

The Adoption of Fintech and its Impact: A Comprehensive Review

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Abstract

The emergence of technology in the current era in the financial services industry empower new innovative products and services which has greatly been utilized by most of the industry today. Changes in technological trends have a significant impact towards society especially in the transaction process. The changes in transaction patterns using Fintech are extremely change on how society deals with current payment. Additionally, finance technology is deemed as new technology as Fintech able to fully utilized their services just 3 years ago even though the technology has been existed for a long time. Therefore, the researcher believed that this theme is worth investigating due to growth in the Fintech market and it is believed that the information regarding Fintech is still limited especially towards the young adult. A review of literature related to the adoption of Fintech and its impact was conducted by analysing different research papers and articles. The result reveal that Fintech does in fact changes how people manage their financial well-being and transaction process. In addition, Fintech also change the trends and lifestyle of people especially young generation from being used to traditional banking to using a finance service provide in the banking industry.

Keywords: Technology, Finance Technology, Adoptions, Financial Literacy, Digital Literacy

Introduction

The emergence of a new information technology in the financial service industry is known as "FinTech." In the simple terms, "FinTech" is a combination of two terms from "finances and "technology." The term "FinTech" is very wide stretched history that related to the technologies on the daily transaction from grocery purchase to banking transactions. The rapid growth of electronic devices and technologies in the FinTech industry empower new innovative product and services. In Malaysia, the development of FinTech like electronic payments and online banking has contributed to the increasing advancement in Malaysia's technologies. The services offered by the financial institutions continue to challenges and

cater to the attitudes of consumers who are accepting of new technology products to gain market opportunities. Moreover, according to Ryu (2018), FinTech has become an important and interesting topic given the development and changes in the information technology. FinTech has expanded to reach developed and developing countries including Malaysia. Based on an EY (2018) report of FinTech in ASEAN, Malaysia has a respectable 196 FinTech companies. Moreover, the innovations offered by FinTech also provide transparency of financial data on every transaction made by users, thus making it easier for the companies to monitor the financial cash flow. FinTech is widely involved in multiusers trading system which include conventional trade transactions such as mini markets, supermarkets, and department store. In addition, Fintech also have increasing involved in the infrastructure facilities like toll gates and shopping canters parking.

Moreover, Finance technology is deemed as new technology as FinTech able to fully implement their services just 3 years ago even though the technology have been existed for a long time. The motivation for conducting this study was based due to no systematic empirical study has been conducted on this topic. In addition, the researcher believed that this topic is worth investigate because the FinTech market is growing rapidly due to the pressure to adopt sophisticated financial technologies in the banking industries (Safiullah & Paramati, 2022). Therefore, the information regarding the FinTech is still limited as the topic still considered new especially towards certain demographic like the young adults. Although FinTech has been widely used in countries such as China, Korea, India, Finland and the United Kingdom (Chua, Lim & Aye, 2019), adoption of FinTech in Malaysia still remains at the preliminary stage (Chua et al., 2019). In addition, intention towards the adoption of FinTech still remains unexplored in the Malaysian context (Chua et al., 2019; Ghazali & Yasuoka, 2018).

Thus, the objective of this review paper is to study the current literature on the adoption and impact of Fintech services among young adults. Existing research will guide and support reaching insightful conclusions about the impact of Fintech services and how it changes the trends and lifestyle. This understanding is greatly needed in the market today so that the organization can study the behaviour pattern and what makes Fintech product or services interesting according to the consumer nowadays. By focusing on the adoption patterns of Fintech and its effect to the consumer, this paper intends to identify valuable understanding and guidance to organizations in analysing the pattern that influence the adoption of Fintech services.

Literature Review

Adoption of Fintech

The concept of intention towards adoption can be characterised as an individual's inclination to engage in or utilise something, which is influenced by their motivational behaviour (Tun-Pin, Keng-Soon, Yen-San, Pui-Yee, Hong-Leong, & Shwu-Shing, 2019). This study focuses on the adoption intention among consumers in the FinTech industry, aiming to analyse consumer behaviour and forecast their inclination to embrace technological advancements in their everyday financial transactions. The term "human behaviour" encompasses a broad range of actions and conduct displayed by individuals, which are shaped by several factors such as culture, attitudes, emotions, values, ethics, authority, rapport, hypnosis, persuasion, compulsion, and genetics (Asra & Shubhangi, 2015).

