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Does Security Concern, Perceived Enjoyment and Government Support Affect Fintech Adoption? Focused on Bank Users

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ABSTRACT

Today, following the globalization of business and systems, together with advancement of technology, has revolutionized the way users access their finances. A new mean of banking services which use innovative information and automation technology or also known as fintech has been used widely. In line with this, there is a pressing need to understand the factors that affecting bank user's acceptance on fintech services. Using Technology Acceptance Model (TAM), this study conducted an analysis on three variables (security concerns, perceived enjoyment and government support) and age as a moderating variable that may influence the acceptance of fintech services. Using quantitative survey, 500 usable questionnaires were collected. The results indicate that security concerns and government support significantly influence the intention to adopt fintech while perceived enjoyment is not. Age did not moderate the relationship in all three variables. The research contributes to a review of fintech service adoption in Malaysia, with the aim of examining users' intentions to adopt fintech services.

Keywords: Intention to Adopt, Fintech Services, Bank User

INTRODUCTION

Fintech is formed for the combination of two words "finance and technology", which can be further defined as innovative financial products and services (Lee & Teo, 2015), advance software and hardware embedded in financial products and services (Lee, 2009) and technology-enabled financial solutions (Arner, Barberis & Buckley, 2015). Fintech has lifted the quality and widening the arrays of financial products and services offered by financial institutions. It uses technological tools that help users or consumers to manage their financial transactions more efficiently. Initially fintech tools was confined to only desktops and laptops, fintech services are now increasingly available on smartphones. In the literature, the term tends to be used to refer to products or services that were offered by financial service companies, developed on highly innovative and disruptive service technologies (Lee & Teo, 2015). Freedman (2000) refers fintech as a framework for modelling, valuing, and handling financial products like bonds, securities, contracts, and money, while Lee (2009), define fintech as a category of company that provides financial services using hardware and

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software technologies. Fintech is also known as technology- enabled financial solutions (Arner et al., 2015). In a nutshell, it refers to digitalized and technology-enabled financial products and services provided by financial institutions all over the world.

According to Accenture (2019), a multinational professional services company, stated that the global financial technology (fintech) investments have huge potential as led by the surged capital in China and tremendous growth in several other markets. From 2017 to 2018, global fintech investment has increased from $26.7 billion U.S. dollars to $55.3 billion U.S. dollars which more than doubled. In the same report, it stated that China as a part of Asia Pacific Accreditation Cooperation (APAC) had contributed more than 46 percent of all fintech investment in 2018. Furthermore, fintech has aid banks in open banking initiatives which create new opportunities for new start-up businesses and established fintech businesses.

Positive growth in Malaysian fintech has indirectly changed the outlook of the country's financial sector. According to International Centre for Education in Islamic Finance (2020), there are nearly 200 local and foreign companies operating in Malaysia as of September 2020, making it one of the fastest-growing fintech markets in Southeast Asia. Most the fintech activities focus on the wallets and payment space, where mobile and e-commerce have created real demand from underserved consumers and merchants. In order to strengthen its position as a major player in fintech industry, several initiatives were launched by Malaysia Digital Economy Corporation (MDEC) to stimulate, assist and accelerate innovation among fintech companies. Industrial collaborations have contributed to the advancement in technology productivity among the financial institutions. Consumers are benefitted as information can be transmitted at a more convenience pace between consumer and bank or financial institution with seamless communication. In return, this new technology applications create new opportunity for banks and financial institutions to enhance customer experience which makes service delivery faster and more cost effective

In accordance with all the fintech developments, the banking system has become more modern and digital, as opposed to the previous traditional back-end banking system. Financial institutions see these benefits and needs which able to lower the cost of intermediation services and broaden the financial inclusion. Besides, fintech has increase the competition among banks and financial institutions. A bank or financial institution with newer and advance technology of fintech services will possessed greater competitive advantage against traditional bank or other competitors that pursuing same market because it can fulfil the needs and demand from customer and able to increase positive user's experience and banking efficiency. In addition, the primary aim of introducing fintech in banking is to enhance the customer experience and increase banking performance (Hu, Ding, Li, Chen & Yang, 2019).

