Influence of Fintech on

Bank Customer's Satisfaction

Abstract

The purpose of this research paper is to examine the influence of Financial Technology (FinTech) on bank customers' satisfaction and behavior. FinTech has seen remarkable growth over the past few years. FinTech providers are using technology to enhance and disrupt existing services and by offering customers a more compelling offer, which includes enhanced services, capabilities and convenience including competitive value propositions. This profoundly changes customers' expectations, in the process applying pressure on competitors to offer and develop similar services to attempt to retain their market share.

Services such as peer-to-peer lending, alternative business models and advanced mobile payments are just some of the new services resulting from financial technology.

The objectives of this paper is therefore to examine the influence of social influence, of perceived usefulness, of security concern and of the perceived ease of use on customer's satisfaction

The sample size of respondents in this study has been chosen by probability sampling technique. This study shows that there is a significant and positive relationship between Perceived Ease of Use, Perceived Usefulness, Social Influence (independent variables) and bank customers' satisfaction. This study also found there is an insignificant positive relationship between Security Concern (independent variable) and bank customers' satisfaction globally. It can be deduced from the results of this research that bank customers' satisfaction is influenced by these factors.

This paper answers the research questions through a quantitative method and the empirical data has been gathered from previous researches on similar topics related to FinTech and customer satisfaction. This research could be further improved by adding different technological variables to the study, and perhaps by conducting a qualitative approach via interview or observations.

Key Terms: FinTech, Banks, Financial, Banking, Customers Satisfaction

CHAPTER 1: INTRODUCTION

The purpose of this research is to investigate the influence of Financial Technology "FinTech" on Bank Customers Satisfaction in Malaysia.

11 RESEARCH BACKGROUND

"FinTech" refers to technology-enabled financial solutions, the abbreviation of Financial Technology. FinTech covers the entire scope of services and products traditionally provided the financial services industry (Amer, 2015). The Financial Services industries are using Fintech to sharpen operational efficiency, lower costs, improve customer experience and heighten the appeal of their products and services to improve customer satisfaction (PwC Global Fintech Report, 2019). The evolution of FinTech has been rapid and technology is advancing faster by the day. David Brear (2020), CEO of 11:FS stated that FinTech has produced a description of urgency for banks. Amongst the challenges banks face today includes the dynamics of economics of the back office functions associated with creating technological and operational proficiency. Bank customers are in constant need for a technologically advancement to satisfy their banking needs whereas the traditional approach of banks are starting to evolve according to these needs to a more personalized and towards a customer-centric approach (Brear, 2020).

Malaysia today is growing and able to adapt and take advantage of FinTech innovations. Mobile wallets, crowdfunding, remittances are amongst the famous forms of FinTech usage (IBS Intelligence , 2020). Statistics from CPA Australia (2020) found that 75 percent of Malaysian businesses have adopted a minimum of one FinTech product or service in the last one year. The adoption index of FinTech has significantly increased from 16 percent to 33 percent from 2015 to 2017 and grown to 64 percent in 2019 (Ey.com, 2019). EY Global FinTech Adoption Index (2019) described that FinTech awareness has increased tremendously also to the point that 96 percent of consumers are familiar with at least one form of FinTech service that 1s available and allows them to do banking transactions.

Figure | below illustrates the consumer adoption of FinTech across 27 markets in 2019.

FinTech services can be categorized into five sections such as payments and money transfer, financial planning and budgeting, investment and savings. borrowing and insurance. Respondents from the Global FinTech Adoption 2019 found that 99.5 percent of customers in India and Russia are exposed to FinTech services and are aware that they are able to make payments and money transters via these services (Ey.com,. 2019). Figure 2 below illustrates the consumer awareness of FinTech services in their respective category.

12 RESEARCH RATIONALE

In an academic study conducted by Tun-Pin (2019) in Malaysia, it was found that Fintech has a positive influence on banking customer's satisfaction in Malaysia. In another study, it is shown that Fintech has also a significant positive impact on customer satisfaction in Islamic banks for the Fintech services offered (Abdullah, 2019). This innovation incorporates service features like speed, convenience, cost, reliability and accessibility (Okoye, et al., 2018). Customers are able to obtain information and perform transactions easily and with this demonstrability of finance towards the market, thus automatically it improves customers' satisfaction (Lee, 2017).

Cybercrime has evolved rapidly and is advanced today as criminals are leveraging on technology to defraud victims on cases of financial Frauds as publicized in the inaugural Global Banking Fraud Survey by KPMG that was conducted between November 2018 and February 2019. Security concern variable plays a role here in the influence of customer's satisfaction.

The Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) will be used to examine the influence of the four key variables which this study is focusing on, which are Social Influence, Perceived Usefulness, Security Concern and Perceived Ease of Use on bank customer's satisfaction in Malaysia.

The FinTech adoption and usage has not been fully utilized by bank customers do to security issue as stated above (Venkatesh & Bala, 2008). It has become an issue because financial frauds and cybercrime due to security concern will affect the usage of FinTech services and eventually affecting customer satisfaction in Malaysia (Kim, 2019). PwC's Global Economic Crime and Fraud Survey report of 2018 reported that 39% of the

respondents of Southeast Asia did not know if they have a cyber-security program that deals with cyber-attacks as illustrated in Figure 3 above.

This is still an ongoing issue in 2019 however; Bank Negara Malaysia (BNM) has issued the Risk Management in Technology (RMiT) policy (KPMG's Global Banking Fraud Survey, 2019).

This policy has been issued with the aim to guide and assist all financial institutions in Malaysia to battle the increase in cybercrime and financial fraud.

13. AIM AND OBJECTIVES

The aim of this research is to study the Influence of FinTech on Bank Customers Satisfaction in Malaysia.

14 Qbjectives

i. To examine the influence of social influence on customer's satisfaction

11. | To examine the influence of perceived usefulness on customer's satisfaction

111. To examine the influence of security concern on customer's satisfaction.

iv. To examine the influence of perceived ease of use on customer's satisfaction.

15 Research Questions

i. What is the impact from the influence of social influence on customer's satisfaction?

11. What is the impact from the influence of perceived usefulness on customer's satisfaction?

111. What is the impact from the influence of security concern on customer satisfaction?

iv. What is the impact from the influence of ease of use on customer's satisfaction?

CHAPTER 2: LITERATURE REVIEW

2.1 REVIEW OF KE CONCEPTS

FinTech is a term used to describe financial technology, an industry encompassing any kind of technology in financial services from businesses to consumers. Fintech describes any company that provides financial services through software or other technology, and includes anything from mobile payment to software technology or cloud services to perform or connect with financial services (Sraders, 2019).

22 $$FINTECH

Financial Technology (FinTech) is a combination of technology and innovation with various available businesses to compete in the marketplace of traditional financial institutions and intermediaries in the delivery of financial services (Chishti & Barberis, 2016). FinTech can be classified as a software technology that allows financial process becoming efficient by eliminating traditional methods. Several technologies that contribute to FinTech includes but not limited to:

IV. Block chain

The usage of AI and ML has enabled FinTech companies to deliver customized services and products to the respective needs and requirements of the gradually developing market (Raj, 2020). Systems such as AI interfaces and chatbots can offer support and advise to customers whilst reducing cost of employees, thus in the process automating the back office processes and enhance the flow. AI and ML innovations are empowering the FinTech industry and this is allowing banks and other financial institutions to continue offering excellent financial services to bank customers'.

Big Data and Data analytics are allowing companies to conclude and successfully perform complex tasks such as risk assessments, allowing financial access to individuals who were inaccessible previously. The volume of data is too large for humans to perform manual work and this is where data science comes into play (www.Fintechmagazine.com, 2020).

Robotic Process Automation (RPA) are software-engineered robots that are designed to learn, identify and mirror human actions and interactions with a digital system. It is an applied technology governed by business logic and designed inputs aimed to automate business processes (Boulton, 2018). David Schatsk y (2016), managing director at Deloitte LP, redesigned the companies claim process by deploying 85 bots to handle 13 processes which amounts to 1.5 million requests per year which resulted in cost savings and speed (Craig, 2016).