Nasution et al (2023) also found that there are a few factors that influences the adoption of the intention to use fintech which are perceived usefulness, perceived ease of use, subjective norms and perceived security. The concept of perceived ease of use refers to an individual's perception of the level of effort required to utilise a certain technology. In addition, perceived usefulness also one of the factors of the adoption pattern of the fintech. Perceived usefulness refers to an individual's perception of the extent to which utilising a certain system will enhance their job performance. Study by Tun-Pin et al. (2019) found that all the variable which is perceived ease of use, perceived usefulness, social influence, personal innovativeness, security concerns, perceived enjoyment and demographic profile affect the inclination to embrace Fintech in Malaysia. The objective of this study is to analyse the many variables under consideration. A sample size of 300 questionnaires was obtained from respondents in Malaysia, revealing that all of the above constructs exhibited a statistically significant and positive correlation with the intention to adopt FinTech. The results of the study also suggest that younger adults exhibit a greater inclination towards embracing Financial Technology (FinTech) compared to older individuals.

Furthermore, Shin (2009) found that the perception of security is the most influential factor in determining user intentions for mobile wallet services. Ooi & Tan (2016 as cited in Nasution et al, 2023) perceived security (PS) refers to the perceived security of the dangers associated with cellular transactions, particularly the risk of losing confidential information, which will result in financial losses. This is one of the primary reasons why perceived security is regarded as a crucial aspect of the adoption of financial technology.

Aside from these four factor that influence the intention and the adoption of the fintech, it is worth mentioning that the adoption of Fintech platforms is significantly influenced by the prevailing historical context, particularly the post-COVID-19 period. During this time, the necessity to embrace technological solutions for the delivery of diverse services, including financial services, has become more pronounced due to heightened social distancing measures and public health concerns (Xie et al. 2021 as cited in Bermeo-Giraldo, Valencia-Arias, Palacios-Moya & Valencia, 2023). Hence, the utilisation of smartphones or alternative mobile devices facilitates the interconnection of clients, payment providers, and merchants, enabling the seamless execution of transactions (Hasan et al. 2021).

The research conducted in Jordan also advocates for the adoption and utilisation of fintech among its population, as a means to address the economic challenges they face during COVID-19 (Al Nawayseh, 2020). This is the reason why Jordan has initiated early measures to facilitate its economy while the crisis, such as promoting the use of FinTech applications among its residents to carry out their financial activities both during and post-lockdown. The Jordanian government has recently declared its endorsement of mobile digital wallets as the primary means for salary transfers inside the private sector and among the unbanked population, a demographic that heavily relies on cash transactions. Nevertheless, the achievement of FinTech applications in Jordan is hindered by various economic obstacles, including the impact of a large number of refugees, limited use of mobile wallets, cultural hurdles, inadequate financial and digital literacy, and, the most important things is a lack of customer trust.

Moreover, according to Elsinger, Fessler, Feyrer, Richter, Silgoner and Timel (2018), fintech products have the potential to enhance accessibility to advanced financial products. The potential emergence of new financial stability issues may arise if individuals possess insufficient knowledge to effectively assess the risk profile associated with these products, hence facilitating easier accessibility. The acquisition of knowledge required to comprehend the quality or potential hazards associated with novel financial products, as well as the proficiency essential for using the corresponding information technology, is of utmost importance. Fintech enables a greater proportion of the population to access a wider range of financial products. It reduces the costs of numerous services and enables the delivery of products that are more precisely tailored. Fintech impacts not only transfers and payments, but also insurance, credit, and savings. It entails new technologies that necessitate additional technical understanding and digital service usage skills and competencies. Therefore, consumers require novel forms of financial literacy that are closely related to media literacy concepts. It can be said that with fintech, most of the people whether it's young people or an old people, will need and acquire a financial literacy in order to use the fintech that already been use by most of all people in the world.

