# **SWOT Analysis of Î-FinTech**

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#### **ABSTRACT**

Financial Technology (FinTech) has become a buzz word in contemporary parlance due to advances in internet related technologies. This paper aims to study and analyze FinTech's (includes Islamic FinTech - Î-FinTech) strengths, weaknesses, opportunities and threats (SWOT). It also tries to present the challenges FinTech may face with TechFin in the future. The paper presents the problem of unbanked population and the opportunity that the unbanked population throws at FinTech firms. The paper discusses the issues of i-FinTech and importance of Shariah compliance with a role that OIC can play in ensuring the protection of i-FinTech depositors and investors. The paper throws light at growth and penetration of internet over the period of nine years. It also studies the investment in FinTech from 2014 to 2020 and specifically in cyber security in the same period. The paper recommends OIC to step in with International Islamic Fiqh Academy (IIFA) and The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) to protect Investors and strengthen trust in i-FinTechs.

Keywords: Fintech, SWOT, Unbanked, Cyber Security, OIC, Techfin

JEL Classification: G0

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## ÖZ

Finansal Teknolojiler (FinTech), internetle ilgili teknolojilerdeki gelişmeler nedeniyle çağdaş dilde moda sözcük haline gelmiştir. Bu makale FinTech'in (İslami FinTech veya Î-FinTech'in) güçlü ve zayıf yönleri, fırsatları ve tehditlerini (SWOT) incelemeyi ve analiz etmeyi amaçlamaktadır. Ayrıca FinTech'in gelecekte TechFin ile karşılaşabileceği zorlukları sunmaya çalışmaktadır. Makale, banka hesabı olmayan nüfusun sorunlarını ve banka hesabı olmayan nüfusun FinTech firmalarına sunduğu fırsatları da ele almaktadır. Ayrıca çalışma, i-FinTech konularını ve İslam İşbirliği Teşkilatı (İİT) i-FinTech mudilerinin ve yatırımcılarının korunmasını sağlamada oynayabileceği bir rolle Şeri uyumluluğunun önemini tartışmaktadır. Makale, dokuz yıllık süre boyunca internetin büyümesine ve yaygınlaşmasına ışık tutuyor. Ayrıca 2014'ten 2020'ye kadar FinTech'e ve aynı dönemde özellikle siber güvenliğe yapılan yatırımı da incelemektedir. Makale, İİT'nin yatırımcıları korumak ve i-FinTech'lere olan güveni güçlendirmek için Uluslararası İslam Fıkıh Akademisi (IIFA) ve İslam Ülkeleri İstatistik, Ekonomik ve Sosyal Araştırma ve Eğitim Merkezi (SESRIC) ile iş birliği içinde olmasını tavsiye ediyor.

Anahtar Kelimeler: Fintek, SWOT, Bankada hesabi bulunmayan, Siber güvenlik, OIC, Tekfin

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#### 1. INTRODUCTION

When 'too big to fail' organizations actually did fail in the 2008 creating global financial crisis, it gave birth to new disruptive babies called FinTech. It was not just a consequence of the crisis but perhaps it was waiting for the right moment to make an impact. The moment came immediately after the crisis. It was simply possible due to many other factors, such as advancements in internet related technologies, a rise in internet usage, making provisions for the unbanked population, etc.

This paper aims to study the Strengths and advantages of FinTech, its Weaknesses and disadvantages, Opportunities provided by the FinTech and Threats confronting FinTech.

Lets first define the FinTech; from its name it is quite clear that it is made of two word 'Finance' and 'Technology' and we call it "Financial Technology", which refers to the use of technology to deliver financial services. But then this service was already there ever since banking went online. Inutu Lukonga writes in his working paper for IMF "The application of technologies in financial services is not new, but fintech represents a paradigm shift. For centuries, banks have undergone technology enabled revolutions, such as international transfers, electronic banking, the rise of credit cards and the emergence of Automatic Teller Machines (ATMs), which were designed to support bank operations." (Lukonga, 2018)

The most widely adopted definition of FinTech is provided by Financial Stability Board (FSB) as a "technologyenabled 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, 2017).

Inutu Lukonga continues explaining the Fintech "By contrast, fintech challenges and sometimes displaces traditional financial institutions and processes, elevates the role of data as a key commodity and drives the emergence of new business models. Fintech is also being driven by changing customer demands particularly from millennials that have grown in a digitally connected world and do not have the same loyalty to banks. While some consumers, particularly corporates, remain loyal to banks, changing consumer expectations are exerting pressure on banks to adopt internet enabled technologies to improve their services" (Lukonga, 2018).

