

ISSUES AND CHALLENGES OF FINANCIAL TECHNOLOGY (FINTECH) IN THE MALAYSIAN FINANCIAL MARKET

RAHMATIA JAMHOR

International Islamic University College Selangor
rahmatiajamhor@gmail.com

SHAFINA FISAL

International Islamic University College Selangor
shafina@kuis.edu.my

NURAU LIANI JAMLUS RAFDI

International Islamic University College Selangor
nurauliani@kuis.edu.my

ABSTRACT

Financial technology, commonly known as Fintech, is a term used by financial companies whose products or services are based on technology, resulting in highly innovative services. Fintech uses advanced technology and innovation to cope with traditional financial approaches in the delivery of financial services, and this have significantly elevated the financial system's efficiency and financial outcomes for businesses and consumers. Fintech is a growing industry and is a relatively new subject within the literature but is widely regarded as one of the most significant innovations within the financial industry. However, despite the benefits offered by the new technology, it is not without cause or turnover. Therefore, the purpose of this research is to present a conceptual paper, discussing the development of fintech over the years and its issues and challenges with respect to the current financial market scenario in Malaysia. The outcome from this study is hoped to give a broader understanding of the fintech issues and challenges faced by financial markets in Malaysia and provide an outlet for further discussions and possible recommendations for future research on fintech.

Keywords: *Fintech, Digital, Issues and Challenges*

INTRODUCTION

According to the Financial Stability Board, 'Fintech is defined as technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services (FSB, 2019). Pwc 2016 defines that, Financial technology (FinTech) is a marriage of sorts between the financial services (FS) and technology sectors — a dynamic segment where technology-centric start-ups innovate the products and services traditionally offered by financial institutions (FIs) (Padmanaban & Soo, 2016).

The rapid growth of technology has an impact, particularly in the areas of financial technology, which has resulted in the banking and financial industries being revolutionised (Nur et al., 2020). Fintech is essential to life in Malaysia. It is increasingly important to the national economy, with significant growth potential. Fintech innovation is widely expected to

thrive in Malaysia, a country with a large middle class and increasing cell phone penetration and supportive government toward the digital economy. Malaysian businesses and consumers also tend to be open to new technologies (IMF, 2020). However, despite the potential and benefit offered, there are challenges associated with financial technology. Therefore, it is imperative to keep tabs on the financial technologies as it will play a major role in business and economic growth.

The purpose of the study is to present a conceptual paper, discussing the development of fintech and its issues and challenges with respect to the current financial market scenario in Malaysia. The other purpose of this study is to provide an outlet for further discussions and possible recommendations for future research on fintech. This conceptual paper contribute to the broader understanding of fintech issues and challenges faced by financial markets in Malaysia. This study begins with the introduction of fintech, followed by discussion on the development of fintech in Malaysia. Next is on fintech issues and challenges in Malaysia. Fourthly, recommendation for future research and the study finally ends with a conclusion.

DEVELOPMENT OF FINTECH IN MALAYSIA

In the financial sector of Malaysia, financial technology (Fintech) is increasingly relevant. According to Malaysia Fintech Report 2021, Malaysia has 233 Fintech companies operating in a wide verity of sector such as payment (20%), wallet (15%), lending (14%), insurtech (9%), wealthtech (9%), remittance (6%), blockchain (6%), regtech (4%), Islamic fintech (4%), crowdfunding (4%), AI/ Big Data (3%), marketplace (3%), and proptech (3%). 95% of Malaysian are banked, and 27.4 million of internet user and 61.8% mobile banking penetration, the penetration of online and mobile banking has reached 112.5% and 61.8% respectively. The transactions of mobile banking surged more than double to MYR460 billion in 2020 from MYR200 billion in 2019. The surge in transactions was supported by a 3 million increase in mobile banking service subscribers in 2020 to 20.2 million, from 2019's 17.2 million. The penetration of online and mobile banking has reached 112.5% and 61.8% respectively (*Malaysia Fintech Report 2021*, 2021). In 2016, the Fintech Association of Malaysia (FAOM) was founded to support the fintech growth and to engage and help industry players in the advancement of fintech, and to connect with local and global stakeholders.

In the last decade Internet banking in Malaysia has quadrupled, showing an increase of over 100% usage rate in 2020. With the assistance of 4G network coverage and affordable data, Mobile Banking is also becoming prominent with projections of 5G connection in the works. It's no coincidence the World Economic Forum's 2020 Network Readiness Index ranked Malaysia (34th place) high among the 139 countries surveyed (Dutta & Lanvin, 2020). As Malaysians continue to adapt their everyday lifestyles to fit the 'new normal' during the pandemic, the spike in e-wallet usage became an inevitable trend. Movement Control Order was the spur for Malaysians to adapt their banking needs in a digital/mobile way.