Block chain is ongoing list of records that are run on a network where the architecture of the system is similar to a database. These records are defined as blocks cryptographically connected to one another developing a chain (Horacio, 2020). Block chain allows banks to

maintain and keep records of all transactions transparently which means banks will not need to rely on custodial services from bodies like SWIFT, as they are able to complete transactions directly via a public block chain (Concise Software, 2020). Empirical studies have shown that Block chain technology is relevant to many industries including telecommunication in which this industry was examined, found that it has a significant positive impact in the telco industry in the aspect of authoritative conduct, culture and proficiency and will face challenges when attempting to integrate with the legacy telecom eco system in the adoption of Block chain technology (Nizam & Srikant, 2020).

These technologies listed contribute to the existence of FinTech applications such as crowdfunding platforms, mobile payments, robo-advisors, insuretech, regtech and so on. Figure 4 below illustrates the flow of how the application of FinTech technology contribute to the applications of FinTech.

Financial Technology is a rapidly growing industry in Malaysia presently. The TULUSS Digital, which ts an Islamic social Financial Technology start-up, is in the process of collaborating with the United Nations High Commissioner for Refugees (UNHCR) to enable crowdfunding strategy for communities of refugee in Malaysia (Aminah, 2021). As reported in the Malaysian Insight (2021). the TULUS Digital CEO, Ahmad Azrin Abidin launched a mobile application and aims to raise a RM2.4 Million for UNHCR programs on refugee health and education programs and emphasizes on anti-violence programs. GRAB launched a Regional Centre of Excellence in Malaysia, which will host Grab's core business strategies, operational functions that include financial services. Grab's digital shop fronts for their uprising GrabFood. GrabRewards and GrabPay merchant partners, allow micro entrepreneurs and small to medium sized FinTech businesses to have their digital presence on the Grab mobile applications and leverage on user base and network distribution to increase the business revenue (Grab MY, 2019).

The 2019 Global FinTech Adoption Index displayed results from this extensive research and survey which show that FinTech has improved and expanded globally and has caused drastic changes across the entire financial industry (James (2020). The EY Asia Pacific FinTech leader explained that most Asian markets have continued to benefit from strong FinTech services being applied with increased innovation being driven by increased

adoption.

23 CUSTOMER SATISFACTION

Philip Kotler (1997), defined customer satisfaction as a feeling of pleasure or disappointment, which is resulted from comparing a product's perceived outcome or performance against a person's expectations. Perceived performance is the customer's perception of the product or service. It is also defined as a measure of how services and products that are provided by an organization, meets or exceeds the customers' expectations (Ozuru, 2016). Customer satisfaction is extremely crucial in increasing and maintaining an organization's customer base, increasing the use of volatile customer mix and increase the organization's image (Alabar, 2012). It is a form of personal assessment that is highly inclined by individual customers' expectations. In the banking industry where banks and financial institutions are offering almost the same services and products and at similar price, competitive advantage is achieved by these financial institutions when customers experience and satisfaction are obtained (Vaslow, 2018). Bank customer's satisfaction is an important element and banking practice shows that achieving a reasonable level of customer satisfaction is not an easy task and is a permanent process with varied results (Chocholakova et al., 2015). Krawcheck (2012) found that the current incompatibility between customer dissatisfaction and customer's willingness to purchase different products is unsustainable. According to a research conducted in Czech Republic, it was found that loyalties of bank customers is converted into purchase of additional banking products (Chochofakova et al., 2015). Banks are effectively applying data technology as an innovative resource to enhance speed and customer service in order to gain competitive advantage. Technology products and delivery channels enable banking customers to perform their banking needs and activities at any time (Joshua et al., 2011).

Davis's Technology Acceptance Model (TAM) (1998, 2000)

In a study conducted by Hu et al. (2019) in researching the adoption of FinTech services for bank users, the paper proposed an improved technology acceptance model (TAM) that includes user innovaliveness. government support. branding image and perceived risks as the determinants of trust in attempting to investigate how users adopt to FinTech services. The results of this model displays that the popularity of internet and intelligent terminal

equipment could have impact on users demands for FinTech services. Based on TAM, this study created a user adoption model for FinTech services, which takes into consideration the role of User's Trust (TRU) and its determinants alongside empirical data for verifications (Hu et al., 2019).

Eltayeb & Dawson (2016) conducted a study on Personal Could Computing (PCC) and applied TAM as the main theoretical framework. The findings of this study shows that Personal Cloud Computing is an advanced growing technology, which is meeting the market needs and demands of individual users. The study also found that despite the potential benefits of PCC, security concern and privacy is discouraging many users from moving towards PCC (Eltayeb and Dawson, 2016).

Y ousafzai et al., (2010) conducted an empirical study on user's behavior utilizing three famous models, which are Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB) and TAM towards consumer's behavior in the context of Internet banking. The results concluded that TAM is superior compared to TRA and TPB as it highlights the importance of trust element in understanding internet banking behavior (Yousafzai at al., 2010).

Cheung and Vogel (2013) conducted a research on user acceptance on TAM model for e leaning. The results indicate that determinants of the TAM model are the key factors influencing adoption of the technology and found that the subjective norm represented by peers are found to strongly moderate the relationship between attitude and intention towards the technology (Cheung and Vogel, 203).

Despite of the limitations, the TAM models are still extremely favorable in evaluating the acceptance of technology systems where functions can be limited based on the scope and type of study and usage.

22.4 DIFFUSION OF INNOVATION THEORY (DOT)

The Ditfusion of Innovation Theory commonly known as DOI was developed by E.M Rogers (1962) and happens to amongst the longest serving social science theories (LaMorte. 2019). This theory was created with the aim to illustrate the method. reason and the rate a product, service or process flows through a population or social system (Roger, 1995). DOI theory is widely utilized by marketers to study and obtain information on the

rate consumers are to adopt to anew product or service (Corporate Finance Institute, 2015). The innovation process evolves from five key steps as described by Rogers (2003), which are knowledge. persuasion, decision. implementation and confirmation as illustrated in figure 12 below.

An extensive research was conducted in North Carolina Community College System via a quantitative study that used Rogers' (1995) Diffusion of Innovations Theory to examine the degree of technology adoption in the faculty by Less' (2003). The members of this faculty were classified based on Rogers' five categories of innovation adoption against the demographic variables of the research. The results of the analysis in this paper displayed that while a positive relationship was achieved between Rogers (1995) categories and their teaching years of experience, the outcome did not display a significant difference between faculty adopter categories and the demographic information on age, gender and race. There was no important differences between users and non-users in the demographic characteristics attained.

A research conducted in Nigeria (Iriobe, Akinyede, 2017) to examine the effect of FinTech on customer satisfaction on accessibility of mobile payment, transaction cost and security concern variables. Convenience and security were used as proxy of financial technology services while customer satisfaction was used as dependent variable. Regression analysis results showed that there is a positive relationship between FinTech service variables (Accessibility, Transaction cost, Availability, Operations and business and Convenience and security concern) and customer satisfaction.

A research conducted in Malaysia (Pin, et al., 2019) on the adoption of FinTech service in Malaysia shows that there is a positive and significant relationship between the study variables, which includes between Social Influence, Perceived Usefulness, & Perceived Ease of Use and the adoptions of FinTech services. The results of this research displayed that perceived risk has a significantly negative impact on trust. This depicts that customer's perceived risk of FinTech services has a substantial role in reducing customers' level of trust in FinTech services. Sikdar et al. (2015) supported the findings of this research. The findings of this empirical study displays that customers usage and adoption to new technologies are influenced by factors of government, user innovativeness and brand image and then the weighing of the perceived benefits and perceived risks involved in the

technology usage, ultimate affects the adoption of new technology.