Investopedia simplifies and describes the FinTech as a "new tech that seeks to improve and automate the delivery and use of financial services. At its core, fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes, and lives by utilizing specialized software and algorithms that are used on computers and, increasingly, smartphones. Fintech, the word, is a combination of "financial technology" (investopedia, 2019).

It is this latter definition provided by Investopedia that is adopted here especially for the SWOT analysis. That descriptive definition talks of algorithms which are part of Artificial Intelligence and Machine Learning that has been increasingly adopted by all FinTech providers.

#### 2. SWOT

Figure 1 provides summary points of the SWOT analysis.

Figure 1

# SWOT Analysis (i-FinTech) Strengths Global / Borderless nature Weaknesses Mobile friendly Lack of trust Halal use (i-FinTech) Lack of capital Customer focused Less regulated Threats Opportunities Security Easy to start Non Shariah compliance (i-Unbanked FinTech) i-FinTech Regulation / Legal Reachability TechFin

# 2.1 Strengths

# 2.1.1 Global / Borderless Nature

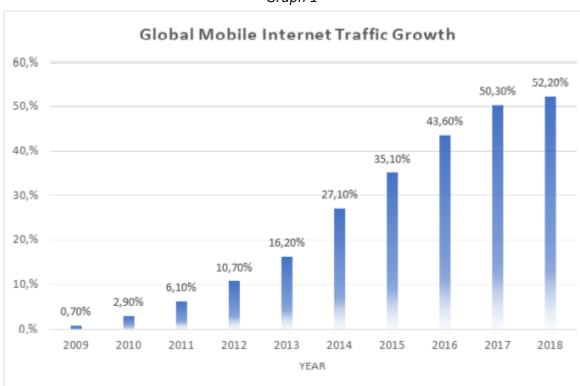
Location has become meaningless while deciding where to setup the office, thanks to rise in ecommerce enabled by FinTech. Monica Acree, head of market development at Braintree writes "Where businesses once needed to have a physical presence in another country before they could begin selling their products, ecommerce advances such as cross-border payments have removed those barriers" (BBC Capital, 2019). FinTech provides platforms which by their nature are presumed to be universal or simply call it borderless. MEDICI Team writes "The recently resumed Money20/20 gave us great insights into the future of FinTech and trends to keep in mind. The conference proved the borderless nature of FinTech to be true." (MEDICI Team, 2015)

<sup>3</sup> MEDICI Team is a group of content writers, bloggers, journalists, researchers, and editors from the MEDICI who collaborate to create FinTech insights.

Currencies, whether in the form of Cryptocurrencies / Crypto tokens or wallets, are created in order to be global to overcome cross border transaction and cost of transactions. The examples of these currencies could be Bitcoin, Ethereum, or Ripple.

# 2.1.2 Mobile friendly

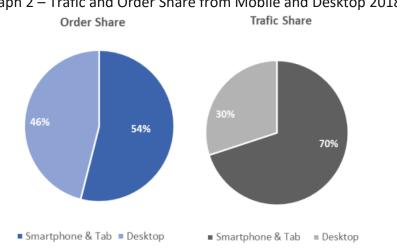
The rise in internet usage, especially the mobile internet, places FinTech in a special position to be more user-friendly.



Graph 1

Source: Data sourced from Dailywireless.org (Pensworth, 2021) | Graphics by Author

Graph 1 above illustrates the increase in Mobile Internet traffic as a percentage of all internet traffic over the recent ten years. As can be seen mobile usage crossed the 50% threshold in 2017 and has continued to rise in 2018 when it was 52.2%; a remarkable rise from 0.70% in 2009.