The number of non-bank issuers providing payment solutions through mobile applications grew from 5 provider companies in 2016 to 47 in 2020, with a volume of MYR29 million for e-money transaction in 2020 (*Malaysia Fintech Report 2021*, 2021). Multiple mobile wallets have been launched by non-bank players in Malaysia, particularly Fintech startups and big technology firms. Based on a survey by Financial Times Confidential Research, among the most popular mobile wallet are GrabPay, Touch 'n Go (a partnership with Ant Financial) and WeChat Pay (Chua et al, 2020). In June 2016, the Financial Technology Enabler Group (FTEG) was set up by Bank Negara Malaysia (BNM) to promote the development and enhance the quality of fintech in Malaysia.

ISSUES AND CHALLENGES IN FINTECH

Due to the exponential and unparalleled growth in the usage of Information and Communications Technology (ICT), Malaysia, along with the rest of the world, has been rapidly ushered into the digital era over the last several decades. Despite the benefits offered by fintech, it does come with its own drawbacks and risks. Based on KPMG report, there are three types of risks in the fintech business: risks to consumers, risks to financial services firms, and threats to financial stability.

Risks to Consumers

Although fintech has the potential to provide many advantages to consumers, it also carries risks that can disadvantage them. To begin, there is a lack of customer understanding of the design and function of fintech (KPMG International, 2019). According to previous research, Malaysians of all ages and backgrounds continue to have a low level of financial literacy. The majority of Malaysians recognised that one's income must always be sufficient to cover expenses, but were unaware that additional financial products such as insurance were necessary to cover unexpected circumstances. The study then cited a survey conducted by Credit Counselling and Debt Management Agency (AKPK) that 1 out of 3 Malaysian rated themselves having low level of confidence about financial management (Mohd Aziz & Kassim, 2020).

Futhermore, adopting fintech solutions could result in the mis-selling of products and services by the fintech provider's to mislead or exposing the customer to fraudulent activity. When the supply chain gets more complicated and the misdeeds occurs, it would be more difficult to correct and resolve obligations and accountabilities. It could also lead to cyber security, the data privacy, confidentiality, and protection are critical for customers and when they use a fintech service, they are required to provide their personal information to the fintech provider. Consumers are at risk of losing their data and may be unaware of how their data is being used (KPMG International, 2019). As Fintech's development primarily involves growth using online networks, it makes this sector uniquely vulnerable to security breaches. Incidents of security violations at big corporations including Yahoo, Uber, Equifax and Google resulting in privacy of customers' personal data being breached, just contribute to the worries (SC, 2018).

Based on Malaysia cyber security strategy report, the cybercrime statistics 2018 and 2019 there's an increase of personal data breach from 3 cases to 26 number of cases, there is also E-Financial Fraud from 377 cases to 869 cases (NSC, n.d.). Between the launch of the MCO on March 18 and April 7, 2020, Cybersecurity Malaysia reported 838 incidents. Of this number, 18 % or 152 cases, included local businesses, with the remaining involved individuals and other entities. This is a significant increase from the 459 cases identified over the same period in 2019, according to data provided to Sunday Star by the agency's emergency response centre, Cyber999. Throughout the movement control order (MCO), the majority of cases contained theft, intrusion, and cyber harassment. Scams, phishing, and social media tactics are also examples of internet fraud cases used to trick victims to extract personal information from them. Intrusion refers to attempted hacking or data breach, while cyber harassment refers to cyberstalking (Yuen Mei Keng, 2020).

In addition, as big data analytics becomes more prevalent, it may result in increased costs and availability inequality. Meanwhile, increased digitalization could exclude less tech-savvy individuals, resulting in financial exclusion. It also the same case as the migrant population which one of the most frequently overlooked segments of society. Malaysia has nearly 2 million migrant workers, but a World Bank report suggests the figure is likely closer to 3.5 million. This equates to more than 10% of Malaysia's total population of 32.7 million.

This frequently invisible population is commonly denied financial services by traditional financial institutions due to their inability to meet account opening requirements (Fong, 2021).