Innovations of fintech services had impacted people's daily life such as mobile payment and e-wallets, insurance, cryptocurrencies, and other personal finance applications which leads to effortless and scalable financial transactions. There were a lot of studies has been carried out throughout the years where the researchers focus on the specific fintech services (such as cryptocurrencies and e-wallet) and rarely conduct in-depth research on empirical extension in Technology Acceptance Model (TAM) framework in fintech from demand side (Hu et al., 2019). By conducting in-depth research (using TAM) among bank users on their intention to adopt fintech services, will enable to expand the applicability of traditional TAM Models. The results are expected to be able to provides valuable data and information for banks and

financial institutions to revamp their commercialization strategies and priorities in order to enhance service quality and performance.

Looking at fintech in Malaysian context, a report by Pricewaterhouse Coopers (2016) stated that most Malaysians are willing to apply fintech in their daily lives. However, almost 74 percent of them are rather reserve when come to perform actual transaction activities via technological devices. Reasons of the hesitations, among others are, unfamiliarity with technology and lacking in fintech knowledge thus making it difficult to instil confidence in adopting fintech services (Aziza, 2019). This is proven in a study by PwC's Total Retail survey (Southeast Asia Report) where only 56% of Malaysian reported buying online in year 2016-2018. For elderly bank users, other factors that deter them from adopting fintech services among others are the lack of self-confidence and the difficulty on understanding how the mechanism works which resulting in frustration and disappointment (Wang, Bolling, Mao, Reichstadt, Jeste, Kim, & Nebeker, 2019). Other adoption hindrances include financial (additional fees or loss of financial outcomes), regulation (legal uncertainty), security and privacy (security vulnerability of technologies) and operational concerns (inadequate processes or systems of fintech companies) (Ryu, 2018). A report by Mckinskey and Company (2020) stated that among all the hindrances, consumers security and privacy concerns are the biggest hindrance in adopting fintech services. This include cybercrime which if it is not controlled might lead to financial disruption in financial industry. Financial companies can be severely harmed by cybercrime, direct and indirectly (Tariq, 2018). The examples of the direct loss are money theft and breach of data; and indirect loss such as customer frustration and tarnish of public image. Panicked and confused bank users will withdraw and discontinue the services which will affect the operations and profitability of the bank. The chance of technology failure is another aspect that has influenced bank users' attitudes toward adoption. This massive shift from conventional to digital financial services necessitates a greater reliance on technology infrastructure and less personal contact. However, this can be overcome with proper interaction between bank users and financial institution in order to achieve positive outcomes such as satisfaction, positive attitude and involvement (Coyle & Thorson, 2001; Fortin & Dholakia, 2005; Stewart & Pavlou, 2002). Thus, with a proper action, this factor which hinders bank users in adopting fintech services can be avoided.

Besides all the above presented factors, further limits the progress of fintech are lack of talent. This is in line with study by Shoffman (2020), where inadequate number of talents in fintech is common especial in key tech area (such as data analytics and machine learning). This scenario happened in both financial entities and fintech start-up companies. Moreover, the support from government such as government investment schemes (financial support) is questioned where the report showed that P2P lenders are excluded from the funding of bank. In consequences, this may lead to absence of confidence in bank user as they may see this as the unfairness by the government because of lack of support which eventually will lead to financial crisis (Makoni, 2020).

In line with all the hindrances and challenges mentioned above, this paper attempts to investigate the adoption intention of fintech services, focusing on bank users in Kuala Lumpur. Specifically, three factors: security concern (SC), perceived enjoyment (PE) and government support (GS) were examined in order to determine bank user's intention to adopt fintech services.

LITERATURE REVIEW

Technological Acceptance Model (TAM)

Technological Acceptance Model (TAM) developed by Davis (1989) was a modification of the Theory of Reasoned Action which incorporate the information systems domain and cognitive-base model. Two variables which affect behaviour (negative or positive outcome) namely perceived ease of use (PEOU) and perceived usefulness (PU) were added to measure the behaviour intention leading to usage determination, which is "the degree of a person's willingness to use the technology". However, there are factors that indirectly affect intention, for instance personal variables, system characteristics and environmental variables. The results show these two variables (PEOU and PU) deemed a robust determinant in predicting intention. In addition, TAM is proven for its ability to explain human behaviour. The model further analyses factors that shape behaviour towards the acceptance of specific systems. It goes beyond financial innovation where new financial instruments and technologies, institutions and market, consisted of institutional, product and process of innovation were created (Cheng et al., 2019; Hussain, 2015; Varga, 2017). It also works in a service sector where mobile-centred IT technology is adopted to enhance the productiveness of the financial practice (Kim, Choi, Park & Yeon, 2016). Within context of this study, TAM is used to predict fintech adoption among bank users.

