance.

Experience had a significant influence on website design (t-statistic=8.476), as discovered by Ibrahim and Mustafa (2013) in their research, that user experience of using computers and the Internet would lead to the realisation of the quality of website design in four ways, namely: through technical content, generally, specifically and through the appearance of the site. In this study, the respondents had experience in utilising the banks' websites and they found useful information such as the contact

information of the bank (e.g. email addresses and telephone numbers). The experience of the respondents in accessing the Internet on a daily basis can also create trust in banks' websites for transactions.

Effort expectancy did not have a significant effect on performance expectancy (t-statistic=0.602). Sedana and Wijaya (2010) found that the level of convenience associated with the use of a system would affect intention to use the system. This finding was probably due to the relative ease of using Internet banking i.e. the respondents did not consider ease of using Internet banking would affect behaviour to use Internet banking.

Social influence did not have a significant effect on performance expectancy (t-statistic=0.759). The impact of social influence on perceived usefulness tended to not apply or the user may have depended on his own conviction of the opinions of others or they tended to use the system on the basis of direct experience. In this study, the respondents used Internet banking not because of references from other people, but based on their own conviction to use it.

In this study, the Internet skill was not connected with performance expectancy and was an insignificant factor or it had no effect (t-statistic=1.359). According to Van Deursen and Van Dijk (2010), Internet skill (operational and formal) and knowledge related to content obtained from the Internet (information and strategy) are considered necessary for the general public as they are helpful when working in the online environment. In this study, the respondents

did not possess the skill of surfing for Internet banking access.

CONCLUSION

Three of the hypotheses suggested in this study were rejected i.e. H1, H2 and H9. Performance expectancy had a significant effect on effort expectancy and social influences in the use of Internet banking. Website design had significant influence on the behaviour of site usage in Internet banking. Website design had a significant impact on the use of Internet banking through mediation of performance expectancy. Prior experience had significant impact on effort expectancy in the use of Internet banking. Prior experience had significant effect on performance expectancy in the use of Internet banking. Prior experience had a significant effect on website design in the use of Internet banking.

This study had limitations, which will be reduced or eliminated altogether in future research into this subject. The first limitation of this study was that it was confined to only one research site, Bandung Raya. Future research into Internet banking can be done in other cities. Second, this study used the UTAUT model that depended on four core determinant variables i.e. performance expectancy, effort expectancy, social influences and facilitating conditions. Ibrahim and Mustafa (2013) suggested to use experience as a variable because it has been proven to be a significant factor in the decision to use Internet banking. Therefore, this research only used experience as a variable. Future research should include

other variables such as age, gender and voluntary use in addition to experience.

REFERENCES

- Abdul-Hamid, A., Raja Sulaiman, R., Osman, A., & Saari, N. (2007). Preliminary study of the chemical composition of the rice milling fractions stabilized by microwave heating. *Journal of Food Composition and Analysis*, 20, 627–637. Retrieved from <http://dx.doi.org/10.1016/j.jfca.2007.01.005>
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour. *Journal of Applied Social Psychology*, 32(1), 1–20.
- Al-Somali, S. A., Gholami, R., & Clegg, B. (2009). An investigation into the acceptance of online banking in Saudi Arabia. *Technovation*, 29, 130–141.
- Aladwani, A. (2006). An empirical test of the link between web site quality and forward enterprise integration with web customers. *Business Process Management Journal*, 12(2), 178–190.
- Aladwani, A., & Palvia, P. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information and Management*, 39(6), 467–476.
- Alsajjan, B., & Dennis, C. (2010). Internet banking acceptance model: A cross-market examination. *Journal of Business Research*, 63, 0148–2963.
- Anderson, J. (2010). M-banking in developing markets: Competitive and regulatory implications. *Info*, 12(1), 18–25.
- Black, P. J., Harrison, C., Lee, C. M. B., & Wiliam, D. (2002). *Working inside the black box: Assessment for learning in the classroom*. London, UK: NferNelson.
- Bryman, A., & Bell, E. (2007). *Business research method*. New York: Oxford University Press.
- Creswell, J. W. (2003). *Research design, qualitative, quantitative, and method, approached*. California: Sage Publication, Inc.
- De Vaus, D. A. (2001). *Research design in social research*. Sage publication. London: Thousand Oaks.
- Gefen, D., & Straub, D. (2000a). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the Association for Information Systems*, 1(8), 1–28.
- Gefen, D., Straub, D., & Boudreau, M. (2000b). Structural equation modeling techniques and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 7(7), 1–78.
- Gerrard, P., & Cunningham, J. B. (2003). The diffusion of internet banking among Singapore consumers. *International Journal of Bank Marketing*, 21(1), 16–28.
- Ghozali, I. (2011). *Aplikasi analisis multivariat dengan program IBM SPSS 19* (5th Ed.). Semarang: Universitas Dipenogoro.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th Ed.). Uppersaddle River, N. J.: Pearson Prentice Hall.
- Hanafizadeh, P., Keating, B. W., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption. *Telematics and Informatics* 31, 492–510.
- Ibrahim, K., & Mustafa, G. (2013). Website design and usage behaviour: An application of the UTAUT model for internet banking in UK. *International Journal of Marketing Studies*, 6(1), 75-89.