Risk to Financial Service Firms

The exact nature of the risks varies according to the types of fintech solutions and emerging technology adopted by firms. Numerous financial services firms are facing growing competitive pressures as a result of fintech advancements in their business model viability. However, technology is not something that anyone, even the boards of directors and senior executives of businesses, can understand instantly. They may lack adequate knowledge of fintech and risk associated with it. As a result, they will be unable to accurately recognise, calculate, monitor, and control these possible threats (KPMG International, 2019). Malaysia faces a skills shortage in key fields related to Fintech technology, such as machine learning and data analysis. The technology has made several fast developments during the last decade, but many jobs must keep up with modern skills. Organizations, employers and governments in the tech ecosystem should be aware that improving capabilities is a joint obligation and that everybody is involved in creating and increasing workforce skills. According to the report, 100% of respondents in Malaysia thought it was difficult to recruit talent that would lead to business needs and development. (Soon & Thung, 2018).

Fintechs and BancTec's race neck-to-neck to develop tech teams and expand their capacity to fulfil industry demands because companies without the right skilled talent might risk missing out on new market opportunities that could boost their success (Yee, 2020). Both banks and Fintech companies were on the hunt for talent such as app developers, cloud programmers, network engineers, cyber security engineers, project managers and data scientists in the talented industry. Qualifications-wise, while candidates' working experience is of paramount significance, it is often useful for candidates to showcase their expertise on topics. Furthermore, due to the increasing importance of cyber protection in banking and insurance as well as transaction digitalization, employers are now searching for applicants with both expertise and recognised skills in data processing (HAYS, 2019). Furthermore, due to a shortage of cyber security personnel, organisations would be left unprotected and exposed to unfathomable cyber-threats. This could lead to the possibility of exploitation of customers' data and raising questions around data privacy and security. Besides that, the fintech firm also facing a challenge of regulation which certain fintech implementations pose complex legal issues, many of which remain unresolved, particularly where cross-border activities cross different national legal and regulatory structures (KPMG International, 2019).

Convenience and quick transactions in cross-border transactions are far more complicated, as recipient recognition relies on processes in another country. A country's Anti Money Laundering (AML) - Counter-Terrorism Financing (CTF) regulatory standard and Fintech firms' ability to comply with AML-CTF regulations will remain a regulatory issue. FATF, the international body responsible for fighting money laundering, has led efforts to avoid the misuse of virtual assets (such as virtual currencies, wallet providers and ICOs) to fund illegal activities. This includes strengthening existing requirements to ensure virtual asset service providers are subject to AML-CFT regulations that include tracking, recording and reporting suspicious transactions (SC, 2018).

Threats to Financial Stability

Technological advancement holds tremendous promise for the provision of financial services, with the ability to expand consumer access, product variety, and convenience, while simultaneously lowering client costs. Simultaneously, new entrants to the financial services

sector, such as FinTech firms and large, developed technology companies ('BigTech'), have the potential to significantly alter the universe of financial services providers. This may have an impact on the degree of concentration and contestability of financial services, with implications for financial stability both positive and negative (KPMG International, 2019). Concentration is a term that refers to the degree to which a market is dominated by a few large companies. Concentration reduction is associated with increased competition, which immediately creates more room for creativity, reduces the monopoly dominance of individual intermediaries, and therefore reduces cost. If technology enables new non-traditional service providers to compete against established ones, concentration can be reduced (Vučinić, 2020).

Successful fintech firms and early adopters, as well as dominant third-party providers, may gain importance in the system. Due to the high dependency on technology, economies of scale on IT providers would have an effect on financial stability (KPMG International, 2019). An over dependency on data-driven algorithms will result in errors that would not have resulted in a more human-centered setting. Automated systems' accelerated speed can also accelerate and disperse errors, exacerbating the possibility that error replication outpaces management's capacity to resolve it. Fintech has the potential to become a new mode of financial intermediation. This could result in expanded financial practises if they are not well monitored depends on the extent to which this technology will become a mainstream part of the financial ecosystem and to what extent it will ultimately be used for delivering critical services (Leibrock & Gray, 2017). Furthermore, widespread adoption of machine learning and other lending or trading strategies may result in herding behaviour (KPMG International, 2019), fintech also enables a broader range of people to exchange crypto properties. The growing use of crypto assets could result in market fluctuations and a possible effect on payment systems, potentially resulting in financial uncertainty.

Rapid digitalisation of the finance system inevitably raises the vulnerability of financial institutions to cyber-attacks. Such attacks have the potential to cause material disturbances to financial services, jeopardising the financial system's stability and credibility. The increasing complexity of cyber-attacks requires corresponding measures, both institutional and system-wide, to foster a financial industry that is both technologically advanced and robust to cyber threats. Cyber security is a top issue in major Malaysian banks' annual reports, as cyber-attacks will erode customer trust and result in a lack of confidence (Chua et al, 2020).