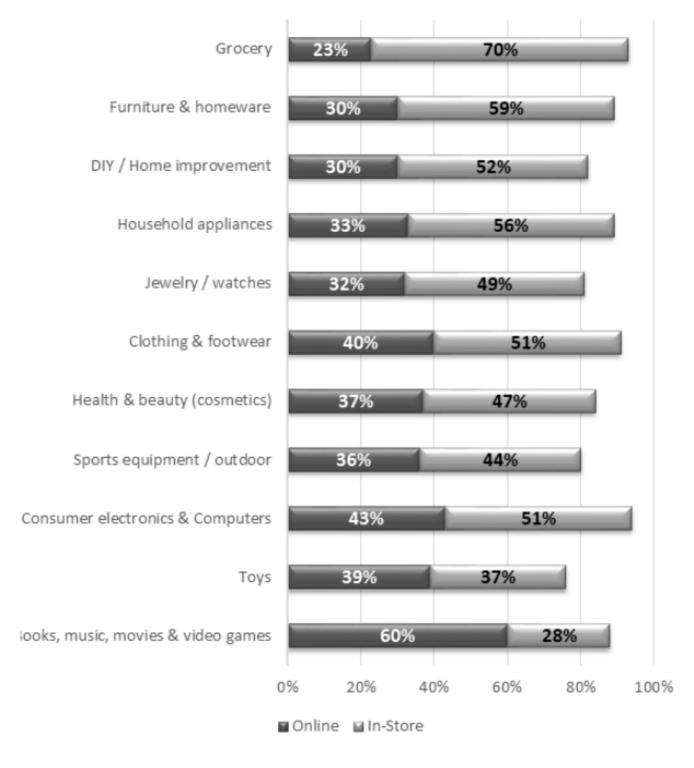


Graph 2 – Trafic and Order Share from Mobile and Desktop 2018

Source: Data sourced from Dailywireless.org (Pensworth, 2021) | Graphics by Author From graph 2 above, it is clear that the trend is towards mobile phones (smartphones + tablets) in comparison to desktops. The traffic share of mobiles is 70% and order share of mobiles are 54%.

As per Finleap Insight "With the growth in mobile phone usage come growth in mobile phone applications. FinTechs have aggressively entered the market and are focused on developing a fast and customer-friendly app to use". (Finleap Insight, 2019)

# Shoping Prefrence Online / In-store for select products - 2017



Source: Data sourced from statista (Kessel, 2017) | Graphics by Author

In graph 3 it is clearly displayed that only in the case the category of books, music, movies, video games and toys does the online shopping exceed in-store shopping. With the rising penetration of Amazon and similar sites providing all types of products online, the online purchase experience and trust is bound to rise in the years ahead.

Andrew Meola writes in Business Insider that "Mobile Internet usage has finally overtaken desktop, a fact that has had wide-ranging implications across various tech sectors.

Financial technology companies have become acutely aware of this shift and have been adapting to consumer demands for more mobile-friendly financial services as a result" (Meola, 2016). Beside the usual Banks, Visa, Mastercard and PayPal, there are a few others such as Apple Pay, Android Pay, Alipay, WeChat, TransferWise, Remitly, WorldRemit, Azimo, etc. that have further boosted the mobile experience for commerce.

## 2.1.3 Halal Use (i-FinTech)

Islamic FinTech (i-FinTech) is no different from any other FinTech in the market except for its halal nature (shariah Complaint). Halal is the state of fitrah (state of purity), which appeals to Muslims. Its not just because halal means good and pure but it is also because Muslims believe in life after death, which motivates them to desire halal products. Use of 'Halal' or 'Shariah Compliant' has strong marketing appeal. i-FinTech has to ensure it must follow the basic shariah guideline for all its products. That is, it has to be free from Riba, it must not be involved in speculative activities, it must not be used for crime or terror activities, it must be clean from obscenity and intoxicants. i-FinTech need to fulfill its promise and uphold the trust its customers have placed in it. Only by fulfilling these conditions can it be truly worthy of calling itself i-FinTech company. And this is what its customers expect from them.

OIC (Organization of Islamic Cooperation) must develop a special unit to study and certify the i-FinTechs. It can take the help of International Islamic Fiqh Academy (IFA) to study the shariah compliance and perhaps Statistical, Economic, Social Research and Training Center for Islamic Countries (SESRIC) to study the FinTech company's financial health and viability. This financial health certification is important as it will involve the funds of many poor Muslims who may be devastated by the failure of the FinTech. Hence it will be a great service by OIC to prudently study and certify the financial health and viability of the FinTech along with its shariah compliance.

#### 2.1.4 Customer focused

In the World FinTech Report (2018) on page 10 (Capgemini, LinkedIn, and Efma, 2018) the following two points are elegantly stated:

• "FinTech firms' primary competitive advantages are their agility to launch and pivot, their laser focus on customer experience".

"Most successful FinTech firms have focused on narrow functions or segments with high friction levels or those underserved by traditional financial institution".

