

# Users' Perception towards the Adoption of Net Banking Web Face Platform in Malaysian

**Ashiquzzaman Md Ashiq**

School of Business Administration, Newport University CED, Latvia,  
In affiliation with National Research, Tomsk State university-1878, Russia

**Abdullah Sarwar\***

Department of Marketing, Faculty of Management,  
Multimedia University, Cyberjaya, Malaysia

**Waliur Md Rahman**

Faculty of Science, Technology, Engineering and Mathematics  
International University of Malaya-Wales, Malaysia

## **Abstract**

To make the banking services more convenient for their customers, banks require introducing various competitive services such as easier accessibility to e-payment. However, popularity of net banking in Malaysia is relatively low due to technophobia and negative attitudes of customers towards innovative products. Therefore, this study aimed at exploring the factors affecting the net banking adoption among Malaysian banking customers. The result shows significant influence of net banking on the perception of the Malaysian customers. However, net banking uses among Malaysian customers are being affected due to the consequences of trust factors phenomena that could be viewed as a negative sign towards the adoption of net banking.

*Key Words:* Behaviour, Net Banking, Perceived ease of use, perceived usefulness, Internet banking.

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\* Corresponding Author, Email: [sunabdullah@gmail.com](mailto:sunabdullah@gmail.com), Ph: +603-83125867, Fax: +603-83185590

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## Abstract

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## 1. Introduction

The recognition for effective use of internet banking to promote innovation and sustainable economic growth has increased in recent years (Lim & Ridzuan, 2014). Malaysia's effort to deliver the best banking service through net banking intervention and evaluation focuses on the contribution of enterprise innovation strategy (Yu, Balaji & Khong, 2015). To make the banking services more convenient for their customers, banks require to introduce various competitive services such as easier accessibility to e-payment (Hassan, 2013). According to Jalil, Talukder and Rahman (2014), currently, there are total 17 million customers have already subscribed for online banking services out of whom only 7.5 million are active users.

In Malaysia, most banks also provide various competitive services (e.g. instant funds transfer) through internet banking. However, popularity of internet banking in Malaysia is relatively low (Jalil et al., 2014). The reason is technophobia and negative attitudes of customers towards innovative products (Taasim & Yusoff, 2015). Besides, when the new innovation is available, Malaysian customers are conservative to take up the new innovation and adoption (Ndubisi, 2009). Interestingly, most banks have already adopted advanced information technology (IT) in Malaysia. It is a successful industry with first-class edification facilities and broad investment opportunities underpinned by government incentives and technology transfer initiatives which in turn were facilitated by increases international trade and commerce (Lim & Ridzuan, 2014).

However, researches on the determinants of net banking adoption among Malaysian bank customer are very limited till date. Therefore, it is very essential to study the factors that affect net banking adoption among Malaysian banking customers. Hence, this study aimed at exploring the factors affecting the net banking adoption among Malaysian banking customers.

## 2. Literature Review

Adoption of net banking makes customers' life easier. Therefore, it is of vital importance to see how net banking customers are taking ideas and knowledge from net banking service points. This phenomenon can be described from the technology acceptance standpoint. According to Davis, Bagozzi and Warshaw (1989), the "Technology Acceptance Model (TAM)" is one of the

most sophisticated structures used in computer-based applications and solutions. This model was basically tailored from Fishbein and Ajzen (1975)'s "Theory of Planned Behavior (TPB)". From that theory, it actually seemed an endowed method to triumph over the difficulty of underutilized systems. It also explains the relationship among factors which are more influential that affects user technology acceptance (Venkatesh & Davis, 2000a). TAM appears to be simpler than other related models which conjoin with broad and complex theories. Venkatesh and Davis (2000b) further explained that TAM is very useful, reasonable and robust model that explains how technology influences future adaptation by different users (Ahmad, 2011). Thus, this model provides a basis for relationships among variables, attitudes and the intention to use (Davis, 1989; Hassan & Fatemeh, 2011). In addition, the behavioural constructs depend on perceptions. Perceived usefulness (PU) was defined as the degree of usefulness and important to use of particular system. Past researches have been demonstrated that perceived usefulness play a vital role to adopt a new technology as well as web technology (e.g. Net Banking) (Lakhi, 2012). Nevertheless, these factors are predictors of manner and attitude towards the use of technology (Michael et al., 2015). Hence, TAM model can guide and improve the understanding of the phenomena under study.

