2020/21 Islamic Fintech in Malaysia

Reality & Outlook

INCEIF®
THE GLOBAL UNIVERSITY OF ISLAMIC FINANCE

ISRA International Shari'ah Research Academy for Islamic Finance
الأكاديمية العالمية للبحوث الشرعية في المالية الإسلامية

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OUTLINE

Foreword

The year 2020 has been a challenging one to say the least. The COVID-19 pandemic not only triggered a global health crisis, but also created a financial emergency which has caused the whole world to suffer severe negative economic impacts. Thousands of small and medium enterprises (SMEs) have shut down, leaving countless numbers of people unemployed with little hope to acquire new jobs. Such a situation urgently calls for inclusive solutions that have potential to address the challenges effectively in order to eliminate the hindrances in the path of citizens striving to fulfill their financial needs. With the adversity created by COVID-19, developing Islamic fintech is now more crucial than ever before, specifically in catering to the financial needs of the SMEs and the B40 community. Fintech holds the potential to provide inclusive and sustainable financial solutions that can uniquely cater to the financial needs of all segments of the society.

While the Islamic fintech ecosystem is still in its infancy, it has great potential for rapid growth. However, in order to materialize such potential, and make efficient use of it, there is a need for a conducive ecosystem. And for that, Malaysia has a great advantage as it can leverage on its position as an Islamic finance hub. Malaysia's robust regulatory environment, comprehensive fintech landscape, supportive Islamic finance community and the government's commitment to champion the Islamic economy, has already paved the way for Malaysia to be a global Islamic fintech hub. With such vision and advantages, Islamic fintech startups in Malaysia can secure long-term growth prospects by scaling up to serve the global Islamic economy, consisting of almost 1.8 billion people around the world.

Therefore, it is high time for the stakeholders to work together and develop a conducive Islamic fintech ecosystem that connects entrepreneurs, investors, and the talented human capital, along with the regulators providing them with a clear direction and roadmap to make Malaysia the global Islamic fintech hub.

As part of our role in supporting the ecosystem for Islamic fintech in Malaysia, this report provides all the relevant stakeholders with a comprehensive landscape of the Malaysian fintech ecosystem. It equips them with the necessary information to understand, and then participate in the growing field of Islamic fintech in Malaysia with their own talent and expertise.

Prof. Dato' Dr. Mohd Azmi Omar
President and CEO
INCEIF

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Executive Director
ISRA

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الأكاديمية العالمية للبحوث الشرعية في المالية الإسلامية

MDEC®

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Preface

The interest in developing Islamic fintech in Malaysia and the efforts in achieving it are constantly on the rise. Several startups have launched Shariah-compliant fintech solutions. Shariah advisory boards at regulatory and industry levels have discussed various Shariah issues related to fintech. Resolutions and exposure drafts have been issued or modified by regulators to cover a wide range of Islamic fintech activities. Some government agencies have established dedicated departments to support fintech and the Islamic digital economy. Universities and training centres have started offering specialized courses and programmes to provide the requisite human capital, while research centres have invested in substantial efforts to push the industry forward by conducting extensive research and providing consultancy services. This report documents a representative sample of such efforts.

The report aims to provide stakeholders with the necessary information about the fintech landscape and ecosystem in Malaysia. It gives a guide to local and foreign fintech entrepreneurs on how to establish and to grow their Islamic fintech startups in Malaysia. It provides an overview of the regulatory environment and the supporting institutions in Malaysia. It explains funding opportunities and human capital development initiatives. The value proposition of Islamic fintech as a driver for innovation in Islamic finance is also presented in this report. The report also discusses the product development process of Islamic fintech solutions and the necessary Shariah governance framework to ensure Shariah compliance of Islamic fintech solutions.

Various business models, value propositions, key activities and achievements for selected cases of Islamic fintech startups in Malaysia will be highlighted in this report. The cases have been selected carefully to cover different areas of Islamic fintech within different market segments. It aims to display diverse techniques for innovation in creating Islamic fintech solutions. These case studies will provide investors, as well as talented entrepreneurs who wish to be a part of the Islamic fintech ecosystem, with significant insight into the opportunities that Malaysia's Islamic fintech ecosystem has to offer.

In order to provide more depth and insight about Islamic fintech entrepreneurship, first-hand interviews were conducted with the founders and CEOs of some promi-nent companies in the Islamic fintech ecosystem. These experts who hail from diverse backgrounds, demographics and areas of expertise, provide a different per-spective to various issues regarding Shariah, use of technology and business mod-elling. Despite their differences, they all share one common experience; they have navigated the unchartered territory of Islamic fintech in Malaysia and have had the first-hand experience of providing Islamic fintech solutions in this country. These are valuable insights to all who are interested in exploring Islamic fintech.