The FinTech's niche is their focus on a specific need of the customer and improving customers' financial experience. This is specially vital for any small and medium size business that needs to build and grow. Customers are the soul of business, their attraction and their attachment to the firm assures success of a

firm, that is customer loyalty. Hence fulfilling the customer attraction is important and challenging for any firms. So FinTech firms have used technology to meet such expectations and remain focused.

## 2.1.5 Less regulated

There is little barrier for many of the FinTech companies as many of them are mostly service providers and do not act as depositors for savings. The regulators are improving law and trying to legislate regulation that could define and fit to the nature of FinTech.

BBVA Research suggests that "activities with similar levels of risk should have the same regulatory treatment, regardless of who performs them, in order to foment financial stability, consumer protection and the integrity of the system." (Álvarez, 2017)

FinTech companies can experiment with their ideas until they are regulated.

## 2.1.6 Other Strengths/benefits are:

FinTech can make assessing credit risk of small borrowers feasible and economical. Technological innovation, increased use of artificial intelligence (AI) and big data has enabled FinTech firms to assess the small borrowers and do it at much lower cost. There are chances of error, but AI is also known for fast learning. Most important is even small borrowers are assessed for their request by the help of these technologies.

- FinTech can support financial stability by reducing the banks' operational costs and improving risk management. Technologies such as artificial intelligence (AI), big data analytics, and blockchain ledgers addresses risk management requirements and the associated operational costs more efficiently. These technologies (a) can help in reducing systematic risk in lending, (b) helps in better reading of Market risk. (c) enables better understanding of volatility of financial markets. (d) helps in reducing lending bias. (e) helps in quick fraud detection. (f) helps in better profiling of clients. (g) helps in early warning of possible money laundering. (h) helps in constantly improve and warn on cyber security.
- FinTech can also improve financial integrity. In an era where technology has become embedded part of lifestyle, its only technology (FinTech for financial industry) that can help in safeguarding the Integrity of Financial Systems by identifying, understanding, assessing, and mitigating the risks of criminal misuse of technology. It is important that financial and banking supervisory bodies to develop laws and regulation matching the speed and complexity of new technologies in financial and banking sector.

#### 2.2 Weakness

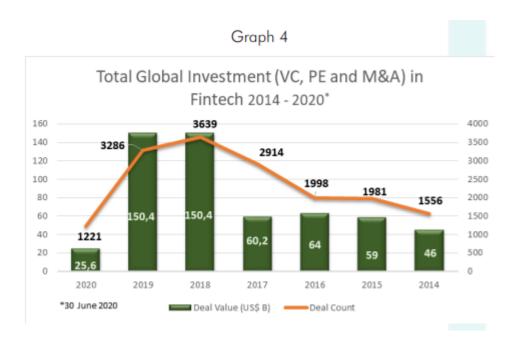
## 2.2.1 Lack of Trust

Richard Thakor and Robert Merton in a posting on VoxEU write "Financial technology firms are more vulnerable to a loss of trust than traditional banks because the latter have a stronger incentive to preserve their reputations .." (WSJ, 2018). The rise of FinTech was due to a lack of trust in banks after the global financial crisis. But banks have a long history of surviving and they have 'lender of last resort' status behind them, which is not the case with FinTech firms.

Moreover, FinTech firms have yet to establish a strong reliable brand and establish a strong network.

## 2.2.2 Lack of Capital

Funding has always been a challenge for the FinTech firms. Mark Whitcroft founding partner of Illuminate Financial says "A lack of financing opportunities and investor interest in capital markets FinTech at the Series A stage is contributing to a major gap in funding for the sector" (FinTech Global, 2017). 'The World Fintech Report' reports that FinTech "have struggled to profitably scale on their own. (While) Traditional financial institutions have a vast customer base and deep pockets, but with legacy systems holding them back, many are increasingly open to innovation through collaboration and APIs rather than building on their own." (Capgemini, LinkedIn, and Efma, 2018) Graph 4 below clearly indicates that over the past six and half years a mere \$555.6 billion were raised for the whopping 16,595 deals. Which translates to just \$.033 billion per deal on average.