Impact of Fintech

When it comes to the impact of fintech on financial inclusion, the changing of the community's lifestyle will be the first things that come our minds. As all people know, fintech is popular even before the Covid-19 pandemic, but it became even more evolve after the pandemic. Ningtyas and Siskawati (2022) argue that due to social distancing regulations, the existence of the COVID-19 pandemic has altered the way of life in this community, resulting in changes in consumer behaviour. Changing in lifestyle can be seen by the study done by Mahmudah and Milzam (2021). Their research aimed to determine the impact of fintech on the lifestyle of students in Pekalongan City. This investigation involved 100 university students between the ages of 18 and 22. This study revealed that the decision to accept an online loan is influenced by a variety of factors. 47% of students use PTP Lending to satisfy their wants, not their necessities. The majority of loan money is spent on purchasing electronics. Interview results indicate that college student lifestyle is the most influential factor in deciding whether to use fintech services. There are a number of factors that explain why the college lifestyle of students has become the most influential, including the desire for new experiences, the need to keep up with IT advancements, the importance of main studies in college, and the fear of missing out. Dorfleitner, Hornif, Schmitt, and Weber (2017) suggested that four categories of Fintech is including asset management, financing, payments, and other types based on the distinctive business models. For instance, Fintech covers a broad range of services, including payments, cryptocurrency, peer-to-peer (P2P) lending, Insurtech, crowdfunding and others.

Despite the devastating consequences of the COVID-19 pandemic on Malaysia, it has also created opportunities for the E-Wallet sector within the FinTech industry to thrive. One of the FinTech inventions that is currently gaining traction in the industry is the e-wallet category. The integration of electronic and mobile technology has resulted in a transition in payment systems to contactless payment. Over time, smartphone use has progressively increased (Moghavvemi et al., 2020). According to a poll conducted by Boku (2021), a global mobile payments network in the FinTech industry, there are currently approximately 2.8 billion users of mobile wallets. By the year 2025, it is estimated that this number will rise to 4.8 billion.

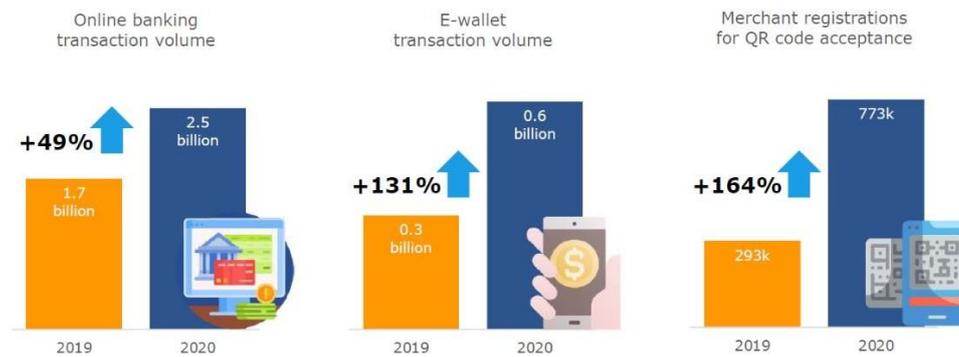


Figure 1. E-Payment Transaction for 2019 and 2020 in Malaysia
(Source: FinTech Malaysia Report, 2021)

During the pandemic back in 2020, The Malaysian Government Movement Control Order (MCO) had a crucial influence in the addition of 3 million new users of mobile banking services, as well as the extraordinary rise in the adoption and use of e-wallets. The adoption of QR (Quick Response) code payment acceptance by merchants increased by 164% compared to the previous year, with over 400,000 new firms signing up for this service.

According to Pintér et al. (2021) in the past few years, the proliferation of smartphones and internet access for millions of people has spawned numerous new financial and payment solutions such as Google Wallet and Apple Pay Application. People can obtain any type of credit from other Internet users without the involvement of institutions, pay with credit cards using mobile devices, and obtain information about expenses and incomes associated with the card from anywhere in the world. Users no longer need to visit institutions and waste time on credit arrangements, currency exchange, and the search for ATMs to withdraw cash (Kalmykova & Ryabova, 2016). In some instances, money had already shed its physical form and become digital. In the meantime, the role and functions of banks and financial institutions had evolved to the point where the global economy would be ineffective without them (Pintér et al., 2021).

Furthermore, we also can argue that financial literacy also one of the impacts on financial inclusion. According to Morgan and Trinh (2020), Financial literacy refers to an individual's ability to comprehend the fundamentals of a financial topic. It has been discovered that financial literacy is positively associated with fintech adoption. A study by Lee, Skillen and Nasraldeen (2022) has done a study that investigate the financial literacy of young adults and to determine the extent and influence of fintech on the behaviour of young consumers aged 17 to 24. The study discovered that while fintech adoption is prevalent among young adults, their financial literacy and fintech literacy must be improved so that they have the best chance of avoiding poor financial decisions and maximising their use of fintech.