Adoption Intention of Fintech

A considerable amount of literature in fintech services have proposed that attitude as an important predictor of behavioural intention (Venkatesh & Davis, 2000; Yeo, Goh & Rezaei, 2017). According to Chong et al. (2019), the adoption intention of fintech can be described as the readiness or willingness to use the financial technology services. Other studies emphasized than the fintech adoption intention is affected by few contextual factors such as social influence, risk and trust (Kim, Youngju, Jeongil & Jiyoung, 2015; Ryu, 2018) and these studies focuses on the technological factors while not considering the social antecedents (Hu et al., 2019; Srivastava, Chandra & Theng, 2010; Xin, Techatassanasoontorn, Tan, 2015). Based on previous studies on "attitude toward using" and "willingness of using" fintech service shows that there is a significantly positive relationship (Chuang, Liu, Kao, 2016; Chong et al., 2019). It has conclusively been shown that when customers perceive positive reviews, they will feel that using fintech services is a positive experience and will be more likely to use them. The intention to adopt will be higher when they perceived fintech services offered are convenient and practical tools and in line with this, the users will have higher chances to recommend it to others. Different variables were studied to assess these findings such as perceived risk and cost in mobile commerce setting (Wu & Wang, 2005), consumer demand, net transactional benefits and perceived accessibility for study in adoption of crypto-payment (Jonker, 2019) and e-commerce quality in e-commerce setting among other service. For study specifically in Malaysia's setting, Chong et al. (2019) found significant impacts of perceived ease of use, perceived usefulness, social influence, personal innovativeness, security concerns, perceived enjoyment on the intention adoption of fintech services; while Cham et al. (2018) proposed factors such as usefulness, ease of use, competitive advantage, perceived risk, and perceived cost could be important.

Security Concern

User's uncertainty and risk is the key determinants in predicting user's fintech adoption intention (Taylor & Todd, 1995). Issues surrounding security threat on fintech products and

services such as personal information leakages, loss of private monetary information, cybercrime, and identity theft are among the main concerns that hinder users from adopting to fintech products and services (Taherdoost, 2017; Ogbanufe & Kim, 2018). In a study conducted in Taiwan found that a solid security facility and trustworthiness ranked first in priority among Taiwanese as compared to ease of use and convenience towards the intention to adopt fintech (Laforet & Li, 2005; Zhou, 2013; Chong et. al., 2019). Despite the agreement that security is of utmost important in initiating users' intention to adopt fintech services, there is also study that contradicting to this agreement. In the study of investigating attitude of youth towards mobile banking, Chau and Ngai (2010) found that security is not important in persuading youth to adopt mobile banking. Thus, this study proposed the following hypothesis:

H1: There is a significant positive relationship between security concern and intention to adopt fintech services.

Perceived Enjoyment

Perceived enjoyment reflects psychological satisfaction (for instance feeling joyful and cheerful) gained after experiencing new information technology that leads to an adoption of the new technology (Chuang et al., 2016; Chen et al., 2016). Feeling happy, pleasant and satisfy after using intelligent payment solution also leads to adoption of the new technology (Wen, 2016). A study by Boonsiritomachai and Pitchayadejanant (2017) found that adoption to new technology among youth is greatly influenced by how they perceived the experience as joyful and pleasant. A study done in Europe showed that perceived enjoyment has significant influence on the intention to adopt fintech products and services (Pousttchi & Dehnert, 2018). Hence, the study proposed the hypothesis below:

H2: There is a significant positive relationship between perceived enjoyment and intention to adopt fintech services.