In another recent study in Botswana (Agolla, et al., 2018) it is found that the adoption of FinTech by banks has created a positive impact and motivation on customer services, satisfaction and products (Ayo et al., 2016). The conclusion of this empirical study shows that, the banking innovations impact on customer satisfaction is displayed as a method of reduction and elimination of time and effort spent for banking needs such as queuing in the bank. The evidence and results of this study found that banking customers are getting more attracted to their banks due the innovative methods and approaches of banking. The researcher displayed that part of the limitation of this study was due to the size of sampling which consists of a modest 103 participants, which was collected from customers across all banks in Botswana.

Another research done on the Allied Bank of Pakistan (Junejo, et al., 2019) has evaluated the overall bank customer's satisfaction level with the Allied Bank of Pakistan on FinTech services and concluded that all independent variables are positively co-related and have a positive influence on customer satisfaction except ease of use and performance. Safety reliability appears to be the most significant dimension of service quality that affects customer satisfaction. Junejo et al. (2019) suggested measures for banks to consider in the research conducted which includes educating bank customers by providing guidelines and trainings in order for bank customers to familiarize themselves with FinTech applications and services. Junejo at al. (2019) also suggested that due to the limitations of this research, for future researchers to carry out extensive researches that include both private and public banks in Pakistan to expand the future research based on employees' perceptions about FinTech services.

An empirical Study tn Taiwan was conducted by Chen et al. (2016) to understand the key factors of consumer acceptance of FinTech and its association with satisfaction. The results of this research found that Perceived Ease of Use has a positive influence on the Perceived Usefulness of FinTech. However, on another note, this research also demonstrated customer's expectation for higher information security, which showed a negative impact on Perceived Usefulness.

The conclusion of an academic research in Indonesia (Wiyayanti, Riza, 2017) on Sharia Fintech and consumer perspective, found a positive impact on user satisfaction. These

results support researches conducted by Al-Hawari and Mouakket (2010), Shipps and Phillips (2012), Jung et al. (2015), Wong et al. (2014), and Hou et al. (2013).

Alwi et al. (2019) conducted an empirical study in Malaysia on customers' satisfaction on FinTech Mobile payment services. This study focused on several factors that are affecting customers' satisfaction where ease of use, security and privacy, information presentation, convenience and service quality variables are taken into account by applying the Theory of Dissonance, Assimilation and Contrast. A quantitative study was conducted and results obtained by Pearson correlation analysis have displayed that security and privacy are strong influencing factors of customer satisfaction and followed by service quality, information presentation and ease of use. It was suggested in this research that financial institutions in Malaysia should work on enhancing security and privacy level and at the same time, providing extensive awareness to their customers on the security and privacy level and safety. The study has proven there is a strong correlation between the independent variables and dependent variable (customer satisfaction) and displays 68.8% of customer satisfaction towards FinTech mobile payment services is explained by the proposed independent variables (Alwi et al., 2019).

Profit seeking appears to be a key motivation factor when an individual or organization is looking for a new technology, product or service, which potentially leads to reduce of cost, risk whilst increasing customer demand satisfaction (Farme & White, 2004, p.5). Dapp & Slomka (2014) conducted an extensive study on FinTech and the digital revolution in the financial sector. It is found in this study that customers prefer internet enabled services to conduct their banking activities, which can increase quality of life by saving time and costs via the traditional banking methods. Financial services that are extremely technologically driven are providing banking customers with banking related products and services (Dapp and Slomka, 2014).

Bernardo Nicoletti (2017) wrote a detailed extensive book on financial services and Financial Technology. This book displays how younger generation are used to having customized and personalized access and solutions, which are tailored to their needs. Customers' today appear to be more of the "user" of financial services of their choice (Cui & Wu, 2016). According to Nicoletti (2017), FinTech companies should recognize and connect in attempt to ensuring the right customer experience and to display the selected

brand image. Customer satisfaction and loyalty are key factors of an organizations success as sales volume is increased and new customer base is formed (Keisidou et al., 2013). Amin (2016) conducted an empirical research with the purpose of examining the service quality and it is impact on e-customer satisfaction and e-customer loyalty. A quantitative study with 1000 questionnaires were distributed across banking customers who uses internet banking and 520 (52%) of the survey, results were returned. The results of this study found that the higher level of internet banking service quality significantly influences customer satisfaction and subsequently leads to customer loyalty and this reduces the chances of customer ending the relationship with the bank or seeking for an alternate provider (Amin, 2016).

Lim at al. (2019) conducted an extensive study to investigate on impacts of perceived security and knowledge on intention of mobile FinTech usage specifically on payment services. Business are putting in plenty of efforts in spreading the use of FinTech services however, security concern is a crucial factor in the dissemination of the services. This study investigates the relationship between perceived security, knowledge, confirmation, perceived usefulness and customer satisfaction. The results of this study depicts that perceived security in mobile FinTech services have a significant positive relationship with perceived usefulness and users' confirmation. It was also found in this research that customers' intention to use is not influenced by perceived security (Lim et al., 2019).

FinTech companies have started to attain a firm and influential grip in the global market currently. Managing a plethora of data in the banking industry has allowed FinTech startups to enhance, innovate and thus successfully offering distinctive solutions that increases customers' satisfaction. Ramesh (2019) conducted an empirical study on FinTech avenues of banks to enhance customer digital experiences (DX). In this study, it was found that, due to the need of a high standard in Digital Experience, banks need to increase investment in FinTech services in order to attain proper distribution channels and further increase the efficiency of back-office functions as this collaboration combines the strength of both FinTech and banks (Ramesh, 2019).

As per the 2018 Statista Report, it was recorded that the crowdfunding sector totaled their transaction value to US$ 5,250 million (Statista, 2018). Baber (2020) conducted an extensive empirical study with the aim in investigating the influence of FinTech

applications and crowdfunding on customer retention in Islamic banks of Malaysia and the UAE. 535 customers were interviewed via structured questionnaires and strata sampling method was used. Positive relationship was found between FinTech applications that included crowdfunding and customer retention. It was also found that vanables such as advisory searches, payments compliance and crowdfunding has a positive impact on customer retention in Malaysia and UAE. It was concluded in this study that expanding the range if FinTech applications by Islamic Banks will ensure customers' continue staying on with the bank thus, increasing customer retention (Baber, 2020). It was also suggested in this study that crowdfunding should be integrated into Islamic Banks as will help social entrepreneurship and achieving global Zakah and Sadaqa system.

Modern information systems have interrupted the flow and methods of companies perform their businesses today. FinTech developments, which include peer-to-peer (P2P) lending applications, happens to be one of current FinTech creations that is said to be affecting traditional financial banks (Gomber et al., 2018). Siek and Sutanto (2019) conducted an empirical analysis of FinTech on banking industry. Important related variables were used in this study such as customer satisfaction, ease of use and net promotion score were among them. This study finds that banks performance have been disrupted due to the emergence of FinTech companies from 2015 onwards due to better and improvised value propositions. It was also found in this research that, P2P FinTech services do not have significant disruption to the banks commonly because customers' consider more on safety reasons (Siek & Sutanto, 2019). COVID-19 has affected many industries including the banking industry in both positive
and negative ways (KPMG, 2020). In the most recent timeline, an extensive empirical study was conducted by Chen, You and Chang (2021) to investigate the impact of FinTech products on commercial bank's performance in China. The data was gathered for this investigation via quantitative method and questionnaires were distributed to bank customers' of China. Data gathered from this research was conducted by utilizing the structural equation modeling technique and the results of this study displays that perceived usefulness of FinTech products has a significant positive impact on bank customers' satisfaction. It was also noted in this research that perceived difficulty of use of FinTech

products has a significant negative impact on customer satisfaction and low expectation of assistance. Apart from this, there is a significant positive relationship between perceived difficulty of use and banks' service quality and work productivity. This study displays the need to increase awareness and understanding of Fintech products and benefit of this study includes allowing commercial banks in China to understand the influence and impression of FinTech products from customers and employees point of view (Chen et al., 2021).