Table 1

Relevant Theories Related

Theory	Author	Technology related to behaviour
Technology Acceptance Model (TAM) Author: Fred Davis 1989:	Fred, D. D., & Fred, D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. <i>Mis Quarterly</i> . 13 (3). 319 – 339.	Understand people acceptance towards information technology
Theory of Reasoned Action (TRA) Authors: Ajzen and Fishbein 1980	Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs. Prentice-Hall	TRA suggested that a person behaviour is determined by their intention to perform the behaviour.
Innovation Diffusion Theory (IDT) Author: E.M Rogers 1962	Rogers, E. M. (1962). Diffusion of Innovations, Third Edition. A Division of Macmillan Publishing Co. Inc.	To explain how, over time, and idea or product gains momentum and diffuses through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behaviour or product
Technology Readiness Acceptance Model (TRAM) Authors: Lin et al., 2007	Lin, C. H., Shih, H. Y., & Sher, P. J. (2007). Integrating Technology Readiness into Technology Acceptance: The TRAM Model. <i>Psychology and Marketing</i> . 24 (7). 641-657.	Combines Technology Readiness Index (TRI) common personality dimension with TAM's specific dimension system. This framework explain how the dimension of personality can affect a person's experience and the way he uses new technology
Unified Theory of Acceptance and Use of Technology (UTAUT) Authors: Venkatesh et al., 2003	Venkatesh, V., Morris, M. G., & Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. <i>MIS Quarterly</i> . 27 (3). 425-478.	Explain user's intention to use an information system and their subsequent usage behaviour.

Conclusions

This review paper also showed the implication of applying Fintech as part of human life. Moreover, the success of an organization especially in the financial industry depends on the intention and behaviour of consumer in adopts Fintech. Additionally, Fintech also boost someone's financial literacy and lifestyle change which it can change and shape the behaviour of consumer. As the implementation of Fintech expands and more knowledge is gained, future studies might reveal more information in this area. Future studies must examine a long-term impact of Fintech not only on organizations, but also on individuals, group, institutions and country.

Furthermore, the study focuses on consumer adoption intention in the FinTech industry, examining various factors influencing this inclination. Key determinants identified include perceived usefulness, perceived ease of use, subjective norms, and perceived security. Younger adults exhibit a greater inclination toward embracing FinTech compared to

older individuals, with perceived security being a critical factor in determining user intentions. The research emphasizes the impact of historical context, particularly the post-COVID-19 period, which has accelerated the need for technological solutions in financial transactions. While Jordan promotes FinTech adoption to address economic challenges during the pandemic, obstacles such as cultural hurdles and a lack of customer trust hinder its success. Additionally, the potential of FinTech to enhance accessibility to advanced financial products underscores the importance of financial literacy, as individuals need the knowledge to assess associated risks and effectively use new technologies. Overall, the findings highlight the multifaceted nature of factors influencing FinTech adoption, with implications for both individuals and societies.

Finally, the impact of FinTech on financial inclusion is profound, with significant shifts observed in community lifestyles. The COVID-19 pandemic accelerated the evolution of FinTech, altering consumer behaviour and emphasizing the importance of online financial services. Studies, such as Mahmudah and Milzam (2021), highlight that the adoption of online loans among students is influenced by various factors, with lifestyle playing a central role. The desire for new experiences, the need to keep up with IT advancements, academic pressures, and the fear of missing out contribute to students' engagement with FinTech services. Additionally, the proliferation of smartphones and internet access has revolutionized financial solutions, reducing the reliance on traditional institutions for credit arrangements and transactions. Financial literacy is identified as a crucial factor impacting financial inclusion, as demonstrated by the positive association between financial literacy and FinTech adoption. The underscores the need for improved financial and FinTech literacy among young adults to enhance their decision-making and optimize the benefits of FinTech adoption. Overall, the evolving landscape of FinTech, driven by societal changes and technological advancements, requires a simultaneous focus on understanding consumer behaviours and enhancing financial literacy to ensure inclusive and informed financial participation.

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