Support from the Government

Among the determining factors of fintech adoption among users is government support. Government in any country could support the development of fintech. With adequate resources (monetary or talent), government could help and support financial institutions in nurturing fintech products and services that are reliable and credible. The support rendered by can be in the form of upgrading the existing network and technological infrastructure in the financial institutions by investing in top-notch technology (Jaruwachirathanakul & Fink, 2005). Other past research found that government support instils positive impact and trust among users, which further affect intention towards adoption of fintech products and services (Marakarkandy, Yajnik & Dasgupta, 2017; Hu et al., 2019). Moreover, with government supports in terms of facilities and upgraded networking and communication, financial institutions are now able to reach out to unbanked population which currently unavailable for them (Guild, 2017). This effort will further encourage users to embark on and adopt fintech products and services. Hence, the study proposed the following hypothesis:

H3: There is a significant positive relationship between government support and intention to adopt fintech services.

Age Group and Intention to Adopt Fintech Services

Previous studies in intention to adopt and early adoption of fintech services have shown that demographic variables (e.g age group and gender) is commonly used as control variable (Gulamhuseinwala, Bull & Steven, 2015; Morgan & Trinh, 2020). A study conducted among Germany households showed that older respondents have the smaller chances of shifting to fintech which supports the popular belief that younger people are more interested in digital technology (Jünger & Mietzner, 2020). Collaborating the findings of past studies by several authors which stated that the probability of older generations using mobile technology is lower, but it rises with constant access to mobile devices, internet access, family and friend support, and privacy (Choudrie & Vyas, 2014; Choudrie, Junior, McKenna & Richter, 2018; Lim et al., 2019).

In addition, several studies have revealed that younger, higher-income groups have higher chances in using fintech services. A study by Singh, Sunny and Kovid (2020) revealed that majority of their respondents are between the age of 30 to 50 years old whom also has more than 10 years of internet experience. This is also supported by study by EY Global Financial Service Institute (2019) where the major users were from the same age range (25 to 34 years) and respondents above the age of 44 showed a usage of below the average of all users. Following that, another study looking into fintech and financial literacy in Vietnam discovered that the proportion of younger people (those under 30 years old) using fintech services is much higher than that of older people, with significant differences, especially between those under 30 years old and those over 60 years old (Morgan & Trinh, 2020). In term of the willingness to try fintech products, the younger generation is much more likely than the older generation to experiment with fintech products in the future (Gulamhuseinwala, Bull & Lewis, 2015). Supported by Cham, Cheng and Ng (2020) and Das and Das (2020), millennials and generation Z are more aware and willing to use such service in comparison with generation X and baby boomer. Thus, this study proposed age as a moderating variable and the hypothesis below:

H4: Age group moderates the relationship between security concern, perceived enjoyment, and government support towards intention to adopt fintech services.

RESEARCH METHODOLOGY

Data Collection and Sampling Design

The study was carried out for a period of 9 weeks between 8th July 2020 and 15th September 2020. Data were collected using the online questionnaire survey method and distributed via Whatapps Application. Whatsapp is used as a distribution method due to its ability to offer real-time texting which allow information (e.g., contact list or media content such as audio, video files, images, location data) to be shared easily (Ahad & Lim, 2014). Other types of social media platforms were also used such as Facebook and Instagram. The study focused on all bank users in Kuala Lumpur. Purposive sampling method was adopted due to the unavailability of the list of financial users. Purposive sampling is also having advantages in term of close proximity, accessibility, willingness and quick response while controlling bias and the setbacks of using such sampling technique (Cham, Cheng, Low & Cheok, 2020; Jager, Putnick, & Bornstein, 2017; Tan et al., 2019). A total of 545 questionnaire were

collected and 45 questionnaires were excluded due to incomplete and missing data as well as outliers.

Research Instrument and Data Analysis Technique

The questionnaire specifically constructed to measure the adoption of fintech among bank users in Kuala Lumpur. The measurement items were adopted from studies by Chong, Choo, Yip, Chan, Teh, and Ng (2019). In order to optimize and reflects the true respondent judgement, a 5-point Likert scale is used. Prior to the real data collection, a pilot test was conducted in ensuring the content validity and the adopted questions are relevant and suitable in Malaysian context. The data was analyzed using descriptive analysis with SPSS 22.0 and SmartPLS to test the hypotheses in this study.