Dr Kinan Salim
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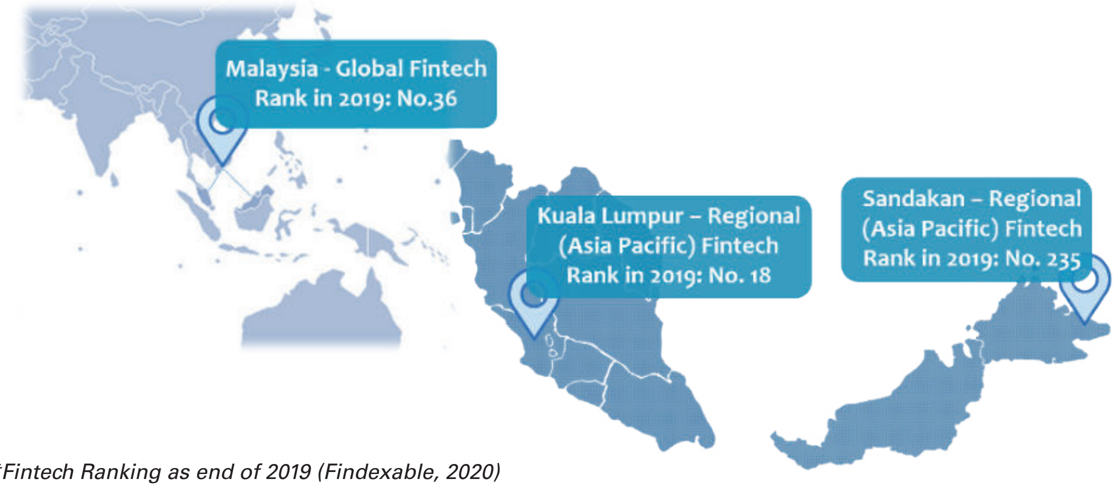
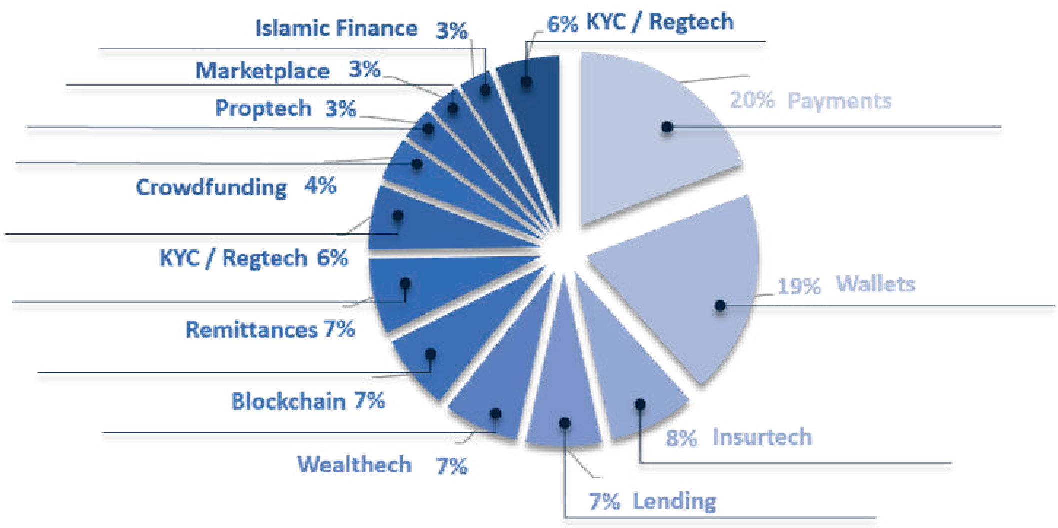
The Ecosystem of Fintech in Malaysia



**Fintech Ranking as end of 2019 (Findexable, 2020)*

Malaysia has shown steady growth in fintech on both the global and regional levels. It has become one of the fastest-growing fintech markets in Southeast Asia with nearly 200 local and foreign fintech companies operating in the country as of September 2020. The majority of Malaysian fintech activity has been concentrated in the wallets and payments space, where mobile and e-commerce have led to real demand from underserved consumers and merchants. This trend has also been supported by Bank Negara Malaysia's agenda to accelerate the country's transition to electronic payments (e-payments), and thus, quicken the pace for the country to realize the consequent cost savings and other various benefits. Further innovations that are entering the mainstream include alternative financing platforms, insurtech, blockchain and remittances. A burgeoning subsector has since emerged from the fintech industry, namely the Islamic fintech niche, which focuses on the use of technology to deliver Shariah-compliant financial solutions, products, services and investments. (See Figure 1).

Figure 1 Key Fintech Verticals in Malaysia Based on Number of Companies in 2019



Source: Fintech News TNG e-Wallet Fintech Report (2019)

This section explains the Malaysian fintech ecosystem which has been set to pave the way for the growing sector. The discussion covers four key pillars that are the regulatory framework, the supporting institutions, funding schemes and human development programs. Figure 2 provides a brief overview, while the details are followed.

Figure 2 - Key pillars of the Malaysian Fintech Ecosystem

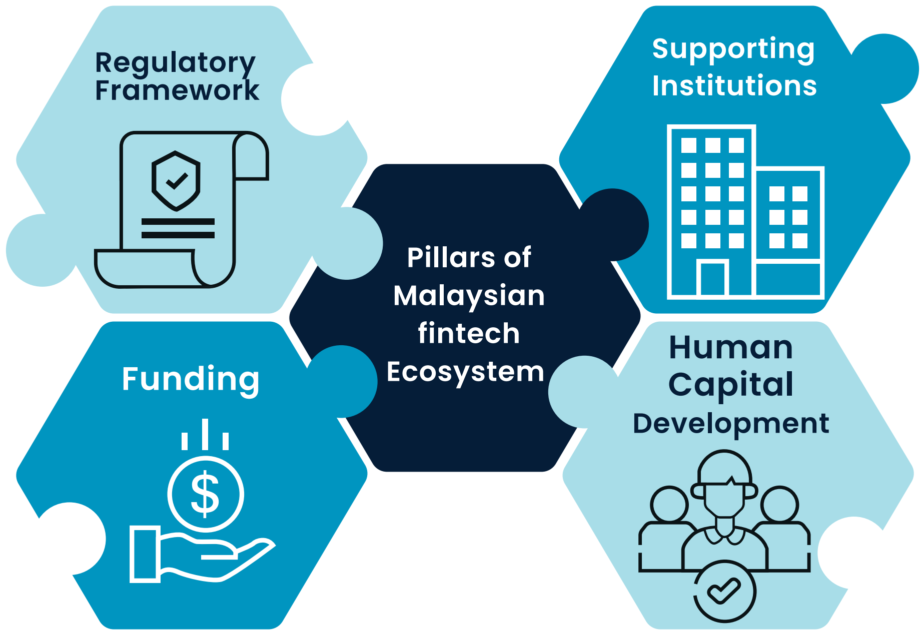
Bank Negara Malaysia (BNM)