A research was empirically examined in Jordan by Al Nawayseh (2020) in factors affecting citizens of Jordan on intention to use FinTech applications. This study was examined by a sampling number of 500 respondents who use FinTech applications in Jordan. There were five hypothesis that were constructed and tested via the structural equation modeling techniques (SEM-PLS). This study displays that perceived benefits and social norms influences the intention to use FinTech applications significantly. It was also noted that perceived technology risks do not strongly influence the intention to use FinTech applications (Nawayseh, 2020). Results of this research also displayed that perceived risks and intention to use FinTech applications are being mediated by customer trust variable.

26 HYPOTHESIS DEVELOPMENT

H1: There is significant positive relationship between perceived ease of use (PEOQU) in FinTech and bank customer's satisfaction in Malaysia.

The findings in a study conducted by Huei, Cheng, Seong, Khin and Bin (2018) found that the perceived ease of use would potentially affect customer's attitude and satisfaction towards FinTech product and services. It requires less effort by the users thereby increasing the likelihood of usage, adoption and increasing customer satisfaction. An extensive research was conducted to determine the impact of Perceived Ease of Use (PEOU) and trust on mobile web site satisfaction in Malaysia. Based on the results and findings, this study proposes some strategies for marketing managers to enhance PEOU, PU and trust. It was found that PEOU is a significant predictor of usefulness. In order to enhance PEOU, becoming proficient with the usage of mobile should be perceived as easy and should be easy; therefore, focus on PEOU will lead to consumer satisfaction with mobile commerce web sites (Amin, Rezaei and Abolghasem1, 2014).

An empirical research was conducted by Amin, Rezaei and Abolghasemi (2014) on the impact of PEOU, PU and trust. The results of this study displayed that there is a significant positive relationship between PEOU and mobile users' satisfaction. The study contributes new insights involving the marketing literature by studying the impact of PEOU on mobile users' satisfaction (Amin, Rezaei and Abolghasemi, 2014).

Hosein (2011) conducted an empirical study of adoption rates among Midwest community banks in internet banking. This study concluded that PEOU does significantly influences banking customers' willingness to adopt internet banking. The analysis illustrates that bank customers' are likely to adopt and utilize online banking when they perceive a system Is as easy to use and the hypothesis in this study was accepted (Hosein, 2011).

H2: There is significant positive relationship between perceived usefulness in FinTech and bank customer's satisfaction in Malaysia

Perceived usefulness as stated in TAM is a level of confidence and comfort level a person has in usage of a particular system. This leads to customer's perspective of the system and performance concerning results of the customer's experience (Chuang et al., 2016: Wonglimpiyarat, 2017). Perceived usefulness provides a constructive outcome, as Customer's evaluate satisfaction in performing financial transactions via a technological platform (Chuang et al., 2016; Moslehpour et al., 2018; Wonglimpiyarat, 2017). This variable has been examined in previous studies as the most effective predictor for customer's satisfaction as value of satisfaction is measured by the usefulness and strength of the FinTech product.

Zviran, M. & Pliskin, Nava & Levin (2005) conducted an extensive research on measuring user Satisfaction and Perceived Usefulness (PU) in the Enterprise Resource Planning (ERP) context. Due to the significant number of reported ERP failures, this empirical examination was conducted within the ERP context of success indicators including perceived usefulness (PU). The results of this study displays that high levels of customer satisfaction is obtained with PU. Results display a strong correlation between PU and customer satisfaction, which determines that PU is one if the key factors that is affecting customer satisfaction with the ERP systems. However, hypothesis testing displayed no relevant evidence for possible correlation between customer satisfaction and PU. The study was concluded and research was done within organizational level and including demographic data such as education,

age, gender and user computing experiences (Zviran et al., 2005).

Ghani, Mazuri & Rahi, Samar & Yasin, Norjaya & Alnaser, Feras (2017) conducted an empirical research on the adoption of Internet Banking with the usage of extended Technology Acceptance Model with E-customer service and customer satisfaction. This study has empirically investigated the TAM model with customer service and satisfaction in the internet banking adoption issues in Pakistan. Structural Equation Modelling (SEM) was applied in studying the hypothesis among the constructs and the Importance-Performance Map Analysis (IPMA) was utilized. The outcome of this study has revealed that the adoption of internet banking in Pakistan could be significantly influenced by perceived usefulness and customer satisfaction as it played an important mediating role among the variables that are proposed (Ghani et al., 2017).

According to Nagaraju (2015), the most effective factor of mobile and internet banking is customers' satisfaction. The introduction of Financial Technology has allowed to an increase in levels of bank customers' satisfaction as individuals have indulged into the usage of mobile banking, virtual banks and other FinTech methods in order to simplify their baking needs and activities thus reducing costs as well which improves customers' satisfaction (Infosys Finacle, 2012).

H3: There is significant positive relationship between social influence in FinTech and bank customer's satisfaction in Malaysia.

Social influence is interpreted as the influence of others in the adoption of a new system and the individual perception on group's subjective organizational culture as stated by Chuang et al. (2016) & Kim, et al. (2016). Social influence plays a key role that influences a person's experience and opinion towards FinTech (Wen, 2016). An empirical research was conducted based on the UTAUT model, which has displayed that social influence plays a significant positive influence on customer satisfaction (Oliveira, Thomas, Baptista and Campos, 2016).

Customers' decisions to adapt to new technologies in the current social media era and often influenced by factors that include family, friends and colleagues who provide positive recommendations about new technologies that could motivate and influence customers to adopt them (Beldad and Hegner, 2017). Accessing financial services is one of the challenges that is being faced by consumers during crisis. An empirical study was

conducted by Nawayseh (2020) on FinTech in COVID-19 and the factors that are affecting customers' choice of FinTech applications. It was found in this study in Jordan that during the COVID-19 lockdown, over 100,000 various electronic wallets were issued and the Central Bank of Jordan and government have encouraged their citizens to adopt FinTech applications in order to perform their financial transactions (Manjari, 2020). This research was conducted by applying a modified version of UTAUT model to examine the intention of FinTech application adoption by bank customers' where over 450 survey forms from valid users were completed and SEM was used to examine the research model and suggested hypothesis. The research results display that FinTech usage by bank customers' are influenced by their individual respective benefits, social impact and trust (Nawayseh, 2020).

The role of social influence in technology adoption has been tested in the Unified Theory of Acceptance and Use of Technology (UTAUT, Venkatesh, Morris, Davis & Davis, 2003) where it represents an individual perspective of in what significant others expect that individual should do. Beldad and Hegner (2017), conducted an extensive research in Germany in expanding the TAM Model with the inclusion of Trust, Social Influence and Health Valuation and found that the impact of social influence on technology has significantly increased (Vannoy & Palvia, 2010) which subsequently is displayed in the expansion of TAM (Schepers & Wetzels, 2007; Yi, Jackson, Park, & Probst, 2006).

As researched by Venkatesh & Davis' (2000), it is concluded that social influence, influences technology adoption and usage of customers'. Most studies found it conceptually similar to TRA's subjective construct (Vannoy & Palvia, 2010). An empirical study was conducted in 2015 in factors influencing mobile payment adoption. This study incorporated social influence and tested the context of customer's adoption via an online survey. The extended model explains 62% of variation in the intention to use and it was found that social influence reduces perceived risk and further contributing to the adoption of mobile payment (Koenig-Lewis et al., 2015).

H4: There is significant positive relationship between security concern in FinTech and bank customer's satisfaction in Malaysia.

Security concern is an important factor it has the ability to maintain financial data confidential from security breaches during transmission and storage (Taherdoost, 2017). A

study conducted by Tseng et al. (2017) reported that 56.2% of Taiwanese decline usage of mobile banking due to security concern reasons. Increase in cybercrime is one of the key factors that influence the adoptions and customer satisfaction of FinTech (Ogbanufe, Kim, 2018). Security breaches and loss of personal information creates negative perceptions towards customer's satisfaction. This indicates there is a positive relationship between security concerns and bank customer's satisfaction.