RESULT

Demographics Characteristics of Respondents

Based on the date procured, it was evident that the distribution of male and female are quite balance with a total of 257 (51.4%) respondents were males and the 243 (48.6%) respondents were females. In total, 208 (41.6%) of respondents were between the ages of 5-25 years old (which is also known as Gen Z), 133 respondents (26.6%) were between the ages of 26-40 years old (or Gen Y), 101 respondents (20.2%) were between 41.55 years old (or Gen X) and Baby Boomers (between the age of 56-76 years old) are the least with 58 respondents (11.6%). Most of the respondents are student with 197 (39.4%), follows by government servant with 104 (20.8%) respondents' private firm employees with 117 (23.4%) respondents and the least are self-employed with 81(16.2%) respondents and others 1 (0.2%). A total of 241 (54%) respondents held a Bachelor and postgraduate degrees. More than half of the respondents 332 (66%) had a monthly income ranging from RM2000 to more than RM10000. Table 1 presents the demographic profile of the respondents.

Table 1: Descriptive Analysis

Variables	Categories	Frequency	Percentage (%)
Gender	Male	257	51.4
	Female	243	48.6
Age	Baby Boomers (between 56 -76 years old)	58	11.6
	Gen X (between 41 - 55 years old)	101	20.2
	Gen Y (between 26 -40 years old)	133	26.6
	Gen Z (between 5 -25 years old)	208	41.6
Employment Status	Student	197	39.4
	Government Servant	104	20.8
	Private Firm Employees	117	23.4
	Self Employed	81	16.2
	Others	1	0.2
Education Status	SPM/STPM	99	19.8
	Diploma	130	26
	Bachelor	241	48.2

	Master or more	30	6.0
Monthly Income	Less than RM2000	168	33.6
	RM2000 - RM6000	222	44.4
	RM6001 - RM10000	69	13.8
	More than RM10000	41	8.2

The Measurement Model

The measurement model (or the outer model) was assessed for validity and reliability by looking at few criteria such as convergent validity, discriminant validity, and internal consistency of the constructs.

Construct Validity

The data is checked for convergent and discriminant validity. The proposed significant cut-off value for loadings is at 0.5 (Hair, Black, Babin and Anderson, 2010). Table 2 shows the values for all the items measuring particular construct were above loading 0.5, hence confirming construct validity.

Table 2: Construct Validity

Item	Intention to Adopt Fintech	Age	Government Support	Perceived Enjoyment	Security Concern
AI1	0.694				
AI2	0.659				
AI3	0.661				
AI4	0.624				
AI5	0.717				
AI6	0.681				
AI7	0.650				
Age		1.000			
GS1			0.751		
GS2			0.771		
GS3			0.830		
PE1				0.818	
PE2				0.744	
PE3				0.828	
SC1					0.700
SC2					0.570
SC3					0.761
SC6					0.638

Convergent Validity

The assessment of convergent validity is first done with checking of item reliability. The factor loading of each item on its corresponding construct should be higher than 0.5 (Hair et al., 2010). Refer to Table 3, all item loadings are above the suggested threshold. Next, composite reliability values ranged from 0.848 to 1.000, which exceeded the recommended value of 0.7 (Hair et al., 2010). Second, average variance extracted (AVE) were found above the 0.5 threshold suggested by Barclay, Higgins and Thompson (1995) measures vary from 0.5000 to 1.000.

Table 3: Results of Measurement Model

Model Constructs	Measurement Items	Loadings	Composite Reliability (CR)[a]	Average Variance Extracted (AVE)[b]
Intention to Adopt Fintech Services	AI1	0.694	0.851	0.500
	AI2	0.659		
	AI3	0.661		
	AI4	0.624		
	AI5	0.717		
	AI6	0.681		
	AI7	0.650		
Age	Age	1.000	1.000	1.000
Government Support	GS1	0.751	0.828	0.616
	GS2	0.771		
	GS3	0.830		
Perceived Enjoyment	PE1	0.818	0.839	0.636
	PE2	0.744		
	PE3	0.828		
Security Concern	SC1	0.700	0.764	0.500
	SC2	0.570		
	SC3	0.761		
	SC6	0.638		

a Composite reliability (CR) = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (square of the summation of the error variances)}
b Average variance extracted (AVE) = (summation of the square of the factor loadings)/{(summation of the square of the factor loadings) + (summation of the error variances)}

Discriminant Validity

Refer to Table 4, there is no outliers indicated and all the square roots of the AVE are larger than the off-diagonal elements. Moreover, the maximum shared variance and the average shared squared variance are found to be smaller than the AVE values of the corresponding constructs (Hair et al., 2016). Overall, the results indicate that the study constructs possess convergent and discriminant validity.

