



FACTORS AFFECTING THE CONSUMER ACCEPTANCE TOWARDS FINTECH PRODUCTS AND SERVICES IN MALAYSIA



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ABSTRACT

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The study objective is to investigate the factors affecting the consumer awareness and acceptance towards FinTech products and services in Malaysia. In this study, first, it is to identify the factors that affect the consumer awareness and acceptance towards FinTech products and services in Malaysia. Second, it is to develop a conceptual framework which included the independent variables such as usefulness, ease of use, relative advantage, perceived risk, perceived cost, and mediating effect of awareness of consumers with the dependent variable of the consumer acceptance towards FinTech products and services. The expected output of this study could help FinTech companies to make the right decisions in promoting their products and services in the country. The findings of this study would be benefiting them to develop more personalized products and services for the Malaysian consumers.

1. INTRODUCTION

Financial technology (FinTech) is a combination of an innovative business model and technology solutions in facilitating the daily financial services. FinTech has brought tremendous development in the digital economy, especially in China, India and United Kingdom. The common products for FinTech include e-wallet, crypto-currency, Peer-to-Peer (P2P) lending, crowd funding, and InsureTech have become the major financial alternatives for consumers and businesses. Although FinTech is still in the infant stage in Malaysia's market, the costs and benefits of Fintech for the consumers and businesses are still remained unexplored by many research studies to date. The studies that related to the overall awareness and acceptance of FinTech products on the consumers in the Malaysia context are essentially unknown and insufficient. Hence, there is an important urgency to investigate the acceptance and awareness of Malaysian consumers toward FinTech products and services since that this form of technology could benefit the advancement of individual financing demands and business organization. Thus, the study objective is to develop the conceptual factors that can affect the awareness and acceptance towards FinTech products and services among Malaysian consumers. The findings will be valuable to researchers, FinTech consumers and companies in understanding and promote the usage of FinTech products and services. It is expected that the result of this study would represent a significant research discovery with great contribution to the Malaysian digital economy.

2. LITERATURE REVIEW

In Figure 1, Davis (1989) developed the Technology Acceptance Model (TAM) (Davis, 1989). (TAM) has been widely used in many different fields such as agriculture, sociology, education, marketing, and information technology (Karahanna *et al.*, 1999; Agarwal *et al.*, 2000; Park, 2009). From the primary development (Davis, 1989) TAM has partially devoted to understanding the users' acceptance of information systems or technology (Taylor and Todd, 1995; Venkatesh and Davis, 2000; Venkatesh *et al.*, 2003). TAM is a highly predictive model in information system and technology adoption (Venkatesh and Bala, 2008). Hence, this theoretical model is well-designed for the particular characteristics of FinTech which able to understand and predict the adoption of a new system or innovation. For instances, the theoretical and empirical support of TAM is stronger than the theory of Planned Behaviour (TPB) (Ajzen, 1991). This is due to TAM is a simple and easy implication model and can offer very common information to technology users.

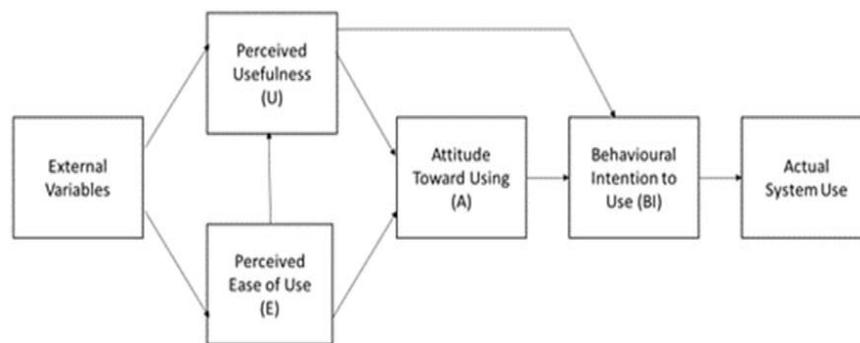


Figure-1. Technology Acceptance Model (Davis, 1989)