Financial Technology adoption and usage has been significant growing in Malaysia, however security concerns continues to be a factor in adoption and intention to use. A study was conducted in Malaysia in2007, regarding adoption of Banking and financial technology and the security concems as being part of hindering growth. The results of this study displayed that majority of the respondents feel the need for security features to be increased as there are doubts in regards to the confidentiality and safety of their data, privacy and security (Raju, at al., 2007).

The financial sectors handle confidential and sensitive data on individuals and companies. The emergence of FinTech, data is widely available in the digital form, which allows easier process to analyze data however allows data to be more prominent to security breaches (PwC's Global FinTech Survey, 2016). PwC's Global FinTech 2016 survey reported that 56% of the respondents identified their concerns of information security and privacy threats due to the rising FinTech. Security is an integral part of FinTech solutions where the responsibility falls within the provider. Security and data privacy play a key role in customers' confidence and intention to use FinTech (Vishwanath, 2016).

Privacy has been included by many components of the security goals (Mukherjee and Nath, 2003; Nilsson at al., 2005; Patton, 2004). Perceived security is one of the main concerns of customers' trust in the adoption of FinTech services and applications. Steward (2018) conducted an empirical research on data security and consumer trust in FinTech innovation in Germany. While this research has limitations such as focusing only in Germany, it was found that although the number of mobile users in Germany 1s increasing significantly, the adoption of FinTech due to the security concern is slow and only 10% of the respondents recognized the emergence of FinTech (Steward at al., 2018). Malware attacks and hacking are prominent security issues that are ongoing in FinTech market. FinTech applications are adopted by many banks today to access real-time financial information about their existing

customers, however if the application does not have proper security features and efficient firewalls, it becomes prone to cyber thefts and security concerns such as money laundering risk, digital identity risks and cloud based security risks (Muhn, 2020).

32 RESEARCH DESIGN AND APPROACH

The research design chosen in this research is explanatory research design to analyze the hypothesis relationship in this paper. As this design is used to identify the scope of cause and effect relationships, it will be useful for future researchers that would like to examine similar topics. Thus, the explanatory design is considered the most suitable method in this research and has the advantage of measuring relationship between variables and present descriptive information (Gray, 2013) in explaining the influence of FinTech on bank customers' satisfaction in Malaysia.

Quantitative methodology technique is being applied in this paper to study the results of the data gathered from various respondents. Primary data collection method has been applied to gather the necessary information as the researcher aims to accomplish investigating the influence of FinTech on bank customers' satisfaction in Malaysia. Data collection will be carried out by questionnaire surveys distributed in an online platform to 200 bank customers' in Malaysia to engage in their thoughts and satisfaction level in the usage if FinTech products and services in their banking needs. Attaining primary data and analyzing it in a detailed statistical manner is crucial as the industry is competitive and customers' perception changes from time to time (Hassan, 2018). Statistical data usage for research and analysis decreases the effort and time for the researcher gather, analyze and conclude the findings. Data can be calculated through the statistical package for social science (SPSS) (Gorard, 2001 , p3; Connolly, 2007, p2-34) which saves resources and time. The analysis from this survey will be conducted by using SPSS Version 26.0.

33 RESEARCH METHODS

Clifford Woody (1927) described research as "comprises defining and redefining problems, formulating hypothesis or suggested solutions, collecting, organizing and evaluating data, making deductions and reaching conclusions and at last, careful testing the conclusions to determine whether they fit the formulated hypothesis. Amongst the types

of research include, descriptive vs analytical, applied vs fundamental, quantitative vs qualitative and conceptual vs empirical. John Creswell (2011) define research as a process of steps used to collect and analyze information to increase your understanding of a topic or issue. These consists of three steps, which are; posing a question, collect data to answer the question and presenting an answer to the question.

Quantitative and qualitative are common research methods. Quantitative research approach emphasizes on numbers and figures in data collection and data analysis (Bryman, 2001). Lichtman (2013) argued that as the researcher would rely on hypothesis testing, there is no assuming element needed as the researcher would follow the clear guidelines and objectives. This method also allows the biasness element in the results to be eliminated. When the researcher is not gathering data from participants in direct contact, but through online surveys, phone and questionnaires, there is proper control and the objectives of the researcher will not be compromised. This could also allow respondents from responding anonymously if they wish to do so (Creswell, 2009).

Qualitative approach can be characterized as a concept, meanings, metaphors, symbols and a description of things (Berg and Howard, 2012). Qualitative data instruments can be in the form of observations, open ended questions or interviews for data collection from participants. John Creswell (2011) argued that qualitative research is best applied in researches that variables are not clear to be explored. This research will be conducted by quantitative data methods. This study will be examined using primary data collection method. Primary data are gathered first hand to answer the research question that is being investigated, thus it is the most suitable data collection method (Hox and Boeye, 2015).

34 DATA COLLECTION

Evidence and results of data provide the answers to the researcher's questions. To obtain the answers to the researcher’s questions, the researcher has to engage and complete the step of collecting data (Creswell, 2011). The two types of data collection includes primary data and secondary data collection (Kothari, 2004). Creswell (2009) found that there are four categories of primary data. which are interview methods, observation methods, focus group and questionnaire surveys. Primary data has not been altered or changed hence its validity is greater than Secondary Data collection method (Kabir, 2016). Data collected from a source that has already been published known as secondary data. This research will

be carried out by using random probability questionnaires. In the present time, due to the ongoing COVID-19 Pandemic, where social gathering or conducting meetings are strictly restricted and enforced globally, it was decided that online questionnaires would be the most effective and time saving method to complete this research. A total of 203 surveys were completed from questionnaires that were distributed to bank customers in Malaysia. The purpose of survey is to collect information from individuals and trying to understand them as a whole whereas the aim of survey research is to measure the attitude or behavior of a population or sample.

This research is carried out with an explanatory approach and inclusiveness of quantitative data survey and using primary data approach as it includes accurate information provided by respondents to the questions relevant in this research while secondary data is adopted as to the convenience and reliable sources of previous researches from reliable sources. Respondents were a random wide group of bank customers' in Malaysia aged between 21 years old, to the '50 years and above' category.

35 SAMPLING DESIGN

According to W .G Cocharan (1977), advantages of sampling include greater precision and accuracy in the observation. The two common types of sampling design are probability and non-probability sampling methods. Probability sampling is a method that provides the probability a sample is representative of population and is used generally in research, which purposes are to generalize the results. Non-probability sampling consists of no probability of selecting any individual or population and the observations are not used for generalization purpose (Pandey, 2015). Probability sampling technique will be chosen in this research because the target respondents who are customers that are related to the banking industry and banking FinTech products and services (Nizam, 2020). This paper targeted respondents aged 21 and above. This was done with the reason and assumption that respondents aged 21 years and above would presumably have better judgment and experience in using FinTech services in their banking needs as opposed to those below 21 years old.

36 INSTRUMENT DEVELOPMENT

In quantitative data collection, the researcher would need to use an instrument to measure

the variables in their study. An instrument is known to be a tool with the purpose of observing, measuring and documenting quantitative data (Creswell, 2011). Specific questions and answers possibilities are developed in advanced of the study and questionnaires is an instrument commonly used. The instrument adopted in this study 1s through structured online survey questions that were self-developed as well materials obtained from previous researches that are relevant to this topic. E-questionnaires were chosen in this study as it is cost and time efficient and allows the researcher to extract and analyze the results once respondents have completed recording their responses respectively. The 32-question survey was developed and divided into 6 sections. Section A displayed the demographic information of respondents. Section B displayed questions on the variable Perceived Usefulness. Section C displayed questions from the variable Perceived Ease of Use. Section D displayed questions on the variable Security Concern. Section E displayed questions on the Social Influence variable and section F displayed questions on bank customers' satisfaction with the intention to use FinTech services. The questions were developed and presented in a five point Likert scale analysis form where | displays how strongly the respondent disagrees and 5 being the optimum where responded strongly agrees with the question or statement. The questionnaire can be referred to in Appendix | Research Questionnaire. Questions are developed in a simple manner that can be understood easily as the researcher wants to ensure all respondents have a clear understanding of the questions and statements developed before recording their responses.