Another assessment of discriminant validity used in this study is Heterotrait-monotrait (HTMT) test. Table 5 indicates Additionally, all values in Table 5 are smaller than

recommended HTMT cut-off value of 0.9, as suggested by Gold, Malhotra and Segars (2001) and Henseler, Ringle and Sarstedt (2015) providing ample evidence of discriminant validity of construct. Thus, all the constructs in this research do not have discriminant validity problem.

Table 4: Fornell-Larcker Criterion: Discriminant Validity

Dimension	Age	Government Support	Intention to Adopt Fintech	Perceived Enjoyment	Security Concern
Age	1.000				
Government Support	0.100	0.785			
Intention to Adopt Fintech	0.181	0.502	0.670		
Perceived Enjoyment	0.057	0.595	0.500	0.797	
Security Concern	0.009	0.571	0.557	0.676	0.671

Table 5: Heterotrait-monotrait (HTMT): Discriminant Validity

Dimension	Age	Government Support	Intention to Adopt Fintech	Perceived Enjoyment	Security Concern
Age					
Government Support	0.120				
Intention to Adopt Fintech	0.205	0.675			
Perceived Enjoyment	0.078	0.850	0.656		
Security Concern	0.041	0.892	0.804	0.873	

Structural Model Analysis

The assessment of the structural model is performed by the bootstrap resampling technique with 500 iterations to ensure stability by generating t-values which at the same time assessing the direct relationship and significant. T-values were used to determine the significance of the hypotheses in the study. The result of our assessment is displayed in Figure 1 and Table 5. Based on what was discovered in the PLS-SEM estimates, the results of the hypotheses were indicated as the following:

Hypothesis 1: The result showed that security concern has positive influence on intention to adopt fintech services (p-value = 0.000 $\beta = 0.353$) and statistically significant (t-value=5.265). This was supported by the previous research of Basak. Goveneder and Govender (2016) and Koksal (2016) where both indicate users are more likely to use a service if they feel that the service provider's place security as one of the top priorities. Thus, hypothesis 1 was supported.

Hypothesis 2: The result showed that perceived enjoyment did not have a significant relationship with intention to adopt fintech services (p-value = 0.076 $\beta = 0.129$). In addition, perceived enjoyment showed a positive relationship with the intention to adopt fintech services which means that users who had a good perception of enjoyment tended to adopt fintech service. However, this relationship was not statistically significant (t- value = 2.020), which implies that the relationship could be occur by pure chance. Thus, hypothesis 2 was not supported.

Hypothesis 3: The result showed that government support had a positive significant (t-value= 3.646) relationship with the intention to adopt fintech service (p-value = 0.000 and beta coefficient = 0.041). Indirectly, it signifies that users who received support by government tended to show a higher level of intention to adopt fintech service. This was supported by the previous examination of Hu et al, (2020) and Marakarkandy et al, (2017). Thus, hypothesis 3 was supported.

Hypothesis 4: The result assessed the effect of age or generation on all constructs security concern (t-value= 0.0036), perceived enjoyment (t-value= 0.404) and government support (t-value= 0.832) towards intention to adopt fintech services. It can be concluded that this study found that age does not moderate the relationship between relationship between security concern (p-values = 0.971 and beta coefficient = -0.002), perceived enjoyment (p-values = 0.686 and beta coefficient = 0.031) and government support (p-values = 0.406 and beta coefficient = 0.053) towards intention to adopt fintech services. Hence, hypothesis 4 was not supported.