Source: Data sourced from Pulse of Fintech H1' 2020 (KPMG, 2020) | Graphics by Author

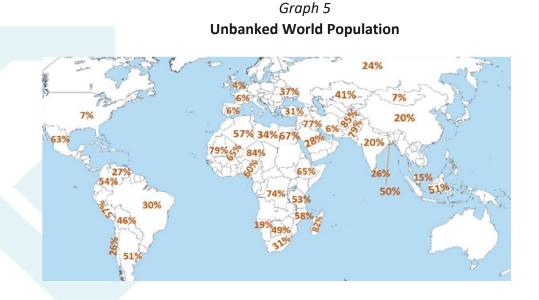
#### 2.3 Opportunities

#### 2.3.1 Easy to start

With little regulation and more imagination FinTech firms or startups are easy and, in fact, the governments and large firms encouraged these firms and potential entrepreneurs to try their wild ideas in the market. Hence many of the financial and technological companies have setup well funded incubators. The US initiated "Jumpstart Our Business Startups (JOBS) Act signed into law by President Barak Obama on April 05, 2012 and also referred to as 'crowdfunding Act'" (ALAM, 2018). According to Investopedia "The JOBS Act is geared towards allowing firms with potentially innovative ideas to hit the ground running without the obstacle of strict regulatory requirements." (Investopedia, 2019) Similarly the Government of India initiated 'Startup India Action Plan' in January 2016 with "the basic aim of this initiative is to encourage, support, develop and back the startups to innovate in all aspects, fields and industries; to enable the ideas to be developed and tested" (ALAM, 2018)

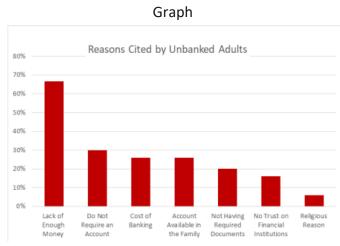
#### 2.3.2 Unbanked

According to the world bank's Global Findex Database "Globally, about 1.7 billion adults remain unbanked — without an account at a financial institution or through a mobile money provider. In 2014 that number was 2 billion" (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2017). The unbanked population has shrunk by 15% in over 4 years at an average rate of 3.75% a year. FinTech is one of the reasons for this increase in banked population. The map below displays unbanked population as distributed globally.



Source: Data sourced from The Global Findex Database 2017 (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2017) | Graphics by Author

The unbanked population presents a huge opportunity to many FinTechs to fill the gap and especially for i-FinTech as according to the Global Findex many Muslim populated countries cited religion to be a reason for not banking. From the same report I calculated that the Organization of Islamic Cooperation (OIC) countries have an average of 56% unbanked population. OIC members in Africa have an average of 62.8% unbanked population, Asian Members have 52.75% unbanked spopulation while the Middle East has 47.14% unbanked population.



Source: Data sourced from The Global Findex Database 2017 (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2017) | Graphics by Author

Graph 6 presents the principal reasons for being unbanked as provided by the unbanked population to Findex Survey.

#### 2.3.3 i-FinTech

Islamic FinTech can ease the challenges faced by the unbanked population on various issues, like reducing the cost of opening and maintaining the account, bringing the banking facility to their mobiles, easing documentation requirements, meeting the religious requirements, winning the trust and, upon winning the trust, encouraging them to have individual accounts in addition to family members having an account. But, for Islamic FinTech firms to succeed in the competitive sector of FinTech, it needs to invest in two areas 1. Invest in financial education and awareness. Many of its clients may not be aware of what is available for them. It has to make their presence and their customized products availability known to customers. This will win them more clients, more clients translates to success. 2. Invest in technological awareness. Adopting new technology is not easy specially when there are so much of continuous changes and development. It needs again more focused and user-friendly technologies, more importantly the firms needs to ease its adoptability by its clients specially for those who are not familiar with new technologies and those from poorer background by educating them and making them aware of its easy usage through various communication channels.

## 2.3.4Reachability

The beauty of FinTech lies in its global appeal. FinTech has the opportunity to be global, in the view of Inutu Lukonga "Regulatory and supervisory gaps could emerge that create opportunities for cross-sector and cross-border regulatory arbitrage. Non-bank payment service providers, ..... do not immediately fit neatly into the jurisdiction of any specific regulatory authority, or there may be ambiguity as to which authority is responsible for the non-banks. ...... Overall, the flood of fintech solutions and the speed of developments pose challenges for the regulatory formulation process, both in terms of pace and skills." (Lukonga, 2018)

