

Preliminary Study on Consumer Attitude towards FinTech Products and Services in Malaysia

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Abstract

“FinTech” or a compound term of Financial Technology refers as a newly emerged industry that utilizes IT-centered technologies which aims to boost the efficiency of the financial ecosystem. Since its inception, FinTech has successfully established its presence in the global financial industry due to the benefits and advantages of the system. However, the research studies that highlight the importance of FinTech are scarce. Specifically, the study pertaining to the consumers’ attitude towards FinTech products and services in the context of Malaysia remains unexplored by most of the studies. This preliminary study proposed the extension of Technology Acceptance Model (TAM) to identify the potential factors that influence consumers’ intention to adopt FinTech products and services in Malaysia. This study reviewed the factors, namely the usefulness, ease of use, competitive advantage, perceived risk, and perceived cost that can potentially influence the attitude of customers towards the product and services of FinTech. This study also proposes the potential mediating effect of attitude towards using FinTech products and the intention to adopt FinTech. This study attempts to create new knowledge geared towards the behavior to utilize FinTech products in Malaysia.

Keywords: *FinTech; Consumers’ attitude; Technology Acceptance Model; Financial services; Technology*

1. Introduction

Financial Technology, or better known as “FinTech”, is an innovative financial service that emerged in tandem with the new technologies advancement. Mobile-based payment is the most typical service in China, Korea and the UK (Kim, Park, Choi, & Yeon, 2015). The history of FinTech can be traced as early as in 1950s where the usage and services from credit cards aimed to reduce burden in carrying cash. Financial technology has transformed the decades of automated teller machine (ATM) usage and services that aimed to reduce tellers and branches into online banking system in the 1990s. The financial technology has further digitized in the 21st century via the mobile wallet, payment apps, robo-advisors for wealth and financial planning, crowdfunding platforms for alternative financing opportunities. This scenario can be supported by the increasing number of potential users of FinTech products in Malaysia as illustrated in *Figure 1*.

Since its inception, FinTech has greatly influenced the global financial market and the way consumers perform their financial transactions. As Information and Communications Technology (ICT) companies can develop simple and easy financial services, hence non-financial companies have started to enter the financial market; becoming a threat for traditional financial services. In Malaysia, many ICT companies have started to emerge in the industry. The top 10 FinTech companies in Malaysia are MyCash online, GHL, Crowdo, Ethis Kapital, Soft Space, MoneyMatch, Manage Pay Systems Berhad (MPay), iMoney, Neuroware, and Trangolo (Singapore, 2017, Jan 13). There are many challenges for

FinTech companies in Malaysia as the central bank of Malaysia has instigated the Financial Technology Sandbox Framework (FTSF) which requires the FinTech companies to fulfill a set of criteria in order to ensure all the products and services offered are in line with the laws and regulations.

As FinTech is a new phenomenon in the local financial ecosystem, to what extent that FinTech is beneficial to Malaysian and SMEs remains unexplored. To date, there are extremely scarcity of studies and research being performed on the Malaysian FinTech industry. To the best knowledge of researchers, local business practitioners (new entrants, start-ups, investors and potential venture capitalists) and policy makers, the studies that are related to the overall acceptance of FinTech’s products and services by the consumers and SMEs in Malaysia are virtually unknown and limited. Moreover, there is also lack of studies for the FinTech industry on consumer’s attitude in Malaysia. Hence, this study aims to investigate the acceptance level towards FinTech’s products and services in Malaysia using the Technology Acceptance Model or better known with its abbreviation, TAM. There is a significant urgency to investigate the acceptance, expectation and readiness of Malaysian consumers towards FinTech’s products and services which is perceived to be benefiting individual financing needs and business community, thus spurring the growth of the digital economy as a whole.

In addition to above, Davis, Bagozzi and Warshaw (1989) in their study argued that the TAM explains the acceptance of consumers toward new technology. Hence, TAM will be adopted as the significant theory in exploring the factors affecting consumers’ atti-

tude and intention in adopting FinTech products in Malaysia. Since FinTech is still a new technological paradigm in Malaysia, the primary objectives of this study are to (1) review the existing literature pertaining to FinTech and (2) highlight and address consumers' attitude towards FinTech products in Malaysia.