- Financial Technology Enabler Group (FTEG)
- Financial Technology Regulatory Sandbox Framework
- Recommendation in Fintech areas such as e-money, digital banking, open banking

Securities Commission of Malaysia (SC)

- Capital Market & Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019
- Guidelines on Recognized Markets 2019
- Guidelines on Digital Assets 2020

- Government supportive agencies & business incubators: MDEC, MAVCAP, Cradle
- Accelerators & Digital Labs: Selangor Accelerator Program (SITEC), MaGIC Global Accelerator Program (GAP), Cyberview Living Lab Accelerator, Fintech Lab Accelerator Program, Orbit; Fintech Hub, UNCDF Finlab Fintech labs established by financial institutions and academic institution.
- Fintech association



- MOSTI Funding: MOSTI R&D Fund for SMEs & International Collaboration Fund
- MOHE Funding: Grant for Research University, Trans-disciplinary Research Grant Scheme, Grant for HiCoE, Fundamental Research Grant Scheme (FRGS) and Long Term Research Grant Scheme (LRGS), Prototype Research Grant Scheme (PRGS)
- CFSB Funding: CIP Ignite I & II and CIP Accelerate
- MAVCAP Funding: Super Seed Fund, 500 Durians
- KMP Funding : Funding focusing on E&E Sectors
- MDV Funding: MDV Technology Acceleration and Commercialization Scheme (MDV-TACT)
- MBAN Funding: Venture Capital Funds

- MTEP Incentives for tech-founders to venture into the ASEAN market from Malaysia
- PDTIs - produce high quality graduates for digital tech-based
- eXpats Service Centres - facilitate foreign knowledge workers' applications for MSC Status and ICT companies operating in Malaysia
- Fintech Booster Program - facilitates for fintech companies to understand legal, compliance, and regulatory requirements
- Academic Program – Undergraduate and Postgraduate Fintech Programs

Source: Authors' Own

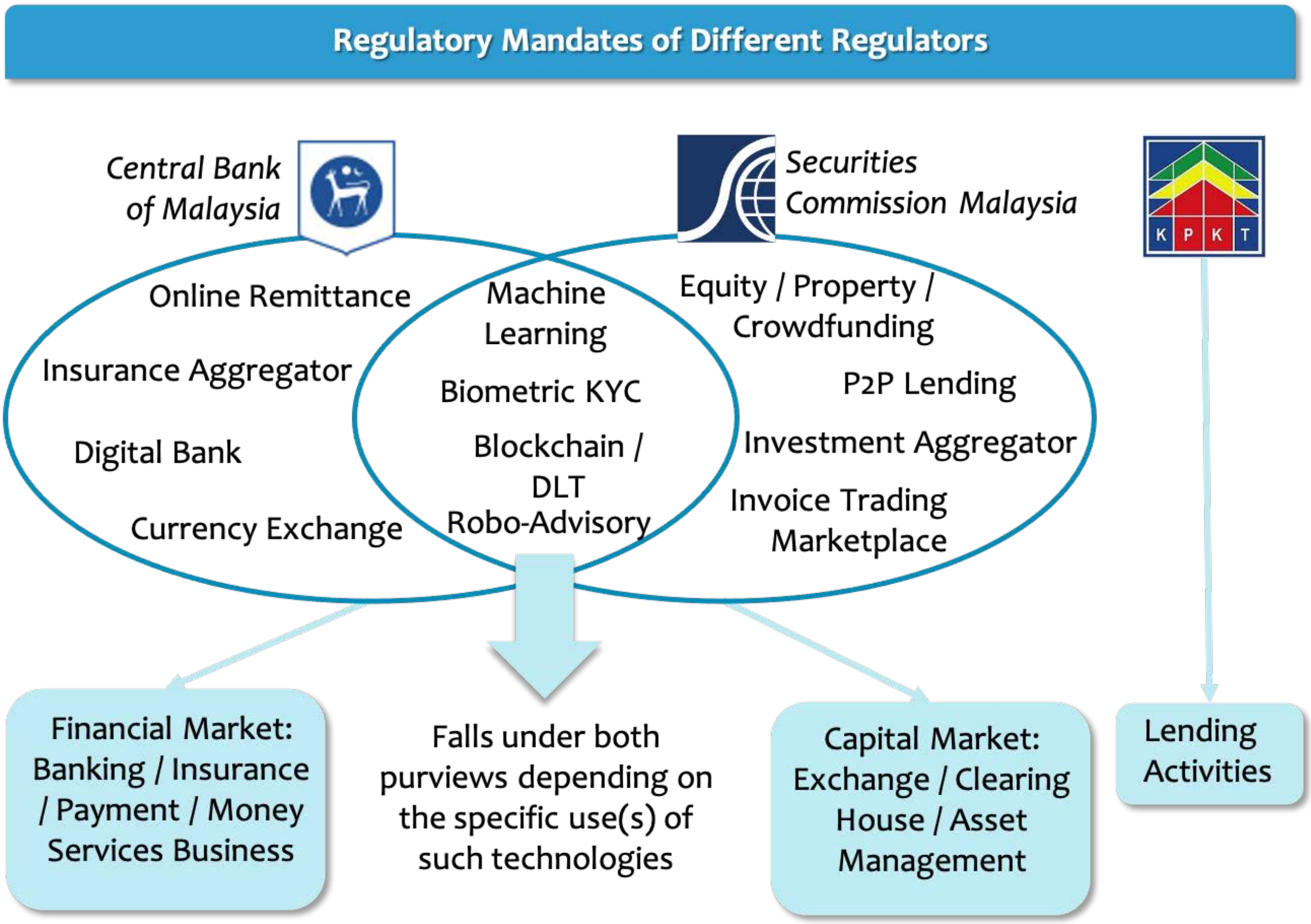
1. Regulatory framework

Malaysia has two regulatory authorities that regulate its financial system; the first is Bank Negara Malaysia (BNM) that acts as a regulator for banking institutions, insurance/takaful companies and activities related to payment and money services. The second regulatory institution is the Securities Commission of Malaysia (SC), which is a statutory body established under the Securities Commission Act 1993 that regulates capital market activities in Malaysia.