In Figure 1, the users' adoption of information technology is determined by perceived usefulness and perceived ease of use in TAM (Davis, 1989). The perceived usefulness is the level of a person trusts that using a specific system will enhance the job performance. In Figure 1, the perceived ease of use is the level of a person trusts that the system adoption would be free of effort (Davis, 1989). TAM highlighted that the perceived usefulness affects the user's behavioural intention directly while perceived ease of use affects the behavioural intention indirectly through perceived usefulness. A longitudinal research of 107 users to determine their intention to use a system (Davis *et al.*, 1989). It concluded that ease of use is obviously of importance while usefulness is even more important. Hence, the resultant model from their study is known as primary TAM (Davis, 1989).

A quantitative research to study the factors that affect the intention of consumers toward using mobile banking services in Malaysia (Krishanan *et al.*, 2016). In Figure 2, they proposed an extended TAM and then added 4 new determinants which are the relative advantage, perceived risk, perceived cost and perceived interactivity for determining the consumers' attitude and intention to use mobile banking. In Figure 2, the relative advantage is the level to which an innovation is found out better instead of the practice being used before. The relationship between relative advantage and adoption is well constructed (Tornatzky and Klein, 1982; Rogers, 2002). Based on Figure 2, perceived risk is the consumer's perceptions of the uncertainty and adverse consequences of purchasing a product. Perceived risk is an adoption decision when circumstances cause the feelings of uncertainty and anxiety (Dowling and Staelin, 1994).

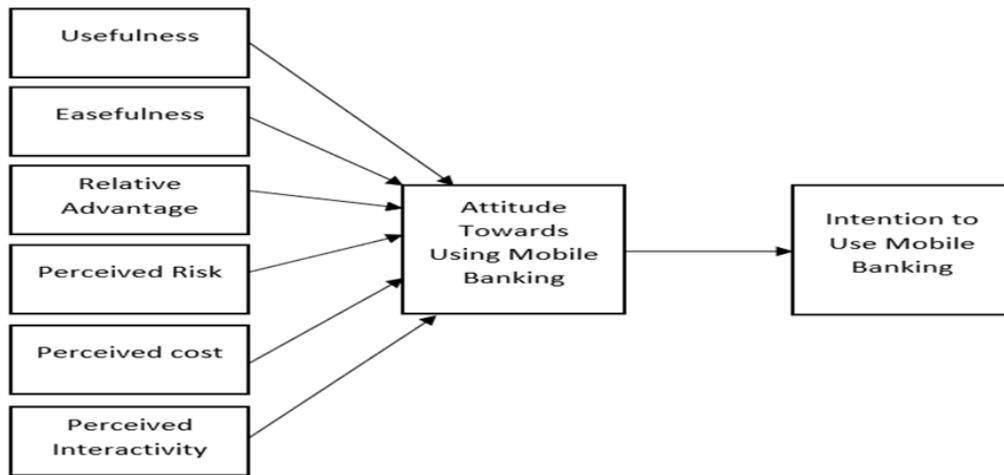


Figure-2. The Extended Technology Acceptance Model

In Figure 2, the perceived cost has significantly and negatively influenced on the attitude (Kuo and Yen, 2009). The perceived interactivity had an important impact on the attitude (Wu, 1999). Based on Figure 2, the attitude of adopting mobile banking was the directly mediating effect on the intention to use mobile banking as the dependent variable. The findings revealed that usefulness, perceived cost, perceived interactivity, perceived risk, relative advantage and easefulness have significantly influenced the consumer intention and attitude towards using the mobile banking.

3. RESEARCH METHODOLOGY

In this study, first, it is to identify the factors that affect the consumer awareness and acceptance towards FinTech products and services in Malaysia. Second, it is to develop a conceptual framework which included the independent variables such as usefulness, ease of use, relative advantage, perceived risk, perceived cost, and mediating effect of awareness of consumers with the dependent variable of the consumer acceptance towards FinTech products and services. Based on previous studies, several rigorous findings revealed that adoption of Fintech services can be investigated in TAM perspective (Folkinshteyn and Lennon, 2016; Wilson and Mbamba, 2017).