Ong et. al. (2014) noted that the online banking activities especially the online inter fund transfer activities in Malaysia is very low. The rationale behind this is the lack of adequate security/trust infrastructure, technical know-how and information processing about the economy and the environment, poorly designed web face platform and websites which may not be functional always, and fraudulent tendencies (Nor & Michael, 2007, 2008). MCMC (2014) disclosed that for this problem of net banking fraud and phishing had allowed financial institutions to create, process, and disseminate information swiftly and shamefully (Al-Ajam & Nor, 2015; Ivo & Saskia, 2011; White & Nteli, 2004). A research by Murillo, Llobet and Fuentes (2010) found that the internet banking fraud and phishing receipt among the U.S. users is part of the bank's responsibility and alternative to opening new outlets. Issues related to user behaviour to use the e-money are still being debated by various researchers for fraud and phishing (Teo, Lim & Yu, 2015; Widjana & Basuki, 2011).

In the past, though net banking adoption has been studied to understand customer behaviour; yet this provides a great opportunity for future research to fill the theoretical knowledge gap that exists towards modern technology acceptance (Angenu, Quansah & Okoe, 2015). This study attempts to identify with various factors that restrain users to adopt and use Internet banking as an assign financial service. Methodically, research on the adoption of internet banking is important as no proven model yet proposed that addressed the importance of trustable service and egocentric customers' satisfaction towards adoption of internet banking. This study aimed to carry out an in-depth investigation on net banking in Malaysia to determine the impact of adoption of net banking on the performance of Malaysian banks. Therefore, this study forms the following hypotheses for further testing:

- H1: There is a relationship between perceived ease of use and adoption of net banking web face platform in Malaysia.
- H2: There is a relationship between usefulness and adoption of net banking web face platform in Malaysia.
- H3: There is a relationship between perceived trust and adoption of net banking web face platform in Malaysia.

### 3. Methodology

This study used survey questionnaire for data collection. Total 400 questionnaires were randomly distributed out of which 382 were returned. After the initial screening, total 362 were found useable for further analysis. To measure the reliability, internal consistency test was carried out using Cronbach's alpha method. According to Hair et al. (2014), a minimum value of 0.70 indicates good reliability. Hence, Cronbach's Alpha was considered to estimate the reliability of measurement tool consisted of factors considered for this study. Besides, both EFA and CFA was conducted and found statistically significant that ranges between 0.631 and 0.842 with an average Alpha value of 0.829. This indicates for farther analysis. The survey was based on the understanding of the theoretical framework of this study that discusses Malaysian online banking customers. Given the assumptions of net banking and the formed hypotheses are tested.

### 4. Results and Discussion

The output from the exploratory factor analysis (EFA) is presented in Table 1 below. The underlying structure was analyzed using principal component analysis followed by varimax rotation that extracted total 16 items. Total four factors were extracted including three dependent variables namely perceived ease of use (PEOU), perceived usefulness (PU), perceived trust (PT) and one dependent variable which is adoption of internet banking web face platform (AWP). The table also indicates that 67% of the total variance was explained by these four factors.

Table 1  
Factor Loading Matrices

Item	F1	F2	F3	F4
<b>Perceived Ease of Use (PEOU)</b>				
Doing what via online banking is easy	.84			
I think learning to use online banking is easy	.69			
I think becoming skilful at using online banking.	.82			
I thing using online banking is easy.	.70			
<b>Perceived Usefulness (PU)</b>				
Easy to conduct my financial Activities by IB		.64		
Using IB improve my performance.		.63		
Using IB enhance my effectiveness		.78		
I find out IB usefulness		.76		
<b>Perceived Trust (PT)</b>				
I Trust IB			.70	
Using IB, my transition is strongly secured			.67	
Using IB is trustworthy			.72	
Using IB has a chance of fraud.			.72	
<b>Adoption of IB Web Face Platform (AWP)</b>				
I find IB website is secure				.67
I Trust IB website platform				.72
I believe IB website In Malaysia				.68
Using IB is trustable and secure web face platform				.71

Further analysis was carried out using AMOS software. Confirmatory factor analysis (CFA) and the measurement modelling were performed in order to verify the reliability, validity and unidimensionality before conducting the final modelling through Structural equation modelling (Neuman, 2007). All the measurement items were taken from the existing literature, thus ensures content validity of the tool being used. The CFI value achieved from CFA further ensures the convergent validity as this validate that measuring a same construct in different scenario produces the same results (Ahire et al., 1996). According to the rule of thumb, CFI and GFI value  $\geq 0.90$  indicates an adequate model fit (Bentler, 1995). Besides, the Normed Chi-Square value should range between 3 to 5 and RMSEA should be  $\leq 0.08$  (Hair et al., 2010). In both cases, the value falls within the accepted range indicating good model fit. All the obtained values are greater than 0.90, hence confirms convergent validity.