Fintech regulations in Malaysia are based on the nature of financial activities a platform facilitates. If the financial activities only fall under the purview of BNM, only then is BNM responsible to oversee them. The SC is involved with fintech activities concerning capital markets, such as equity crowdfunding and P2P lending. However, some areas are jointly regulated by both BNM and SC. Another area that possibly involves fintech companies, is lending activities that occur without taking deposits from the public. This area will be under the supervision of the Ministry of Housing and Local Government (Malay: Kementerian Perumahan dan Kerajaan Tempatan, abbreviated KPKT).

See Figure 3 for details.

Figure 3 The Scope of Each Regulator.



Source: BNM Fintech Booster Launch Session 2 (2020)

While innovation is an exciting journey for the market, regulators strictly uphold their concern to protect the investors and ensure market stability. As such, the various involved regulators regularly revise their guidelines/ regulations following the fast-paced innovation towards achieving their mandates. The following list demonstrates the major currently applied regulations and exposure drafts in the fintech avenues.

1

Banking, investment banking, insurance/takaful, money changing, remittance, operating a payment system or issuing payment instruments.

- Financial Services Act 2013 (FSA)
- Islamic Financial Services Act 2013 (IFSA)

Digital Assets

- Capital Markets and Services (Prescription of Securities) (Digital currency and Digital Token) Order 2019
- Digital Assets Guidelines
- Guidelines on Recognized Markets

2

3

e-KYC

- Supplementary Document to the Anti-Money Laundering Framework
- e-KYC Exposure Draft

4

Digital Banking

- Licensing Framework for Digital Banks - Exposure Draft

Financial Crime

- Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA)
- Malaysian Anti-Corruption Commission Act 2009 (the MAC Act)

5

6

Cyber Security

- Communication and Multimedia Act 1998;
- Communication and Multimedia Commission Act 1998;
- Computer Crimes Act 1997;
- Copyright Act 1987;
- Consumer Protection Act 1999;
- Consumer Protection (Electronic Trade Transactions) Regulations 2012;
- Digital Signature Act 1997;
- Electronic Commerce Act 2006;
- Malaysian Communication and Multimedia Content Code (Version 6,published in 2012);
- Penal Code;
- Personal Data Protection Act 2010;
- Personal Data Protection Regulations 2013;
- Personal Data Protection Standard 2015;
- Strategic Trade Act 2010.

Source: Shearn Delamore & Co. (2020)

1.1 Bank Negara Malaysia

In 2016, Bank Negara Malaysia has established the Financial Technology Enabler Group (FTEG), to support innovations that will improve the quality, efficiency and accessibility of financial service in Malaysia. FTEG comprises cross-functional groups within BNM and is responsible for formulating and enhancing regulatory policies to facilitate the adoption of technological innovations in the Malaysian financial services industry.

There are three key principles underlying BNM approach to fintech regulation: Parity, Proportionality and Neutrality. Parity means providing a level playing field for both incumbents and new entrants. Proportionality implies balancing between benefits and risk, while neutrality implies prioritizing desirable outcomes over preference to specific technologies. Considering these principles, BNM has outlined five approaches to promote an enabling environment for fintech companies. This includes a regulatory coordination with other regulators in order to pave the way for innovation, a flexible business enabling environment that allow testing new innovative ideas, an outreach educational and guidance agenda to engage the fintech players and explain about the regulatory requirements, an active regulatory setting by recalibrating existing regulations and publishing new polices that covers the new fintech areas, and lastly establishing and enabling shared infrastructure that enhance customers experience. A detailed explanation of these approaches are provided in Figure 4 , followed by further explanation of BNM Sandbox and key fintech policies.

Figure 4 Approaches and multi-pronged strategic initiatives in facilitation Innovation