#### 2.4 Threats

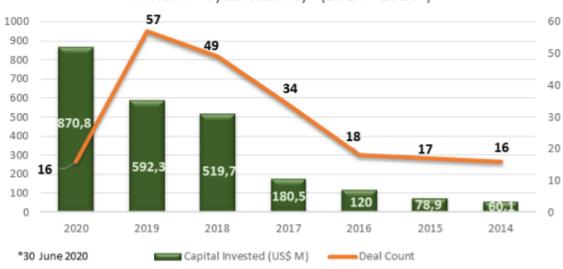
#### 2.4.1 Security

FinTechs are about internet connectivity, which involves communication with large numbers of connected devices having different software and security levels. Maintaining cybersecurity is the greatest challenge to the FinTech. The security of the system is at stake along with data and privacy. Implanting security features and keeping it updated is a real challenge in term of security innovation and the cost associated with it. Inutu Lukonga explains that "Cyberattacks constitute the biggest threat due to their increasing frequency, unpredictability, potential for systemic impact, and existing gaps in risk management. Cyber risks are not unique to fintech but increased interconnectivity driven by financial technological developments increase access points and the potential for cyberattacks to have system-wide impact. Successful cyberattacks could also erode confidence in technology-driven business models, slow-down the uptake of digital financial products, and hamper the overall development of the fintech industry." (Lukonga, 2018) We have seen a rise in cybersecurity investment by FinTechs but I believe it is not sufficient. This is because I believe security is the most important challenge for the FinTech. There is sudden surge in investment in cybersecurity after spread of Covid 19 in first half of 2020. Graph 7 below illustrates the FinTech investment trend over the past six and half years.

Graph 7

Total Global Investment (VC, PE and M&A) in

Fintech - Cybersecurity (2014 - 2020\*)



Source: Data sourced from Pulse of Fintech H1' 2020 (KPMG, 2020) | Graphics by Author

The total investment over last six and half years was a mere \$2.422 billion which is 0.43% of capital invested in FinTech over the same period. The total deal in the past six and half years for security was just 207 deals which is 1.25% of the total deals concluded in the same period. FinTech firms have to take security issues more seriously than it is at present.

But, there is an issue with the way investment analysts look in terms of the returns on investment. I believe that is perhaps hindering investment in security. I am reproducing the statement of Bia Bedri, Global Cyber Lead, Banking & Capital Markets, KPMG International on investment in Security. She says "firms are now having to justify this investment to their boards and to demonstrate a clear return on investment which is a challenge. Risk quantification, showing spending of \$X will reduce cyber risk by Y, but it is still maturing; making it difficult to clearly show the return on investment. ....... Financial services firms will need to think about security differently. They really need to embrace and deliver security by design (not as an add-on) and understand new and more agile ways of working with regulators, local governments, and national governments to start help shaping the future of the interconnected, digital age, such as 'Smart Cities', 5G, and new technologies like Blockchain and artificial intelligence." (KPMG International, 2019)

The National Cyber Security Centre - UK (National Cyber Security Centre, 2017) sets the minimum standards for protection for all sizes of companies. As a minimum, the following five main steps need to be taken: 1. Data Back Up; 2. Protection against Malware; 3. Securing Smartphones and Tablets; 4. Using Passwords for Data Protection and 5. Avoiding Phishing

## 2.4.2 Non Shariah Compliance (i-FinTech)

For i-FinTech after security challenge it has to guard its shariah compliance. i-FinTech has to ensure at no point of its transactions or services it is in violation of any of Shariah laws or lack of compliance. It must work to the extent that even the perception of non-compliance does not arise, as Shariah compliance is what differentiates it from others.

## 2.4.3 Regulation/legal

Though loose regulation is currently playing as an advantage for the FinTechs, it could be a big threat as well. In an unregulated or improperly regulated jurisdiction there are always chances of misuse of liberal regulation. In wide open regulation it becomes difficult to punish the rogue player. According to Financial Stability Board (FSB), the majority of the jurisdictions are already taking steps to regulate the FinTech and to protect its customers. A key stocktake by FSB on regulatory approaches to FinTech (FSB, 2017) are:

• A majority (20 of 26 <sup>1</sup>) of jurisdictions have taken or plan to take measures on FinTech. Other jurisdictions are considering changes, and one has chosen not to make changes.

<sup>&</sup>lt;sup>4</sup>Argentina, Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Indonesia, Italy, Japan, Kenya, Mexico, Netherland, Pakistan, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Switzerland, Turkey, United Kingdom, and US.