#### 4.1 Hypotheses Testing

The Structural equation modelling (SEM) was employed to examine the association between the variables used in this study. Goodness-of-fit indices found for this study model were Normed Chi-square = 2.584, GFI = 0.937, AGFI = 0.969, CFI = 0.958, RMSEA = 0.065 (see Figure 1). The model shows the different paths that were hypothesized. The availability of three independent variables were noticeably affected the dependent variable. All the paths were significant at  $p \leq 0.05$  level. Result shows significant influence of net banking on the perception of the Malaysian customers.

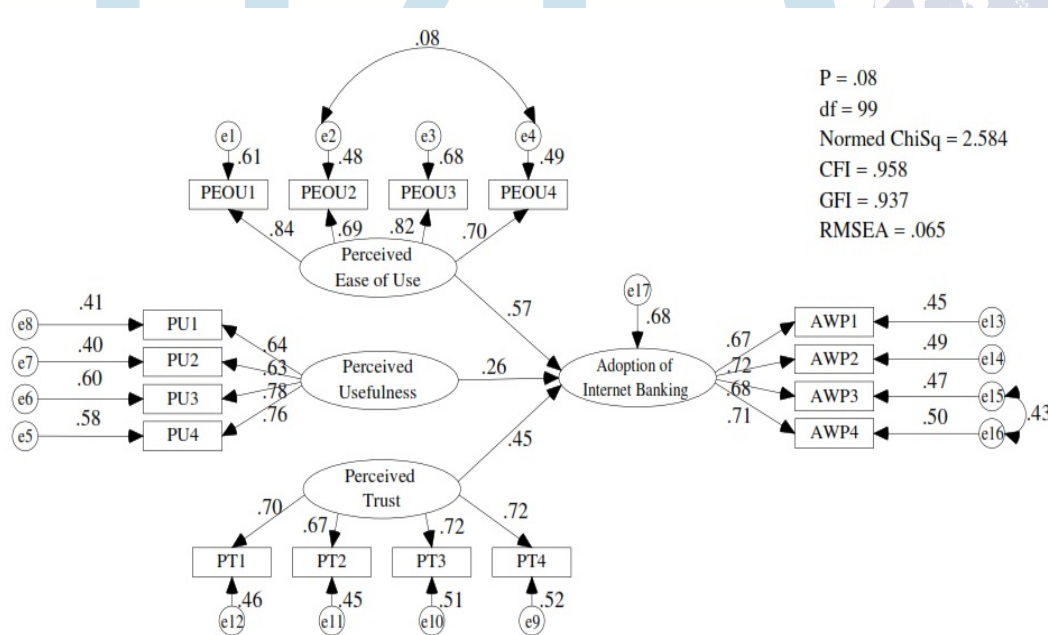


Figure 1: Testing Theoretical Framework

The result confirms that perceived ease of use has a strong positive influence on customer's perception towards adoption of net banking web face platform in Malaysia with the highest path value of 0.57. Hence, this hypothesis (H1) has proven to be statistically significant and thus, accepted at  $p \leq 0.05$ . The finding supports the strong association among perceived ease of use and adoption of net banking in Malaysia. The result also confirms the

positive association between perceived usefulness and Malaysian customer's perception on the adoption of net banking web face platform (path value of 0.26). Hence, H2 is also accepted at  $p \leq 0.05$ . This also confirms that there is a significant positive effect of perceived usefulness on adoption of net banking in Malaysia. Finally, the last hypothesis formed in this study also proven to be statistically significant and thus, accepted at  $p \leq 0.05$ . This finding also confirms the positive association between perceived trust and the adoption of net banking with the path value of 0.45. Therefore, H3 is also accepted.

## 5. Conclusion

Net banking uses among Malaysian customers are being affected due to the consequences of trust factors phenomena that could be viewed as a negative sign towards the adoption of net banking. Besides, there might be other factors that influence the perception of customers towards net banking such as "Trust", Social behaviour to understanding and being aware of why, how, where, and when Malaysian's customer are willing adoption of net banking web face platform. In this paper, the authors felt that the identified reasons should be take care of that might help to create awareness and interest towards adopting internet banking in Malaysia. Internet based economical service and technology innovation has no ending. It is a continuous process of innovation towards serving the customers with the best possible way.

The new era has entered to the mobile banking, Smart-phone Apps banking and several digital based banking. Hence, adoption of net banking is the most necessary thing now a day for customers that always offers an economical enjoyment to Malaysia's Bank customer as well as Malaysian's Bankers that must understand the challenge towards different banking procedures. This would be a fundamental step in motivating Malaysian customers towards net banking service. Net banking is more efficient and cost-effective access to the Malaysian government, which makes net banking and other technology-based banking applications much popular among the users. Malaysian government centre bank (BNM) has take an initiative to promote the use of electronic payment, banking and financial institutions all over the country to run an important step towards exploit launching of net banking among Malaysia.

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