3.7 DATA ANALYSIS METHODS

Statistical Package Social Science version 26.0 was used to conduct the analysis once the data completion phase had completed in order to establish and examine the relationship between the variables and hypotheses in this research and the direction, degree and strength of the relationship (Sekaran, 2000). The respondent questionnaire survey data was then coded into SPSS to study and analyze the demographic analysis, descriptive and normality analysis, reliability analysis, regression analysis as discussed below in the section 4.6 below under Summary of Findings.

38 ETHICAL CONSIDERATIONS

This research will be conducted in a proper manner by maintaining the confidentiality of data will be protected under the act of Personal Data protection Act Malaysia (PDPA) 2010. The researcher will abide by the rules and regulations. Any data used in this research not from the researcher, has been properly referenced. As per the University's Postgraduate Major Project Research guidelines and regulations, the researcher has submitted and attained all necessary approval from the Ethics Application documents, participation information and consent documents.

CHAPTER 4: RESULTS, ANALYSIS AND DISCUSSION

Chapter 4 describes the statistical data analysis, defining the details of the findings, testing the significant value of the suggested hypotheses and concluding the analysis according to the objectives of this research.

4.1 DEMOGRAPHIC ANALYSIS

Sample results of 203 respondents were returned for this topic research and consent was obtained from the University Ethics Board prior to conducting the survey. The respondents are grouped into five clusters, which are age group, education background, employment sector, job position and working years of experience of the respondents who are bank customers as displayed below on Table 3, Table 4 and Table 5.

Based on the survey results, 43.3% of the respondents were from the age group of 31 to 40 years old, which is the majority in this category, followed by 27.6% from the category of 41-50 years old. This section displays 9.9% of the respondents were aged 50 and above. In an empirical study conducted in Malaysia on the adoption of FinTech service, Soon et al. (2019) conducted a structured research questionnaire where it was found that out of a 300 respondent survey, only 0.3% of the respondents were aged 55 years and above, as opposed to 9.9% of 203 respondents in 2021. This indicates FinTech awareness amongst population aged 50 and above is increasing in Malaysia.

84 respondents have been working for a minimum of 15 years above who accumulated to 41.4% of the population who participated in this survey. Respondents who have been working for 3-5 years recorded only 5.9% of the total population in this survey.

Table 4 : Demographic Profiles of the Respondents

The respondents education background consists mainly from bachelor's degree holders who made up 65% of the population in this survey, which followed by Master holders who recorded 18.7% of the responses.

The respondents come from various employments sectors and majority are from the private sector with 69.5%, followed by those in the public sector with 15.3%. There were 12 respondents who participated in this survey that are either retired or unemployed, which recorded a 5.9% of the response from the total 203 respondents.

44 ANALYSIS OF ASSUMPTIONS FOR MULTIPLE REGRESSION

44.1 Auto Correlation Analysis

A common method for testing autocorrelation is via the Durbin-Watson test. The Durbin-Watson test produces statistic that ranges from 0 to 4 where values that are close to 2 in the middle range displays less autocorrelation and values closer 0 or 4 indicates a greater positive or negative autocorrelation (Durbin and Watson, 1971). As displayed in Table 8 below, the auto correlation Durbin-Watson statistic displays a value of 1.875, which indicates there is no autocorrelation among residuals.

44.2 Miulticollinearity Analysis

Isolating the relationship between each independent variable and the dependent variable is the main goal in regression analysis, hence if the degree of correlation between variables are high, it can result in causing inaccurate data when results are interpreted (Frost, 2017). Variance Inflation Factors (VIF) range from | onwards and the value describes the percentage of the variance (Stephanie, 2015). The results in table 9 shows a range of the variable VIF values between 2.241 (lowest- PU) to 3.536 (Highest -PEOU)the highest. Perceived Ease of Use also displays the highest beta value of 0.406, which shows PEOU is the strongest influence factor for bank customers' satisfaction. It can be explained as, if PEOU increases by | unit, customers' satisfaction would increase by 0.393 unit. Based on these values there are some minor multicollinearity in the data but it is not sever enough to warrant further corrective measures. Values greater than 5 shows data is highly correlated and values between | and 5 shows that data is moderately correlated (Hair et al., 2010).

45 Regression Analysis

Regression analysis is a quantitative method used to analyze and test the relationship between a dependent variable and independent variables.

45.1 Model Fitness

Hair et al. (2011) found that the model fitness value of R square should reach a minimum of 0.6 in order for it to be classified as a good fit model to explain the variations in the dependent variable. From the data generated in SPSS as displayed in table 17 below, it can be concluded that the coefficient (R) of 0.821 shows there is a significant strong correlation between both, independent (PU, PEOU, SI & SC) and dependent variable (BCS). R square determines the portion of dependent variable that can be explained by the independent variable. Based on this, we can deduce that R square value of 0.673 which is defined as 67.3% of bank customer satisfaction in Malaysia towards the influence of FinTech by the suggested independent variables. Based on this, it can be concluded this is a good fit model

H1: There is significant positive relationship between perceived ease of use (PEOU) in FinTech and bank customer's satisfaction in Malaysia.

The results of the regression analysis for H1 revealed that null hypothesis is rejected and the proposed hypothesis is accepted (P<0.05=0.000) and Beta value (.406) Therefore Perceived Ease of Use (PEOU) in FinTech is found to have a positive and significant relationship on bank customers' satisfaction in Malaysia based on both values. PEOQU displays a P-value of 0.000, which does not exceed the significance level of 0.05.

H2: There is significant positive relationship between perceived usefulness (PU) in FinTech and bank customer's satisfaction in Malaysia

The results of the regression analysis for H2 revealed that null hypothesis ts rejected and the proposed hypothesis is accepted (P<0.05=0.004) and Beta value (.178) Therefore Perceived Usefulness (PU) in FinTech is found to have a positive and significant relationship on bank customers' satisfaction in Malaysia based on both values. PU displays a P-value of 0.004, which does not exceed the significance level of 0.05.

H3: There is significant positive relationship between social influence in FinTech and bank customer's satisfaction in Malaysia.

The results of the regression analysis for H3 revealed that null hypothesis is rejected and the proposed hypothesis is accepted (P<0.05=0.000) and Beta value (.254) Therefore, Social Influence (SI) in FinTech is found to have a positive and significant relationship on bank customers' satisfaction in Malaysia based on both values. SI displays a P-value of

0.000, which does not exceed the significance level of 0.05.

H4: There is significant positive relationship between security concern in FinTech and bank customer's satisfaction in Malaysia.

The results of the regression analysis for H4 revealed that in this case, the null hypothesis is accepted and the proposed hypothesis 1s rejected (P<0.05=0.249) and Beta value (.088) Security Concern in FinTech is found to have a positive and insignificant relationship on bank customers' satisfaction in Malaysia based on both values. SC displays a P-value of 0.249, which exceeds the significance level of 0.05.

46 SUMMARY OF FINDINGS

The purpose of this research is to examine the influence of FinTech on bank customers' satisfaction in Malaysia. As per the data gathering and tested, it can be deduced that H1 and H2 have a significant positive relationship with the dependent variable; bank customers satisfaction which is in line with the Technology Acceptance Model (TAM). The Unified Theory of Acceptance & Use of Technology model (UTAUT) model supports H3 and H4. The analysis is summarized in the empirical validated model as displayed in figure 16 below on the significant effect results and coefficients.