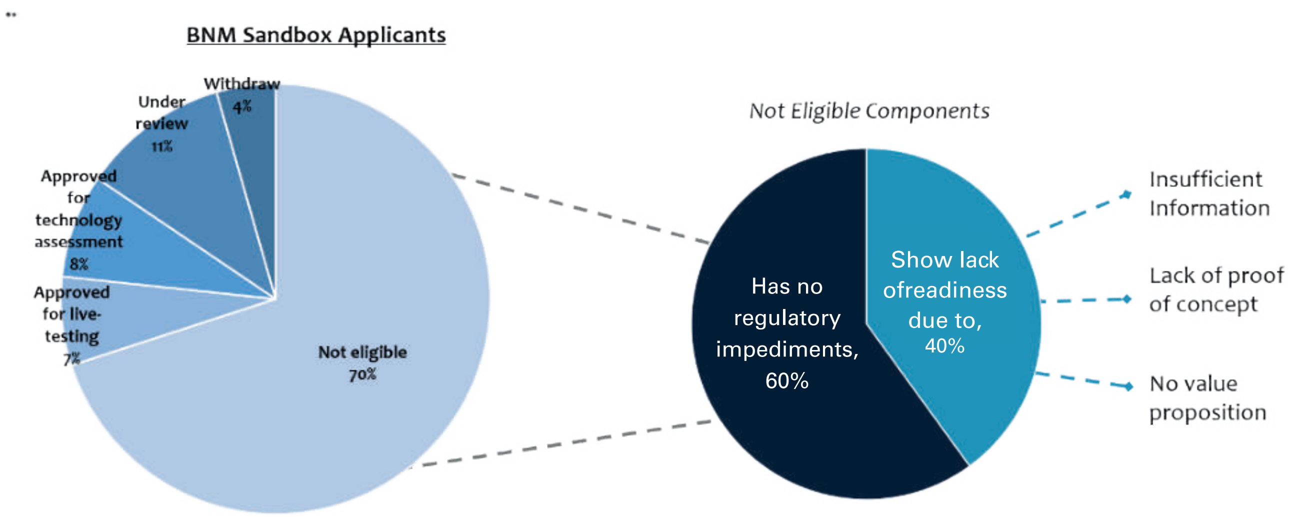
5 Main Approaches	Multi-Pronged Strategic Initiatives	Detailed Activities
Regulatory Coordination Driving the fintech agenda in close collaboration with other key agencies such as SC & MDEC	▪ Digital Assets ▪ Digital Identity ▪ Direct Industry Engagement	BNM coordinates with selected entities in Malaysia to come out with an agreement on how innovation should be regulated.
Policy & operational flexibility Operating a regulatory sandbox to enable live-testing of emerging businesses in a safe and contained environment	▪ Regulatory sandbox ▪ Specialized sandbox track ▪ Innovation lab	Fintech companies are facilitated by BNM to test their solutions within the BNM Sandbox Framework. The two stages involved are an assessment of technology and live-testing. All the key parameters and KPIs for the Fintech to graduate are set earlier.
Outreach, education & guidance Conducting educational and public outreach programs for fintech platforms to communicate and clarify regulatory expectations	▪ Fintech hacks ▪ Accelerator & booster programs ▪ MyFintech week 2019 ▪ FEN ▪ MyKNKP	BNM organizes My Fintech Week and Fintech Booster to enhance the capacity of the Fintech ecosystem where the players can directly engage with the experts in regard to their concern on regulations.
Regulatory Setting Recalibrating existing regulations and publishing new policies to facilitate new innovation	▪ Interoperable credit transfer framework ▪ Insurance / takaful aggregator framework ▪ Outsourcing PD ▪ RMIT ▪ Digital banking framework ▪ E-KYC guidelines	Fintech companies need to comply with all the regulations in their operations and activities, otherwise they need to seek alternative methods. They must convince the regulators regarding their approach to mitigate upcoming risks and ensure their sustainability.
Enabling shared infrastructure Implementation of open/digital infrastructure in collaboration with other industry players to catalyze the growth of fintech	▪ Open API ▪ DLT for trade finance	BNM supervises Fintech in ensuring the usage of technology has significantly reduced the hassle for the consumers.

Source: Adapted from BNM Fintech Booster Launch Session 2 (2020)

BNM issued the Financial Technology Regulatory Sandbox Framework (Sandbox) in 2016 which allows regulatory flexibilities to be granted to applicant fintech companies to experiment with fintech solutions in a live and controlled environment which is accompanied by the appropriate safeguards, for a limited period. The Sandbox focuses on innovations that can improve the accessibility, efficiency, security and quality of financial services; enhance the efficiency and effectiveness of Malaysian financial institutions' management of risks, and address gaps in or open up new opportunities for financing or investments in the Malaysian economy.

As of August 2020, there have been 90 applications for the Sandbox since 2016. They come from various sectors within the industry, but a large amount came from the payment sector. However, with the passage of time, insurance and takaful participation have become apparent in the Sandbox. Out of the total applications, 6 companies have been approved for live-testing and 7 companies have been approved for technology assessment. There are 10 companies that are still under review and another four have withdrawn due to changes in business partners and business models. 60% of the rejection has no regulatory impediment, as startup companies don't have the resources nor the experience for regulatory consultation before application while 40% showing lack of solution readiness, as the sandbox is seen as a means for testing ideas rather than solutions (See Figure 5).

Figure 5 BNM Sandbox



BNM Fintech Booster Launch Session 2 (2020)

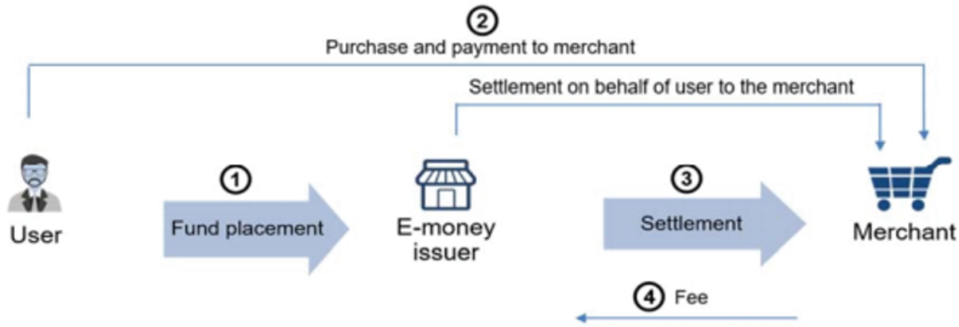
“We help identify whether or not their activity or business models fall under BNM regulations. We adopt an ‘informal steering’ approach where we guide and advise participants on the modifications that can be made. The sandbox does not preclude licensing eligibility criteria. It may be viewed as a ‘learner’s permit’ but a full license is not necessarily guaranteed.”

Suhaimi Bin Ali, director of the Financial Development and Innovation Department at BNM
BNM Fintech Booster Launch Session, August 2020

BNM has issued regulations and recommendations covering many areas of fintech including e-money, digital banking and open banking.

Electronic Money (E-Money)

Figure 6 - What is e-money?