- Data availability is frequently mentioned as an issue, and there are sometimes legal or institutional
  constraints on action. Cross-border issues are not frequently discussed, largely because authorities
  are focused on domestic issues and mandates.

#### 2.4.4 TechFin

Until recently conventional financial system were dealing with FinTech disruption but suddenly they have the opposite word 'TechFin' taking the world of Finance by storm. Bangkok bank Innohub explains the difference between the FinTech and TechFin in the following words:

"FinTech is a financial innovation through which technology is applied in financial business to response to the needs of consumers. Whereas, TechFin is how leading technological companies expand their businesses into the financial industry. These include Google, Amazon, Facebook, and Apple, collectively known as Gafa, from the US, and Baidu, Alibaba, and Tencent, or Bat, from China." (Bangkok Bank INNOHUB, 2019)

Ant Financials <sup>2</sup>, the largest of TechFin company when it emerged into world of financing there was not much notice taken, but when Apple (Rooney, 2019) on 25th March 2019 announced its entry into digital credit card in partnership with Goldman Sachs and Mastercard, the world woke up to the realities of TechFin. Kate Rooney of CNBC writes with a note from Raymond James "The revenue potential is also unproven. While this appears to represent an "incremental benefit to users," the "revenue opportunity of the Apple Card product is unclear at this point," Raymond James wrote in a note to clients after the announcement" (Rooney, 2019). Obviously Raymond James Inc is trying to allay the fear of Apple's announcement on financial institutions.

Arunkumar Krishnakumar of Green Shores Capital writes "I believe, Apple has rocked the boat, and banks are feeling the heat. They are cash rich, know how to create digital+physical products, have a brand following, and can disrupt payments in a bigger way, if they chose to.

With IBM entering the remittance market through World Wire, Facebook testing out Whatsapp payments, Alipay entering the UK market in a big way, and Apple's recent announcement, the Penny should have Dropped for the banks. And the realization should hit them that **Fintechs were more of a distraction, the real battle has just begun"** (KrishnaKumar, 2019)

<sup>&</sup>lt;sup>5</sup> Previously known as Alipay.

#### 3. CONCLUSION

Finance industry after 2008 could not remain the same it was before the global financial crisis. It needed to address many things like, debt, derivatives, sub primes and net. Smartphones and mobile based apps brought in new types of revolutions to the internet. The mobile itself witnessed advancement in terms of mobile based internet connectivity from 2G to 4G and now 5G. FinTech was a natural progression fixing the shortcomings of the legacy of conventional banking and financing systems. FinTech firms normally concentrated on specific issues which has played as a niche for them. The world witnessed a tremendous rise in internet penetration. This rise in mobile internet connectivity was due to increases in internet speed and cheaper offers from the internet provider made the inroads for FinTech much simpler.

The unbanked population that existed due to stringent documentation requirements, minimum balance requirements, physical distance and sometimes due to religious beliefs, has given the FinTech firms a great market to accommodate. In fact, these firms are helping governments in their financial inclusion mission.

Less regulated areas of technology where now finance was being mixed gave the authorities a new challenge to define and evolve legislation that fits the FinTech. This provided FinTechs with space to experiment with their ideas. But this little regulated new area of commerce could also become a threat for the industry when rogue players increase, endangering the trust that is growing on the FinTechs.

OIC must step in to provide certification to i-FinTech which shall include the shariah compliance and financial health of the i-FinTech to safeguard the poor users from probable i-FinTech failure.

While the traditional financial institution were still thinking of how to meet the challenges thrown by FinTech and whether to imitate them or partner them; they were thrown a still greater challenge which was from BigTechs. Large technology companies ferried in to the world of finance, now named as TechFins. The TechFins have all the three major elements required to succeed in a modern finance system. 1) They have deep pockets, 2) They have the digital/technological edge, and 3) They have the largest database available.

The conventional financial institution have a remarkable experience of surviving the odds and the traditionally regulated banks have 'lender of last resort behind it. It will be in the interest of the conventional financial institutions to partner with the right FinTechs to meet the future challenges. FinTechs have a technical edge and knowhow, while the conventional financial institutions have deep pockets and a strong database.

Don't forget that Generation Z (Gen Z) <sup>3</sup> are used to technologies promoted by TechFins; which for future poses a bigger challenge for conventional finance and FinTechs.

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<sup>&</sup>lt;sup>6</sup> Generation after millennials are called Gen Z.