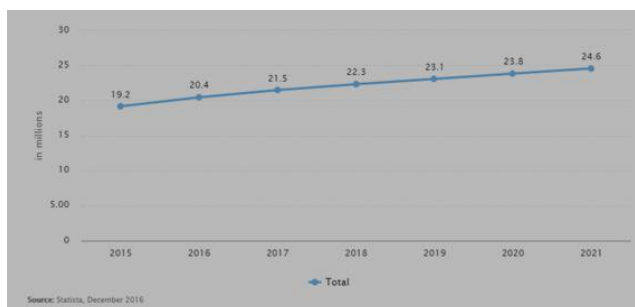


Fig 1: Potential users of FinTech's product and services in Malaysia (Statista.com, 2017)

2. Literature Review

2.1 Technology Acceptance Model (TAM)

Davis et al. (1989) proposed the Technology Acceptance Model (TAM) to explain the effects of variables on consumer behaviors and intentions (Davis et al., 1989). Since its inception, TAM has been widely cited in the research context in various settings (Muk & Chung, 2015; Tarhini, Hassouna, Abbasi, & Orozco, 2015). The model explains that perceived ease of use, perceived usefulness and attitude will affect the users' intentions to use as illustrated in Figure 2. According to this model, perceived ease of use explains the level where a user thinks that very less effort is needed to use a particular system or technology. Moreover, perceived usefulness explains the level where a user thinks that the particular system will have a direct influence on his/her performance. It was argued that the attitudes of the users are directly influenced by both perceived ease of use and perceived usefulness, which in turn influence users' intention to use and to adopt the system. Since TAM has been regularly used to understand the acceptance level of users towards a particular system, hence, this theory was adopted for this study.

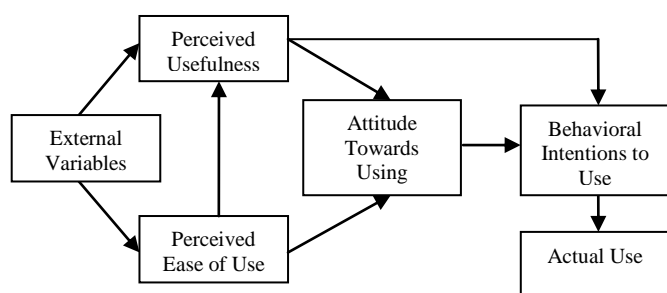


Fig 2: Technology Acceptance Model (TAM)

2.2 Conceptual framework

Since FinTech is a subset of technological products, this research has been designed based on the TAM foundation. This study will

assess the factors (e.g. perceived ease of use, competitive advantage, perceived usefulness, perceived risk, and perceived cost) that influence users' attitude towards FinTech products and services which in turn will influence their intention to adopt it.

Perceived Ease of Use and Perceived Usefulness. Perceived ease of use is defined as the level where a user thinks that less effort is required to use a system or technology (Davis et al., 1989). Perceived usefulness in this study can be explained by the level where a user thinks that the particular system will have a direct influence on his/her performance (Venkatesh & Davis, 2000). The past studies that examined the ease of use and perceived usefulness of a system have found positive impact on consumer's attitude towards the respective system (Al-Fahim, 2016; Chuang, Liu, & Kao, 2016; Lee, 2016; Lim & Cham, 2015; Venkatesh & Davis, 2000). This scenario may indicate that when an individual found FinTech's products and services are useful and user-friendly, it will then enhance their attitude toward the technology. A research study conducted by Chuang et al. (2016) in Taiwan found that perceived ease of use as well as perceived usefulness were closely associated with the consumers attitude towards the use of FinTech products.