Table 6: Results of Path Analysis

Path Coefficient	Standard Beta	Standard Error	T-Value	P Values	Decision	f^2	R^2	VIF	Q^2
Security Concern -> Intention to Adopt	0.353	0.067	5.265	0	Supported	0.099		2.085	
Perceived Enjoyment -> Intention to Adopt	0.129	0.073	1.779	0.076	Not Supported	0.013	0.393	2.123	0.167
Government Support -> Intention to Adopt	0.207	0.057	3.646	0	Supported	0.041		1.715	
Age -> Intention to Adopt	0.148	0.037	3.996	0	Supported	0.035		1.022	
Moderator 1: Security concern -> Intention to Adopt	-0.002	0.056	0.036	0.971	Not Supported	0		1.694	
Moderator 2: Perceived enjoyment -> Intention to Adopt	0.031	0.076	0.404	0.686	Not Supported	0.001		2.23	
Moderator 3: Government support -> Intention to Adopt	-0.053	0.064	0.832	0.406	Not Supported	0.002		2.131	

Lateral Collinearity: VIF 3.3 or higher (Diamantopoulos & Sigouw, 2006)
R2 ≥ 0.26 consider Substantial (Cohen, 1989)
F2 ≥ 0.26 consider Substantial (Cohen, 1989)
Q2 > 0.278 consider medium (Hair et al., 2017)

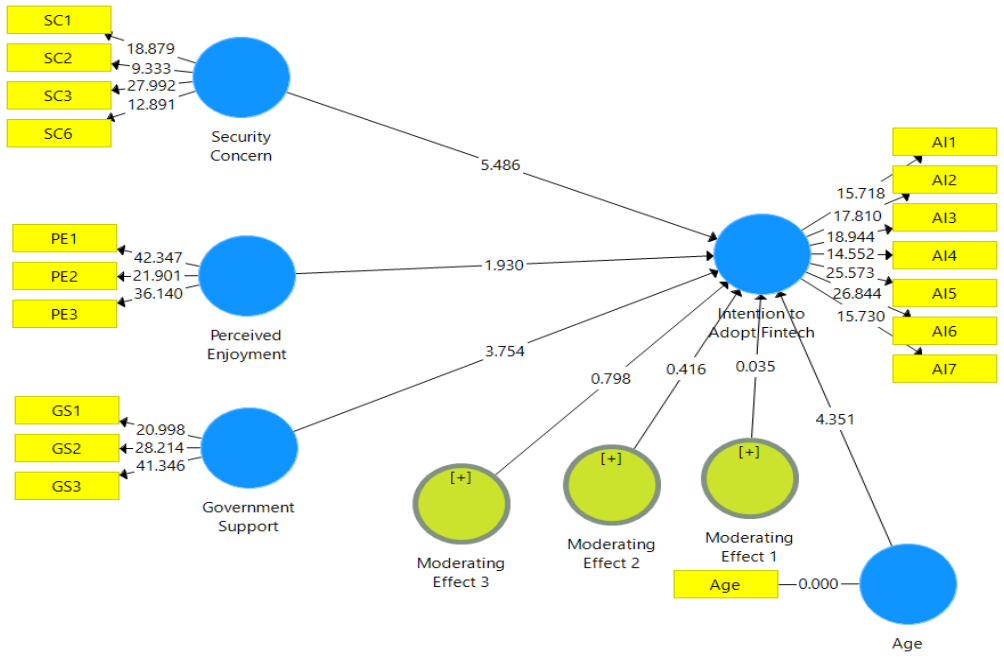
The index of variance inflation factor (VIF) is determined to examine the issue of multicollinearity. The VIFs for the constructs range from 1.022 to 2.230, which are lesser

than the conservative threshold of 3.3 (Diamantopoulos & Siguaw, 2006), suggesting that multicollinearity is at an acceptable level.

The determinant coefficient (R2, based on Hair et al. (2016) values of 0.75, 0.50 and 0.25 reflects substantial, moderate, and weak model respectively. A R^2 of 0.393 in this study indicates that intention to adopt fintech services is explained by 39.3% of security concern, government support. R^2 in this study has a moderate predictive accuracy in explaining its endogenous constructs (Henseler, Ringle & Sinkovics, 2009; Hair, Ringle & Sarstedt, 2011).

The effect size (f^2) is used to assess the relative impact of a predictor construct on an endogenous construct. The findings show that omission of all independent variables have small effect on intention to adopt fintech services (Cohen, 1988), except perceived enjoyment. However, this study also found that the omission of perceived enjoyment ($f^2 = 0.013$) has no effect to intention to adopt fintech services. The Q^2 test was used to measure the predictive relevance of the endogenous variables (Stone, 1974). It represents a measure of how well observed values are reconstructed by the model and its parameter estimates. The finding shows a Q^2 value of 0.167 which indicated a small predictive relevance of the endogenous constructs.