CHAPTER 5 CONCLUSION & RECOMMENDATIONS

5.1 CONCLUSIONS

This study contributes to the research gap on understanding the influence of FinTech on bank customers' satisfaction in Malaysia. The main objective in this research is achieved as the findings between all the independent and dependent variables have been determined. Based on the above analysis, findings display that a significant and positive relationship is achieved between all the chosen variables in this study (PU, PEOU, SI and SC) in FinTech, and bank customers' in Malaysia. These findings are consistent with the results of research by Sikdar et al. (2015). As illustrated in H4 (Relationship between security concern in FinTech and bank customer's satisfaction in Malaysia) retumed a P-value of 0.249, which exceeds the significance value of 0.05, thus it can be deduced that the sample results are consistent with a true null hypothesis (Rumsey, 2019) thus this hypothesis can be eliminated. Approximately 67.3% of bank customer satisfaction is achieved by the proposed independent variables, which presents the relationship between the proposed independent variables and bank customers' satisfaction in Malaysia. Based on the results

of the Pearson Correlation analysis, it is found that Perceived Ease of Use has the highest B value of .406, which is the strongest influencing factor for banking customers' satisfaction among the four proposed variables. The significant relationship between PU, PEOU, SI and SC is consistent with the findings of Cheng et al. (2007). In summary, bank customers' intention to adopt and or continue using a new technology or service in their banking needs would rely on the satisfaction level obtained, that is determined by the proposed variables in this study, which are Perceived Ease of Use, Perceived Usefulness and Social Influence. Bansal et al. (2010) found that users are concerned about the misuse of personal information when using FinTech services and this affects customers' willingness to use new technology services. Although Security Concern has a positive relationship with bank customers' satisfaction, it has been revealed in this study from the data obtained that it is not significant, therefore H4 is not acceptable.

52 RECOMMENDATIONS:

Based on the survey results, 43.3% of the respondents were from the age group of 31 to 40 years old, which is the majority of the respondents who participated in this survey. It was also found in this research that the biggest influencing variable factor for bank customers' satisfaction in FinTech services and products are Perceived Ease of Use. It is recommended that banks, financial institutions and FinTech companies should continue to collaborate and work together in creating awareness and continuously working on improvising ease of use features of their products. With the current advancement of technology, FinTech companies and Banks are reinventing methods to engage and redesign banking customers' experience. Customers' satisfaction also relies strongly on the standards of interaction apart from the products and services. This could be achieved by providing proactive customer support, which includes a blend of digitalization such as Artificial Intelligence (Al) to continuously analyze data and enhance processes, Al based Chatbots, whilst having human engagement support on a personalized basis. If customers perceive FinTech services as easy to use and convenient, they are more likely inclined to adopt them, thus increasing customer's satisfaction and contributing to customer retention. While traditional banks are Starting to streamline and digitalize capabilities, they should look into integrating their multiple digital channels into Omni-channel customer experience. This could allow holistic solutions be provided by tailoring to customers specific expectations.

53 LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Future researchers could broaden this research by potentially adding more variables to the research and increasing the sampling size of the research. Also by integrating the Security Concern of FinTech into this research model, it has been validated by empirical research. This paper has not explored other factors such as risks, flexibility, intention to adopt, perceived enjoyment and innovativeness. Future researchers could look into adding new constructs to examine other aspects that influence bank customers' satisfaction in Malaysia on the usage of FinTech services. Future researchers may consider revising the questionnaires to suit their context or opt for a qualitative research method via interviews, which could suit the context of the study.

CHAPTER 6 REFERENCES & APPENDICES

Agolla, J.E., Makara, T. and Monametsi, G., 2018. Impact of banking innovations on customer attraction, satisfaction and retention: the case of commercial banks in Botswana. International Journal of Electronic Banking, 1(2), pp.150-170.

Al Ajlouni, Ahmed & Al-Hakim, Monir. (2019). Financial Technology in Banking Industry: Challenges and Opportunities.

Al nawayseh, M.K. (2020). FinTech in COVID-19 and Beyond: What Factors Are Affecting Customers' Choice of FinTech Applications? Journal of Open Innovation: Technology, Market, and Complexity, 6(4), p.153.

Alwi.S., Alpandi,R.M.. Salleh, M.N.M., Basir, I.N. and Anff, F.F.M. (2019). An Empirical Study on the Customers' Satisfaction on Fintech Mobile Payment Services in Malaysia. International Journal of Advanced Science and Technology, [online] 28(16), pp.390—400.

Amin, Muslim & Rezaei, Sajad & Abolghasemi, Maryam. (2014). User satisfaction with mobile websites: the impact of perceived usefulness (PU), perceived ease of use (PEOU) and trust. Nankai Business Review International. 5. 258 - 274. 10.1108/NBRI-01-2014-0005.

Amin, Muslim. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. International Journal of Bank Marketing. 34. 280-306. 10.1108/) BM-10-2014-0139.

Baber, H., 2020. Impact of FinTech on customer retention in Islamic banks of Malaysia. International Journal of Business and Systems Research, 14(2), pp.217-227.

Bernardo Nicoletti, 2019. Palgrave Studies in Financial Services Technology. The Future of Fintech. — Integrating Finance and Technology in Financial Services

Bradley, J., 2009. The technology acceptance model and other user acceptance theories. In Handbook of research on contemporary theoretical models in information systems (pp. 277-294). IGI Global.

Buckley, R.P. and Webster, S. (2016). Fintech in Developing Countries: Charting New Customer Journeys.

Cham, Tat Huei & Low, Suet Cheng & Seong, Lim & Khin, Aye & Ling, Raymond, 2018. International Journal of Engineering & Technology. 7. 166-169. Preliminary Study on Consumer Attitude towards FinTech Products and Services in Malaysia

Chao, C.-M. (2019). Factors Determining the Behavioral Intention to Use Mobile Learning: An Application and Extension of the UTAUT Model. Frontiers in Psychology, 10.

Chen, M.C., Chen, S.S., Yeh, H.M. and Tsaur, W.G., 2016. The key factors influencing internet finances services satisfaction: An empirical study in Taiwan. american journal of industrial and business management, 6(06), p.748.
Chen, Ming-Yi & Teng, Ching-I. (2013). A comprehensive model of the effects of online store image on purchase intention in an e-commerce environment. Electronic Commerce Research. 13. 10.1007/s 10660-013-9104-5.
Chen, Xihui & You, Xuyuan & Chang, Victor. (2021). FinTech and commercial banks' performance in China: A leap forward or survival of the fittest?. Technological Forecasting and Social Change. 166. 120645. 10.1016/j.techfore.2021 .120645.
Cho, Yoon & Sagynov, Esen. (2015). Exploring Factors That Affect Usefulness, Ease Of Use,Trust, And Purchase Intention In The Online Environment. International Journal of Management & Information Systems (IJMIS). 19.21. 10.19030/ijmis.v 1911 9086.
Chocholakova, A., Gabéova, L., Belas, J. and Sipko, J. (2015). Bank Customers' Satisfaction, Customers' Loyalty and Additional Purchases of Banking Products and Services. A Case Study from the Czech Republic. Economics & Sociology, 8(3), pp.82—94.
Chuang, L.-M., Liu, C.-C. and Kao, H.-K. (n.d.). The Adoption of Fintech Service: TAM perspective. International Journal of Management and Administrative Sciences (IJMAS, [online] 3(07). pp.1-15.
Corporate Finance Institute. (2015). Diffusion of Innovation - Definition, Rationale and Adopter Categories.
Dalila Bakar. Nazatul Izma, 2017. Fintech in Islamic Finance. The Joumey Begins
Dapp, T. and Slomka, L. (2014). Current Issues Digital economy and structural change. [online]
Eltayeb, M. and Dawson, M. (2016). Understanding User's Acceptance of Personal Cloud Computing: Using the Technology Acceptance Model. [online] Semantic Scholar.
Gary Hwa, 2019. Global FinTech Adoption Index 2019
Gomber, P., Kauffman, RJ., Parker, C. and Weber, B.W. (2018). On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in... |online] ResearchGate.
Goodhue, D.L. and Thompson, RL. (1995) éTask-technology fit and individual performance, MIS Quarterly, Vol. 19, No. 2 (6/1995), pp.213236.
Hong, S.H. and Yu, J.H. (2018). Identification of external variables for the Technology Acceptance Model(TAM) in the assessment of BIM application for mobile devices. JOP Conference Series: Materials Science and Engineering, 401, p.012027.
Hosein, N.Z. (2011). Internet Banking: An Empirical Study Of Adoption Rates Among Midwest Community Banks. Journal of Business & Economics Research (JBER),7(11).
Hu, Zhonggqing & Ding, Shuai & Li, Shizheng & Chen, Luting & Yang, Shanlin. (2019). Adoption Intention of Fintech Services for Bank Users: An Empirical Examination with an Extended Technology Acceptance Model. Symmetry. 11. 340. 10.3390/sym 1 1030340.
IBS Intelligence. (2020). Top 4 exciting Malaysian FinTechs transforming financial services.
Ikramuddin Junejo, Asif Ali Shah & Asha Bachani. (2019) Influence of Fin-Tech on Customer Satisfaction: Empirical Evidence from Allied Bank of Pakistan. South Asian Journal of Social Studies and Economics
Iriobe, Grace & Oyinlola, Akinyede. (2017). The Effect of Financial Technology Services on Banks Customers Satisfaction in Nigeria. SSRN Electronic Journal. 10.2139/ssrm.2984215.
Ismail, Noraini. (2018). Perceived Security And Consumer Trust In Adoption Of Fintech Service. 650-659. 10.15405/epsbs.20 18 07.02.70.
Kelly, A.E. and Palaniappan, S. (2019). Survey on Customer Satisfaction, Adoption, Perception,Behaviour, and Security on Mobile Banking. Journal of Information Technology & Software Engineering, [online] 9(2), pp.1—15.
Khurana, S. (2018). A Sociological Take on Fintech: The Diffusion of Innovations Model . {online|
Koenig-Lewis, Nicole & Marquet, Morgan & Palmer, Adrian & Zhao, Anita. (2015). Enjoyment and social influence: predicting mobile payment adoption. Service Industries Journal. 35.