# Bibliography

ALAM, K. (2018). Epilogue: Post Conference Update: Venture Capital in India (2012-2016). In J. A. Khan, & K. ALAM, Islamic Finance & Venture Capital: Options for the Indian Economy (pp. 117-132). New Delhi: Genuine Publications and Media Pvt Ltd.

Álvarez, C. (2017, November 22). intech-regulation-seeking-a-level-playing-field-for-everyone. Retrieved from bbva.com: https://www.bbva.com/en/fintech-regulation-seeking-a-level-playing-field-for-everyone/Bangkok Bank INNOHUB. (2019, May 13). TechFin – the new challenge of the financial world. Retrieved from bangkokbankinnohub.com: https://www.bangkokbankinnohub.com/techfin/

BBC Capital. (2019). The future of fintech - Borderless business, BBC Capital. (BBC) Retrieved August 18, 2019, from bbc.com: http://www.bbc.com/storyworks/capital/the-future-of-fintech/borderless-business Capgemini, LinkedIn, and Efma. (2018). World FinTech Report 2018. Capgemini.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2017). The Global Findex Database 2017. Washington DC: World Bank Group.

Finleap Insight. (2019). Fintech Trends: Mobile Age. Retrieved from finleap.com: https://www.finleap.com/insights/fintech-trends-mobile-age/

FinTech Global. (2017, November 15). Fintech Startups Still Suffering From A Gap In Series A Funding. Retrieved from fintech.global: https://fintech.global/fintech-startups-still-suffering-from-a-gap-in-series-afunding/

FSB. (2017). Financial Stability Implications from FinTech: Supervisory and Regulatory Issues that Merit Authorities' Attention,. Financial Stability Board. Basel: Financial Stability Board. Retrieved August 16, 2019

investopedia. (2019, 06 25). Fintech. Retrieved August 17, 2019, from investopedia.com: https://www.investopedia.com/terms/f/fintech.asp

Investopedia. (2019, April 3). Jumpstart Our Business Startups Act (JOBS). Retrieved from investopedia. com: https://www.investopedia.com/terms/j/jumpstart-our-business-startups-act-jobs.asp

Kessel, I. v. (2017, July 17). Chart: Where Do We Buy What? Retrieved from Statista: https://www.statista.com/chart/10292/shopping-online-and-in-store/

KPMG. (2020). Pulse of FinTech H1' 2020. KPMG.

KPMG International. (2019). Pulse of Fintech 2019. KPMG.

KrishnaKumar, A. (2019, March 29). The battle of Fintech is over, the battle of TechFin is about to begin. Retrieved from dailyfintech.com: https://dailyfintech.com/2019/03/29/the-battle-of-fintech-is-over-thebattle-of-techfin-is-about-to-begin/

Lukonga, I. (2018). Fintech, Inclusive Growth and Cyber Risks: A Focus on the MENAP and CCA Regions.

New York: IMF. Retrieved August 16, 2019

MEDICI Team. (2015, November 24). 7 Most Important Things You Should Know About the Global FinTech Industry. Retrieved March 19, 2019, from gomedici.com: https://gomedici.com/7-most-important-thingsto-know-about-the-fintech-industry

Meola, A. (2016, December 16). Mobile fintech is here to stay with banking and payment services. Retrieved from businessinsider.com: https://www.businessinsider.com/mobile-fintech-is-here-to-stay-with-bankingand-payment-services-2016-12

National Cyber Security Centre. (2017, October 11). Small Business Guide: Cyber Security. Retrieved from National Cyber Security Centre: https://www.ncsc.gov.uk/collection/small-business-guide/backing-yourdata

Pensworth, L. (2021, March 7). 2021 Internet Statistics, Trends & Data - Daily Wireless. Retrieved from daily wireless: https://dailywireless.org/internet/usage-statistics/

Rooney, K. (2019, March 26). Apple's move into banking raises the bar for fintech, traditional credit cards. Retrieved from cnbc.com: https://www.cnbc.com/2019/03/26/apples-move-into-banking-raises-the-barfor-fintech-credit-cards.html

Wikipedia. (2019, August). 5G. Retrieved from en.wikipedia.org: https://en.wikipedia.org/wiki/5G WSJ. (2018, August 21). Trust and Fintech. Retrieved from WSJ.com: https://www.wsj.com/articles/trustand-fintech-1534848211