This was resulted from the benefits of FinTech, namely usefulness, user-friendliness, time saving and convenience. Moreover, as evidenced by Al-Fahim (2016) based on his study on the banking industry in Yemen, the ease of use and the usefulness of a banking system positively influenced users' attitude and intention to use internet banking. Summarizing all these arguments as stated above, this research hypothesized that:

H1: Perceived ease of use has a significant positive effect on users' attitude towards FinTech's products and services.

H2: Perceived usefulness has a significant positive effect on users' attitude towards FinTech's products and services.

Competitive Advantage. Competitive advantage in this study is defined as the level to which an innovation possessed by system is more superior than the users' expectation and their idea (Krishanan, Khin, & Low, 2015). Competitive advantage is an important determinant of technology adoption (Lu, Yang, Chau, & Cao, 2011). In the previous studies, competitive advantage showed a positive relationship toward intention to use a product (Shih & Fang, 2004; Tan & Teo, 2000). Moreover, Shih and Fang (2004) found that competitive advantage has a positive impact towards users' attitude to internet banking in Taiwan. Similarly, Lu et al. (2011) argued that competitive advantage was closely related to users' attitude towards mobile payment services. The evidence above clearly shows that the competitive advantage of the technology has a significant impact on users' attitude towards the system. However, to what extent competitive advantage has an impact on consumers' attitude towards FinTech remains uncertain. Thus, the following hypothesis was developed:

H3: Competitive advantage of the system has a significant positive effect on users' attitude towards FinTech's products and services.

Perceived Risk. Perceived risk is defined as the uncertainty that will be experienced by an individual in their decision making (Cox & Rich, 1964). In the era of information technology, perceived risk can be explained as a security risk or privacy risk in which personal information can be easily obtained without the consent of the owners (Amaro & Duarte, 2015; Cham, Lim, Cheng, & Lee, 2016; Cox & Rich, 1964; Yiu, Grant, & Edgar, 2007). According to Lee (2009), the perceived risk has significant negative effect on an individual's attitude towards the use of certain technological products or services. Specifically, the higher the perceived risk, the less favorable the attitude towards the particular technological product. Lee (2009) also found that security risk has a significant impact on users' attitude and is an important factor toward adoption of technology products (Lee, 2009). As for Internet banking, Martins, Oliveira and Popović (2014) reported that perceived risk has a great impact on consumer's attitude towards the payment system which in turn influences their intention to use the facility. Based on the supporting evidence above, it is ascertained that perceived risk will determine the attitude of an individual towards FinTech's products and services. Hence, this research hypothesized that:

H4: Perceived risk has a significant negative effect on users' attitude towards FinTech's products and services.

Perceived Cost. Perceived cost in this study is defined as the level to which an individual thinks there will be a cost incurred for using a system (Kleijnen, Wetzels, & De Ruyter, 2004). Kleijnen et al. (2004) argued that cost has a negative impact on an individual's attitude to use a system. Moreover, Luarn and Lin (2005) in their study reported that perceived cost has a negative influence on the consumers' attitude as cost usually becomes a priority when it comes to product selection (Cham, Ng, Lim, & Cheng, 2018; Luarn & Lin, 2005). Similarly, Kuo and Yen (2009) in their study on the information technology setting found that perceived cost has a negative impact on the users' attitude towards mobile value-added services usage. Nevertheless, the study by Wu and Wang (2005) in the mobile commerce setting also found that cost is a factor that potentially affects users' attitude towards the system usage (Wu & Wang, 2005). However, to what extent the costs of using FinTech's products and services will influence users' attitude still remains uncertain. Thus, the following hypothesis is developed:

H5: Perceived cost has a significant negative effect on users' attitude towards FinTech's products and services

Linking Attitude and Intention to Use FinTech. The prior studies shows that attitude is positively related to the behavioral intention of individuals (Hsu & Lin, 2016; Venkatesh & Davis, 2000). This means that when a person has good experience in using FinTech products and services, it will increase his or her willingness to use it. This evidence has been supported by Chuang et al. (2016) as there is a positive relationship between users' attitude and their intentions to use FinTech's products in Taiwan. Similarly, Lee (2016) also found that the attitude of users have significant impact on users' intentions to use Mobile Enterprise Applications (MEA). Moreover, Lee (2009) elucidated that attitude is positively influenced a consumer's intention to use online banking. Hence, the evidence above established that attitude and intention to use

were closely associated. With that, the following hypothesis is developed:

H6: Users' attitude has a significant positive effect on the intention to adopt FinTech's products and services.