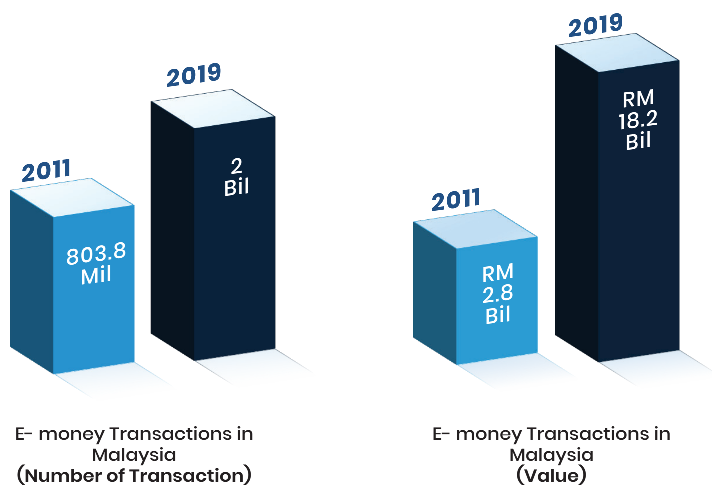
1. A registered user places funds into the e-money account.
2. The user conducts a transaction with the merchant.
3. The approved issuer makes settlement to the merchant on behalf of the user.
4. The approved issuer imposes fees to the merchant based on the contractual agreement between the approved issuer and the merchant.

Source: BNM (n.d.)

E-money can be issued in different forms, such as card-based (e.g. prepaid card), and network-based which can be accessed via the internet, mobile phones or other devices. BNM differentiates between two types of e-money schemes: small schemes and large schemes, which is determined by the purse size and the outstanding e-money liabilities. In both cases, e-money issuers are required to adopt the principles and the minimum standards as per the BNM Guideline on Electronic Money (e-Money), taking into consideration the nature, size and complexity of their e-money schemes. While the Guideline is applicable to all e-money issuers in Malaysia, including licensed institutions, the guideline includes additional requirements for issuers of large e-money schemes that are not licensed institutions.

Currently, there are 6 banks and 48 non-banking e-money issuers in Malaysia (BNM, 2020a). Statistics from 2011 to 2019 show that the value of e-money transactions in Malaysia rapidly increased from RM 2.8 billion in 2011 to RM 18.2 billion in 2019. As far as the number of transactions are concerned, the number sky-rocketed from 803.8 million transactions in 2011, to two billion transactions in 2019. The on-going pandemic is also expected to cause a further increase in this form of contactless payment, with more and more people showing interest in e-money.

Figure 7 E-Money Transactions in Malaysia (2011 vs 2019)

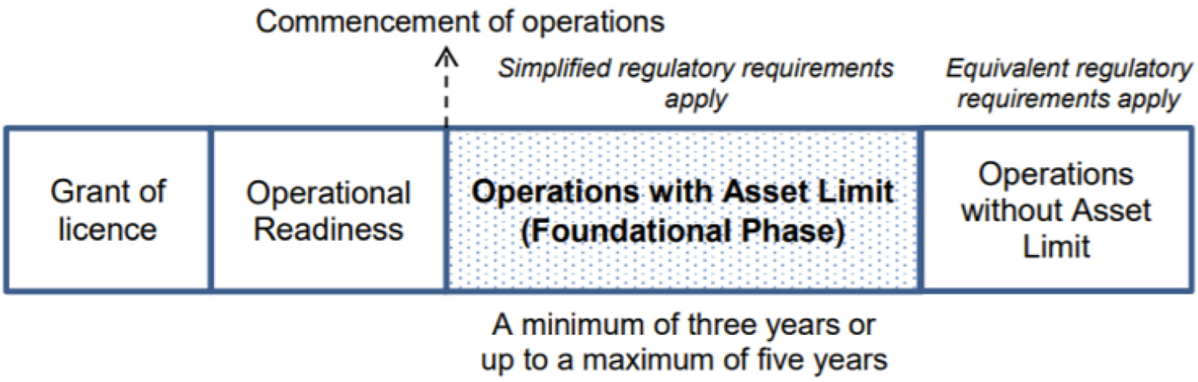


Source: BNM (2020b)

Digital Banks

Digital banks deliver banking services through digital channels such as the internet. They typically target unbanked customer segments such as low-income individuals, early income millennials, startups as well as small and medium enterprises (SMEs). While a first exposure draft of the Licensing Framework for Digital Banks was issued in Dec 2019, an updated version has been made available in March 2020. Based on the simplified regulatory framework proposed by this draft, a licensed digital bank shall be under a "foundational phase" of three to five years of operations, during which they will have an asset limit of RM2 billion. During this period, they must also maintain minimum of capital funds unimpaired by losses of RM100 million, and RM300 million thereafter. In addition, 25% of the digital bank's on-balance sheet liabilities must be held in high quality liquid assets.

Figure 8 Licensing Framework for Digital Banks: timeline of regulatory requirement



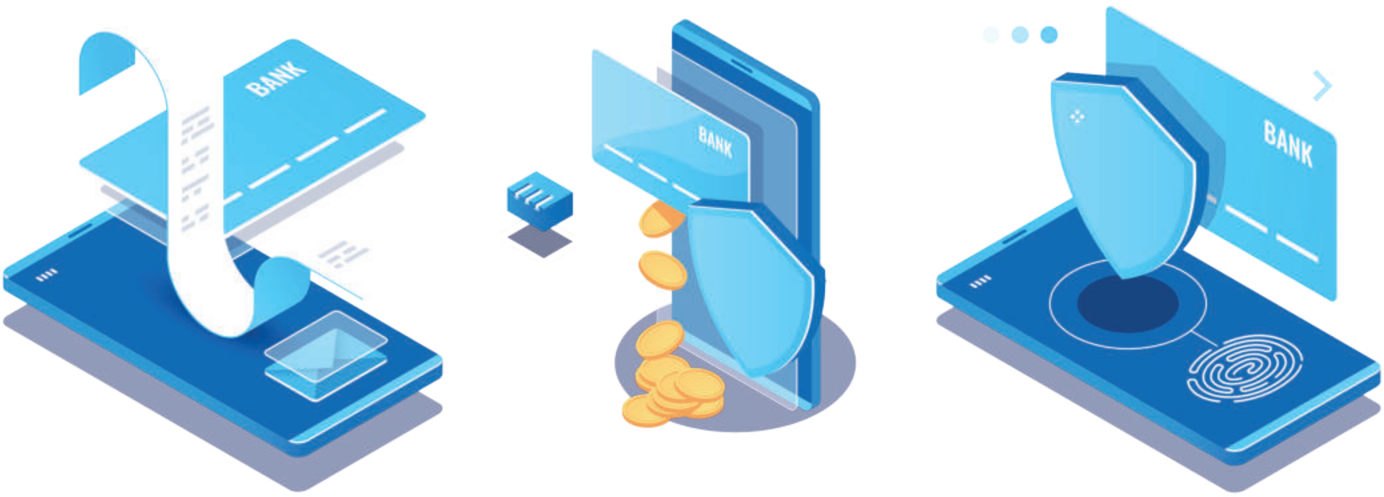
Source: BNM (2020c)