- Khalfan, A. M. S., AlRefaei, Y. S., & Al-Hajery, M. (2006). Factors influencing the adoption of Internet banking in Oman: a descriptive case study analysis. *International Journal of Financial Services Management*, 1(2-3), 155-172.
- Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380.
- Lassar, W. M., Manolis, C., & Lassar, S. S. (2005). The relationship between consumer innovativeness, personal characteristics, and online banking adoption. *International Journal of Bank Marketing*, 23(5), 414–437.
- Lee, G., & Lin, H. (2005). Customer perception of e-service quality in online shopping. *International Journal of Retail and Distribution Management*, 33(2), 161–176.
- 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(2), 50-66.
- Makris, M., Koumaras, V., Koumaras, H., Konstantopoulou, A., Konidis, S., & Kostakis, S. (2009). Quantifying factors influencing the adoption of Internet banking services in Greece. *International Journal E-Adoption I*(1), 20–32.
- Meuter, M. L., Bitner, M. J., Ostrom, A. L., & Brown, S. W. (2005). Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies. *Journal of Marketing*, 69, 61–83.
- Moon, J. W., & Kim, Y. G. (2000). Extending the TAM for a world-wide-web context. *Information & Management*, 38, 217–230.
- Nasri, W., & Charfeddine, L. (2012). An exploration of facebook. com adoption in Tunisia using technology acceptance model and theory of reasoned action. *Interdisciplinary Journal of Contemporary Reserch in Business*, 4(5), 948–969.
- Nysveen, H., & Pedersen, P. (2004). An exploratory study of customers' perception of company web sites offering various interactive applications: Moderating effects of customers' internet experience. *Decision Support Systems*, 37(1), 137–150.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134.
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). Consumer acceptance of online banking: An extension of the technology acceptance model. *Internet Research*, 14(3), 224–235.
- Riquelme, H. E., & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing*, 28(5), 328–341.
- Rouibah, K., Hamdy H. I., & Al-Enezi M. Z. (2009). Effect of management support, training, and user involvement on system usage and satisfaction in Kuwait. *Industrial Management & Data System*, 103(9), 338–356.
- Sedana, I. G. N., & Wijaya, St. W. (2010). UTAUT model for understanding learning management system. *Internetworking Indonesia Journal*, 2(2), 27–32.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (2nd Ed.). New York: John Wiley and Sons.

- Tan, M., & Teo, T. S. H. (2000). Factors influencing the adoption of internet banking. *Journal of the Association for Information Systems*, 1(5), 1-42.
- TGartner. (2003). TGartner Technology Demand Index Shows IT Spending Remained Soft in October, Although Expected Increases Point to Optimism for 2004. Retrieved April 13, 2015, from <http://www.businesswire.com/news/home/20031114005252/en/Gartner-Technology-Demand-Index-Shows-Spending-Remained>
- Van Deursen, A. J. A. M., & Van Dijk, J. A. G. M. (2010). Internet skills and the digital divide. *New Media & Society*, 13(6), 893-911.
- Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: *Development and test. Decision Sciences*, 27(3), 451-481.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Wan, W. W. N., Luk, C., & Chow, C. W. C. (2005). Customers' adoption of banking channels in Hong Kong. *International Journal of Bank Marketing*, 23(3), 255-272. Retrieved from <http://dx.doi.org/10.1108/02652320510591711>