Lai, P C. (2017). THE LITERATURE REVIEW OF TECHNOLOGY ADOPTION MODELS AND THEORIES FOR THE NOVELTY TECHNOLOGY. Journal of Information Systems and Technology Management. 14. 21-38. 10.4301/s 1807-17752017000100002.
LaMorte, W. (2019). Diffusion of Innovation Theory. [online] sphweb.bumc.bu.edu.
LaMorte, W. (2019). The Theory of Planned Behavior. |online] sphweb.bumc.bu.edu.
Lawrence Uchenna Okoye, Alexander Ehimare Omankhanlen, Johnson I. Okoh and Isibor,Areghan A, 2018. International Journal of Civil Engineering and Technology (IJCIET) TECHNOLOGY-BASED FINANCIAL SERVICES DELIVERY AND CUSTOMER SATISFACTION: A STUDY OF THE NIGERIAN BANKING SECTOR
Lee, Younghwa & Kozar, Kenneth & Larsen, Kai. (2003). The Technology Acceptance Model: Past, Present, and Future. Technology. 12. 10.17705/1CAIS .01250.
Lim, Se & Kim, Dan & Hur, Yeon & Park, Kunsu. (2019). An Empirical Study of the Impacts of Perceived Security and Knowledge on Continuous Intention to Use Mobile Fintech Payment Services. International Journal of Human-Computer Interaction. 35. 886-898.10.1080/10447318.2018.1507132.
Ma, Qingxiong & Liu. Liping. (2005). The Technology Acceptance Model.
Mazlan, N. (2021). Fintech 2021: the year of customer journey ¢ JurisTech. [online] JurisTech.
Muhn, J. (2020). Cybersecurity: The Hidden Risks of Fintech Services. [online] Finovate.
Nicoletti, B. (n.d.). Integrating Finance and Technology in Financial Services The Future of FinTech. [online]
Nizam, Ismail. (2020). CHALLENGES IN ADOPTION OF BLOCK CHAIN TECHNOLOGY IN TELECOM INDUSTRY IN MALAYSIA. 10.24924/ijise/2019.1 1/v7.iss2/113.132.
Portz,J.D., Bayliss, E.A., Bull, S., Boxer, R.S., Bekelman, D.B., Gleason, K. and Czayja, S. (2019). Using the Technology Acceptance Model to Explore User Experience, Intent to Use, and Use Behavior of a Patient Portal Among Older Adults With Multple Chronic Conditions: Descriptive Qualitative Study. Journal of Medical Internet Research, [online] 21(4), p.e1 1604.
PricewaterhouseCoopers (2016). Catching the FinTech wave: A survey on FinTech in Malaysia.
Ramesh, L. (2019). FinTech: A new Avenue of Banks to Enhance Customer Digital Experience (DX). [online] International Journal of Innovative Technology and Exploring Engineering (IJITEE), pp.2278-3075.
Samaradiwakara, G D Manoja & Chandra, Gunawardene. (2014). Comparison of existing technology acceptance theories and models to suggest a well improved theory/model. International Technical Sciences Journal. 1. 21-36.
Sarfaraz, J. (2017). Unified Theory of Acceptance and Use of Technology (UTAUT) Model-Mobile Banking. Journal of Internet Banking and Commerce, [online] 22(3), pp.1-20.
Schweitzer, M. and Barkley, B. (2017). /s “Fintech” Good for Small Business Borrowers? Impacts on Firm Growth and Customer Satisfaction. |online] papers.ssm.com
Science Alert. (n.d.). The Security Concern on Internet Banking Adoption Among Malaysian Banking Customers.
Siek, M. and Sutanto, A. (2019). Impact Analysis of Fintech on Banking Industry. 20/9 International Conference on Information Management and Technology (ICIMTech).
Sudha, Raju & Thiagarajan, A.S. & Seetharaman, A.. (2007). The Security Concern on Internet Banking Adoption Among Malaysian Banking Customers. Pakistan journal of biological sciences:PJBS. 10. 102-6. 10.3923/pjbs.2007.102.106.
SWIFT - The global provider of secure financial messaging services. (n.d.). How to spot, stop and defend against cyber-attacks.
The Influence of Financial Service Characteristics on Use Intention through Customer Satisfaction with Mobile Fintech. (2020). Journal of System and Management Sciences.
Tun-Pin, Chong Keng-Soon, William Choo Yen-San, Yip Pui- Yee, Chan Hong-Leong, Julian Teh Shwu-Shing, Ng, 2019. South East Asia Journal of Contemporary Business, Economics and Law, Vol. 18, Issue (February) ISSN 2289-1560. AN ADOPTION OF FINTECH SERVICE IN MALAYSIA

Umar Farook .A, Dr. S. Sudalaimuthu, 2017. International Journal of Advance Research, Ideas and Innovations in Technology. Customer Perception: Technology Based Banking and its Impact on Financial Inclusion

Vaslow, J. (2018). The Importance of Customer Satisfaction in the Banking Industry. [online] TheMSR Group.

Venkatesh, V., Thong, J. and Xu, X. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and the Road Ahead. Journal of the Association for Information Systems, 17(5), pp.328-376.

Venkatesh, V., Thong, J.Y-L. and Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. M/S Quarterly, 36(1), p.157.

Vincent Fong, 2018. Fintech Malaysia Report 2018 — The State of Play for Fintech Malaysia

Waehama, W., McGrath, M., Korthaus, A. and Fong, M., 2014. ICT Adoption and the UTAUT Model. In Proceedings of the International Conference on Educational Technology with Information Technology (Vol. 17, pp. 24-30).

Williams, Michael & Rana, Nripendra & Dwivedi, Yogesh. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. Journal of Enterprise Information Management. 28. 443-488. 10.1108/JEIM-09-2014-0088.

wwweey.com. (n.d.). What is next for Asia in FinTech adoption.

Yang, Kiseol. (2010). Determinants of US consumer mobile shopping services adoption: Implications for designing mobile shopping services. Journal of Consumer Marketing. 27. 262-270. 10.1108/0736376101 1038338.

Zviran, M. & Pliskin, Nava & Levin, R.. (2005). Measuring User Satisfaction and Perceived Usefulness in the ERP Context. Journal of Computer Information Systems. 45. 43-52.