It is worth mentioning that Bank Negara emphasized in the press release associated with the announcement of the exposure draft in December 2019 that the licensed digital banks should be able to offer banking products and solutions to the underserved markets in Malaysia. Such banks should also provide meaningful access to and promote responsible usage of suitable and affordable financial solutions to financial consumers as announced in the press release associated with the issuance of the exposure draft. This clearly conveys a message that digital banks in Malaysia are expected to play an important role in financial inclusion.

Open banking is an initiative that allows third-party service providers to access individual banking data through open application programming interfaces (APIs). It enables the interaction between different software applications via specified set of protocols. This allows software applications to communicate with each other to exchange data directly or to access another software application's functionalities through an automated access.

Open Banking

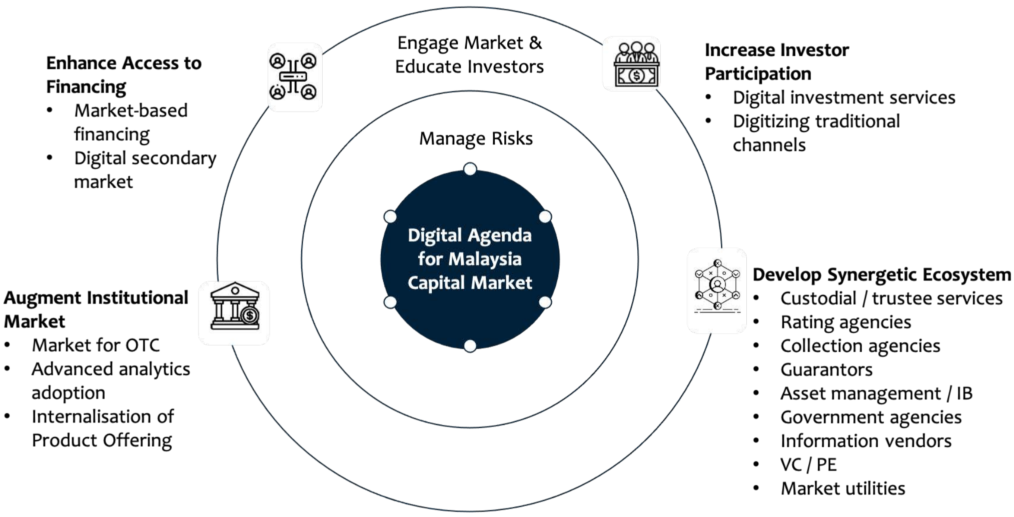
BNM had issued a recommendation of the standards of open APIs that banks should adopt which came into effect on 2nd January 2019. Financial institutions are encouraged to adopt the Open Data API Specifications recommended by the Open API Implementation Groups for selected open data. To facilitate third party adoption, financial institutions are strongly encouraged to publish a detailed API documentation online to accompany the published Open Data APIs.



1.2 Securities Commission Malaysia

The role of the SC is to promote and maintain fair, efficient, secure and transparent securities and derivatives markets; and facilitate the orderly development of an innovative and competitive capital market in Malaysia. The Digital Agenda for Malaysia's Capital Market, set in 2016, has clarified the guidance and support of the SC towards the fintech ecosystem (See Figure 9).

Figure 9 Digital Agenda for Malaysia Capital Market



Source: Chin & Azmil (2017)

To facilitate digital investment management activities to be offered in Malaysia, a new category of portfolio management licence has been introduced under the Digital Investment Management (DIM) framework. The framework provides the opportunity for retail investors to access specialist services of investment management. The SC has introduced Equity Crowdfunding (ECF) and Peer-to-Peer (P2P) financing to allow for alternative market-based financing avenues for SMEs to raise funds. The SC also regulates digital assets to promote responsible innovation in the digital asset space, while at the same time managing emerging risks and safeguarding the interests of issuers and investors.

“As part of the SC's initiatives to catalyse greater interest and visibility towards nurturing the development of digital finance, the SC launched the Alliance of Fintech Community (aFINity) in 2015. It was established not only to provide clarity on policy and regulations only, but it also plays a role as 'Network Organizer' to nurture the wider fintech ecosystem through its innovative labs.”

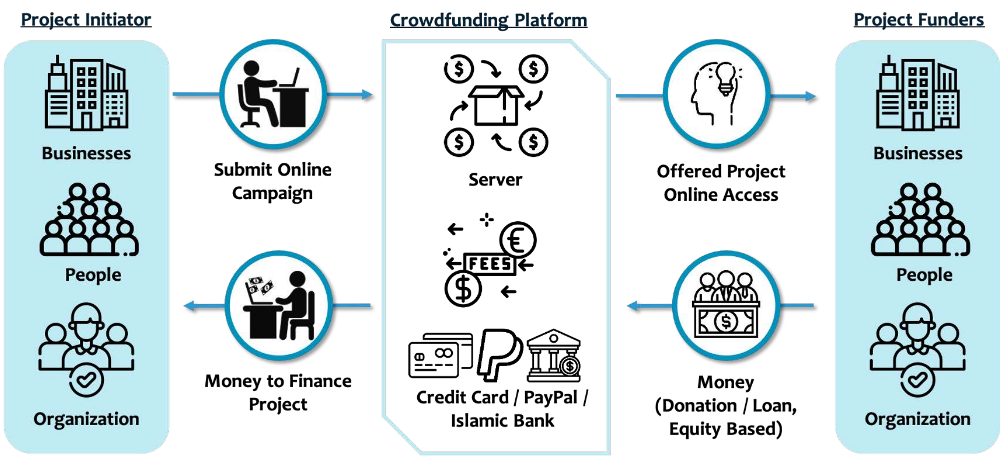
https://www.sc.com.my/development/digital/afinity