Figure 1: Results of Path Analysis



DISCUSSION

The current study involves an investigation of the influence of security concern, perceived enjoyment, and government support towards intention to adopt fintech services. In addition, this paper would also like to examine whether age group moderates the relationship between security concern, perceived enjoyment, government support and intention to adopt fintech services. Analysis of the computed results show that security concern, government support and age confirmed to have a significant influence on the intention to adopt fintech services in Kuala Lumpur. This suggests that ultimately bank users who had the intention to adopt

fintech services will only act on their intention if the financial institutions place a higher emphasized on security and privacy (Chong et al., 2019; Zhou, 2013). The result is in the lines of earlier literature by Ogbanufe and Kim (2018) where in dealing with financial transactions, consumers place security and the confidentiality of personal data as their main priorities. It is utmost critical to protect customer assets. Breaches of consumer data could lead to negative perceptions which further hinder the adoption of fintech services. Greater emphasis hence needs to be paid on strengthening cyber security in banking sector processes to eliminate cybercrime such as personal data breaching, loss of personal information and identity theft. In line with this, financial institutions need to ensure that their systems and operations are designed to detect cyber-threats and as a result limit any business disruption or financial losses which involved huge investment.

The finding also provide evidence that government support is crucial in influencing bank users intention to adopt fintech services. This finding is in agreement with few other findings which showed that government support is one of the major drivers for fintech adoption and will encourage the interest of bank users to adopt fintech services (Chong, Ooi, Lin and Tan, 2010; Hu et al., 2019; Marakarkandy et al., 2017). Among the reasons for this is the credential that government portrays which can enhance credibility and reliability of fintech products or services. Besides, the huge investment made by government in setting up the infrastructure such as communication network constructions and facilities indirectly enhance the development of fintech which makes it more acceptable for potential users (Jaruwachirathanakul & Fink, 2005). Potential bank users would be persuaded to embrace and switch to fintech platforms as a result of these efforts. With improved IT infrastructure and facilities, banks and financial institutions will expand their brand to promote fintech services to clients from all over the world, not just those in the city center (Guild, 2017). Furthermore, greater and better monitoring system (integrating rules and various policies for users and financial institutions benefits) can be implemented, which resulting in greater security for bank users. A collaboration between both parties can assist in betterment of the fintech services such as in the scope of security, speed, user's innovativeness which will match the need and wants of bank users. Formulation of a realistic and relevant policies is critical (Kiwanuka, 2015). As a result, adoption intention among bank user could be improved.

Despite prior evidence, these results were contradicting the previous studies. There is no significant relationship between perceived enjoyment and intention to adopt fintech services in this study, which contradicting Teo, Lim and Lai (1999)'s study that perceived enjoyment will only be effective in influencing individual to adopt new technology in the initial stage. As this study tested on existing bank users, perceived enjoyment might not a significant influence towards the intention to adopt fintech services. Some might argue that younger users are more technology savvy and they are have greater attraction with technology (Jünger & Mietzner, 2020; Choudrie & Vyas, 2014; Choudrie et al., 2018; Morgan & Trinh, 2020), this result shows age groups do not moderate the relationship between security concern, perceived enjoyment, government support and intention to adopt fintech services. This result confirmed with the previous study that age has a direct influence towards intention to adopt fintech services among respondents in Kuala Lumpur.

FUTURE RESEARCH DIRECTIONS AND CONCLUSION

This study would also like to suggest a multiple dimensions of study which include other variables such as perceived ease of use and perceived usefulness to be carried out in the future in order to have a comprehensive, concentrate and accurate result of the interaction between the adoption intention of bank users towards fintech services and the variables. In addition, social influences can also be examined as a moderating fatctors that could influence the adoption of fintech services among consumers.

The adoption of fintech services in inevitable in the near future. Nevertheless, the degree and speed of adoption could differ across different countries for various reasons. This study confirms the importance roles played by security concern and government support in influencing intention to adopt fintech services among Malaysians. It is important to note that collaborations among the fintech service providers and government agencies are critical in promoting the adoption of fintech services in Malaysia.

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