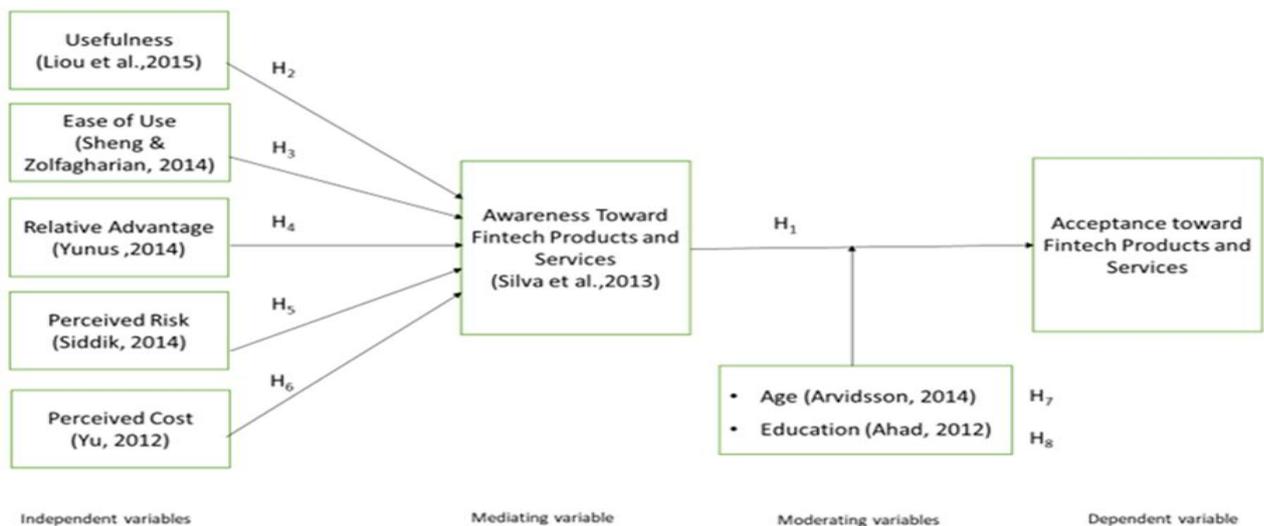


Figure-3. Awareness and Acceptance towards FinTech Products and Services

Usefulness of FinTech product and services is being mentioned in Figure 3. Perceived usefulness is essential to allow the potential users to trust the new technology can be adopted easily. Perceived usefulness of consumer can

significantly influence the consumer attitude towards mobile banking adoption (Crabbe *et al.*, 2009; Masinge, 2010). Perceived usefulness has a significant influence on the consumer trust in a mobile wallet payment service (Chang *et al.*, 2018). Hence, hypothesis 1 is developed:

H₁: There is a positive relationship between usefulness and awareness towards FinTech products and services.

Ease of use of FinTech product and services is being proposed in Figure 3. The perceived ease of use had a greater influence on the attitude of consumers towards adopting the mobile banking services (Hosseini *et al.*, 2015). Perceived ease of use has a significant effect on the consumers' intention towards adopting mobile payment services (Mun *et al.*, 2017). Then, hypothesis 2 is formed:

H₂: There is a positive relationship between easefulness and awareness towards FinTech products and services.

According to Figure 3, the relative advantage is being used to determine the consumer awareness and acceptance of FinTech product and services. The relative advantage is the innovation level that is found out instead of the ideas being used before (Rogers Everett, 2003). Some previous studies stated that relative advantage had a significant effect on the intention of mobile banking adoption (Cruz *et al.*, 2010; Chen, 2013). Relative advantage has significantly affected the intention to adopt the NFC-enabled mobile payment (Ruangkanjanases and Sirikulprasert, 2018). Thus, hypothesis 3 is formed:

H₃: There is a positive relationship between relative advantage and awareness towards FinTech products and services.