CONCLUSION

The study discusses the development of fintech and its issues and challenges with respect to the current financial market scenario in Malaysia. Based on the discussion above, it can be conclude that the importance of awareness, financial literacy in the digital era and the need to address the talent shortage in fintech industry. This study is hoped to give a broader understanding of the fintech issues and challenges faced in Malaysia. Although this research provides contribution on knowledge of development and challenges of several issue in fintech, it still has many limitations most notably that on the regulation development of fintech in the industry and their application in fintech service or products. The study also does not focus on the issues or challenges faced by Islamic fintech.

Reference

- Dutta, S., & Lanvin, B. (2020). *Network Readiness Index 2020*.
Fong, V. (2021). Providing Financial Services to Malaysia's Invisible Population. *Fintechnews*. Retrieved from <https://fintechnews.my/25780/financial-inclusion/migrant->

worker-financial-inclusion-merchantrade/

FSB. (2019). FinTech - Financial Stability Board. Retrieved April 28, 2021, from Financial Stability Board website: <https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/>

HAYS. (2019). The Inside Story of Finance Technology in Malaysia. Retrieved April 28, 2021, from https://www.hays.com.my/theinsidestory/hays_1917728

IMF. (2020). Malaysia: A Flourishing Fintech Ecosystem. *International Monetary Fund*, 1–5. Retrieved from <https://www.imf.org/en/News/Articles/2020/02/27/na022820-malaysia-a-flourishing-fintech-ecosystem>

Jochen M. Schmittmann Chua Han Teng. (2020). MALAYSIA Selected issues. In *International Monetary Fund* (Vol. 22). https://doi.org/10.1007/978-1-4684-3821-5_16

KPMG International. (2019). *Regulation and supervision of fintech*. (March), 16. Retrieved from <https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf>

Leibrock, M., & Gray, A. (2017). *FINTech AND FINANCIAL STABILITY EXPLORING HOW TECHNOLOGICAL INNOVATIONS COULD IMPACT THE SAFETY & SECURITY OF GLOBAL MARKETS*.

Malaysia fintech report 2021. (2021). Retrieved from <https://fintechnews.my/27070/malaysia/fintech-malaysia-report-2021/>

Mohd Aziz, N. I., & Kassim, S. (2020). Does Financial Literacy Really Matter for Malaysians? a Review. *Advanced International Journal of Banking, Accounting and Finance*, 2(2), 13–20. <https://doi.org/10.35631/aijbaf.22002>

National Security Council. (n.d.). *Malaysia Cyber Security Strategy 2020-2024*.

Nur, S., Binti, L., Abidin, Z., Hasimi, M., Yaacob, B., & Teknologi, M. P. (2020). Faktor-Faktor yang Mempengaruhi Penggunaan Fintech dalam kalangan Pengguna di Malaysia. *Jurnal Wacana Sarjana*, 4(2), 1–13.

Padmanaban, P., & Soo, H. K. Y. (2016). Catching the Fintech Wave. *PrinceWaterhouseCoopers Journal*, (November), 72. Retrieved from <https://www.pwc.com/my/en/assets/publications/2016-pwc-aicb-catching-the-fintech-ave.pdf>

SC. (2018). *Executive Summary Opportunities and Challenges : Financial innovation and the Fintech landscape in Malaysian Capital Market*. 9(1), 1–24. Retrieved from <https://www.sc.com.my/api/documentms/download.ashx?id=85390647-8f49-4f51-b0d7-6c742e7ab886>

Soon, L. N., & Thung, B. (2018). *ASEAN FinTech Census 2018*. 48. Retrieved from https://www.ey.com/en_sg/financial-services/asean-fintech-census-2018

Vučinić, M. (2020). Fintech and Financial Stability Potential Influence of FinTech on Financial Stability, Risks and Benefits. *Journal of Central Banking Theory and Practice*, 9(2), 43–66. <https://doi.org/10.2478/jcbtp-2020-0013>

Yee, T. J. (2020). Randstad: Shortage of Skilled Talents Hamper Growth of IT, Fintech in Malaysia. Retrieved April 28, 2021, from Digital News Asia website: <https://www.digitalnewsasia.com/business/randstad-shortage-skilled-talents-hamper-growth-it-fintech-malaysia>

Yuen Mei Keng. (2020, April 12). Cybersecurity cases rise by 82.5%. *The Star*, pp. 1–7. Retrieved from <https://www.thestar.com.my/news/focus/2020/04/12/cybersecurity-cases-rise-by-825>