Based on the discussion above, the research model developed for this study is presented as follows:

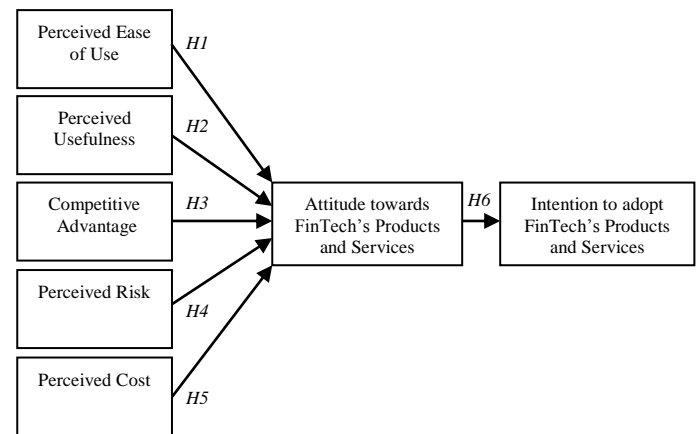


Fig.3 Research Framework

3. Methodology

This research is a multidisciplinary study that involves the finance and business sectors and is directly linked to the software technologies, Internet-of-things (IoT) and Information and Communication Technology (ICT) industry. Hence, empirical research methods will be employed to achieve the objectives of gauging the acceptance, awareness and attitude of Malaysian users toward FinTech.

In the context of measurement, all the constructs in this study will be adapted from the existing literature. The seven-point Likert scale will be used to check the mean score for each question whereby 1 denotes strong disagreement while 7 denotes strong agreement. A total of 500 questionnaires will be collected via purposive sampling from the selected Malaysians adults who have experience of using FinTech's products or services. According to Saunders, Lewis, and Thornhill (2012), the proposed sample size of 500 for the present study is considered sufficient to represent a large population. This research will also conduct a pilot study prior to the actual survey.

The data collected in this study will be analysed using two statistical software: (1) *Analysis of Moment Structures* (AMOS) and (2) *Statistical Package for Social Sciences* (SPSS). The statistical techniques that will be used for the purpose of this study include reliability analysis, validity analysis, path analysis and independent sample t-test.

4. Expected Results

The present research is expected to highlight the importance of the factors (e.g. perceived ease of use, competitive advantage, perceived usefulness, perceived risk, and perceived cost) that potentially influence consumers' attitude towards FinTech's products and services. Moreover, this study could be useful for future researchers and policy makers in the FinTech domain. As for managerial implications, this research will highlight the important areas that have to be considered and improved by the Government of Malaysia and FinTech businesses. For example, creation and improvement of the information technologies infrastructure should be enhanced in order to encourage more users to use FinTech products or services. Nevertheless, the initiative to promote the use of FinTech's products and services among consumers may also induce the making of relevant laws (e.g. security, privacy, etc.) by the policy makers. Theoretically, this study will be able to contribute to the existing body of knowledge by creating a knowledge base for FinTech research in the Malaysia context.

5. Conclusion

This preliminary study aims to create an understanding of consumer behavior towards FinTech products and services by adopting Technology Acceptance Model (TAM). To date, FinTech remains as a new phenomenon in the financial ecosystem which is worth to be explored by many researchers specifically when addressing the consumers' perception towards the FinTech products or services. With the development of financial services, advancement of information technologies, and evolution of financial sectors, FinTech has become a new opportunity in financial industry. This platform is expected to attract the interest of regulator body, servicing industry and products services to understand the consumer behavior in order to gain distinct competitive advantage. Despite of enhancing the comprehension of consumer behavior towards FinTech products and services, this study will serve as a valuable guide and provide insights to future researches to explore further on this avenue.

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