Perceived risk of FinTech product and services is being proposed in Figure 3. Perceived risk is the overall of risk perceived by the consumer in meditating a certain purchase decision. Risk has a significant influence on the consumer intention to adopt mobile banking (Wessels and Drennan, 2010; Chen, 2013; Alsheikh and Bojei, 2014; Islam and Hossain, 2014). The risk has significantly influenced the Fintech adoption intention (Ryu, 2018). Consumer intention of mobile money transfer's service was significantly affected by perceived risk (Tobbin, 2010). Hence, the following hypothesis 4 is developed:

H₄: There is a negative relationship between perceived risk and awareness towards FinTech products and Services.

The perceived cost of FinTech product and services is being used to study the consumer awareness and acceptance. Perceived cost is a financial cost which beliefs needed to pay when an individual adopts the particular technology. The mobile commerce adoption was affected by the perceived cost of consumers (Gitau and Nzuki, 2014). The intention of mobile banking adoption was significantly affected by perceived cost (Cruz *et al.*, 2010; Koenig-Lewis *et al.*, 2010; Islam and Hossain, 2014). Based on the evidence above, hence hypothesis 5 is developed as follows:

H₅: There is a negative relationship between perceived cost and awareness towards FinTech products and services.

The mediating effect of awareness towards FinTech products and services is being proposed in Figure 3. Awareness is an attentiveness and capability level of an individual that depict trusts in a particular time, space or object (Islam and Grönlund, 2011). The awareness directly affected the intention of mobile advertising adoption (Khan and Allil, 2010). Lack of awareness reduces the consumer mobile shopping adoption (Megdadi and Nusair, 2011). Thus, hypothesis 6 is developed:

H₆: There is a positive relationship between the mediating effect of awareness and acceptance towards FinTech products and services. Demographic characteristic is being mentioned in Figure 3. Demographic characteristic has been applied in many studies which can enhance the explanatory power of user intention towards the latest technologies adoption. In many studies, age reflects the individual difference in information processing which can influence their dependence on a habit that instructs behaviour. In Sweden, the age of consumer showed a significant influence on individual attitude towards mobile payment adoption (Arvidsson, 2014). The age has significantly and positively affected the user's intention in electronic banking technology adoption (Kolodinsky *et al.*, 2004). In the study, education can be used to categorize the consumers into a group. The education standard had a huge influence

on perceived ease of use by the teachers in the decision making of new technology adoption (Ataran and Nami, 2011). Based on this demographic characteristic, hence the hypothesis 7 & 8 is developed as follows:

H₇: There is a positive relationship between age and acceptance towards FinTech products and services.

H₈: There is a positive relationship between education level and acceptance towards FinTech products and services.

Based on the constituted relationship by previous researchers, the conceptual framework of this study is developed and which included the variables of usefulness, perceived risk, relative advantage, easefulness, perceived cost, age, education, awareness and acceptance towards FinTech products and services as shown in Figure 3.

4. RESULTS AND DISCUSSION

The perceived usefulness significantly influenced on the consumers' intention to adopt the online product recommendation service (Sheng and Zolfagharian, 2014). Perceived ease of use was significantly affected the broadband television adoption (Liou *et al.*, 2015). Relative advantage had a significant impact towards the attitude and intention in mobile banking adoption (Yunus, 2014). The perceived risk has significantly affected the consumer's behaviour intention (Siddik *et al.*, 2014). The perceived cost has significantly influenced towards the behavioral intention to use the mobile payment (Mbogo, 2010). The age significantly impacted on individual toward the mobile payment adoption (Arvidsson, 2014). FinTech is completely new and currently, there are many of unfamiliar consumers in Malaysia. Based on studies of FinTech adoption in the Malaysian context, they have neglected the mediating and moderating effects on the awareness of FinTech services adoption. This research fulfils the previous research gaps and enhances the knowledge about awareness and acceptance towards FinTech products and services. The main objective of this research is to develop the conceptual factors that affecting the awareness and acceptance towards FinTech products and services among Malaysian consumers. The contribution of this study is to develop an extended version of TAM which investigates the factors affecting the consumer awareness and acceptance towards FinTech products and services in Malaysia context. This extended version of TAM is developed in order to provide a more complete prediction about the Fintech awareness and acceptance by Malaysian consumers.

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