Equity Crowdfunding & Peer-to-Peer Regulatory Framework

In supporting SMEs that are the backbone of the Malaysian economy, the SC has introduced Equity Crowdfunding (ECF) and Peer-to-Peer (P2P) financing to allow for alternative market-based financing avenues for SMEs to raise funds.

In the year 2015, Securities Commission Malaysia introduced the Guidelines on Recognized Markets which include the requirements for the registration of equity crowdfunding (ECF) platforms and provided governance arrangements for the operators of such platforms. With that the country became the first in the region to introduce detailed guidelines for crowdfunding platforms in order to expand the fintech landscape in the country. The Guidelines on Recognized Markets have been revised a few times, the latest revision was issued in May 2020. Under this framework, an eligible issuer can raise up to RM10 million. Issuers will be able to tap on investments from retail, sophisticated as well as angel investors, subject to the investment limits as provided in the Guidelines. ECF investors are given a 6-day cooling off period, within which they may withdraw the full amount of their investment. In addition, if there is any material adverse change relating to an issuer, the investors must be notified of such change. The investors will be given the option to withdraw their investment if they choose to do so within 14 days after the said notification.

Figure 10 - What is Crowdfunding?



Source: Authors' Own

In 2016, the SC introduced the regulatory framework for Peer-to-Peer (P2P) crowdfunding, setting out requirements for the registration and obligations of a P2P operator as provided in the revised Guidelines on Recognized Markets. This framework was established to further support the alternative funding channel after seeing success in ECF. P2P investment opportunities are open to all investors. Retail investors are encouraged to limit their investments exposure on any investment note or Islamic investment note executed or offered on or through a P2P platform to a maximum of RM 50,000 at a time in order to manage their risk exposure.

> Total funds raised by ECF & P2P in Malaysia have broken the 1 billion Ringgit mark this year and benefited more than 2,500 MSMEs
>
> Source: Securities Commission Malaysia (2020)

Digital Assets Regulatory Framework

Digital assets based on the SC Malaysia description refer collectively to a digital currency and digital tokens. Both are not recognized as legal tender nor as a form of payment instrument that is regulated by Bank Negara Malaysia (BNM). However, both Crypto assets and Cryptocurrencies are subject to SC regulations.

Figure 11 - What are Digital assets?

Digital Currency - A digital representation of value which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise, that functions as a medium of exchange and is interchangeable with any money, including through the crediting or debiting of an account'.

Digital Token - A digital representation which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise.

Source: Securities Commission Prescription Order (2019)

In January 2019, "The Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019" went into effect. The order sets out the defining characteristics of "digital currency" and "digital tokens" that are prescribed as being securities for the purposes of Malaysia's securities law. It subsequently issued amendments to its recognized market guidelines, which now include a framework for operators of digital asset platforms to be approved by the SC as recognized market operators. This includes requirements related to an entity's structure and governance, risk management processes, client asset protection, transparency, and market integrity. Digital currency exchanges have been made subject to Malaysia's anti-money laundering and counter-financing of terrorism system, which is overseen by the central bank.

In March 2019, SC published a consultation paper on its proposed approach to regulating initial coin offerings (ICOs). This approach would include approval of the ICO by the SC based on various criteria and the registration of a disclosure document that meets certain requirements. The Securities Commission Malaysia (SC) has also released the Guidelines on Digital Assets, which has been recently updated on 28 October 2020. The platform operators must seek authorization from the commission and have a minimum paid-up capital of RM 5,000,000 ($1.23 million). The guidelines also set out the requirements for anyone seeking to raise funds through token offerings. The offering must be conducted by incorporated company and have its main business in Malaysia, with a minimum paid-up capital of RM 500,000. Figure 12 shows the development in digital assets in Malaysia.

Figure 12 Digital assets in Malaysia

June 2019

SC approved three digital asset exchanges:

- Luno Malaysia Sdn Bhd,
- SINEGY Technologies (M) Sdn Bhd
- Tokenize Technology (M) Sdn Bhd

August 2020

- More than 400,000 accounts were opened
- RM100 million value of trades

Source: Securities Commission Malaysia (2020)

2. Supporting Institutions

Entrepreneurs are often considered as national assets that need to be cultivated, motivated, and remunerated as their innovations can spur the economic growth and improve standards of living. From this perspective, having supporting institutions such as government agencies, digital labs, business incubators and accelerators is crucial.

2.1 Malaysia Digital Economy Corporation

The Malaysia Digital Economy Corporation (MDEC) is a government agency under the purview of the Ministry of Communications and Multimedia Malaysia. It is entrusted to lead Malaysia's digital economy forward. Incorporated in 1996 to oversee the development of the MSC Malaysia initiative, MDEC's primary mandate is to accelerate the growth of digitally-skilled Malaysians, digitally-powered businesses and digital investments in Malaysia. MDEC is focused on creating inclusive, high-quality growth through the nationwide digitalization initiatives that are in line with the 'Government's Shared Prosperity Vision 2030' and firmly establishing Malaysia as the Heart of Digital ASEAN.

In order to strengthen Malaysia's position as a major player in the fintech and Islamic fintech spaces, MDEC has pushed forward several initiatives to support and grow the industry, such as developing the Islamic Digital Economy Mi'Yar Guide, establishing the Malaysia Digital Hub initiative, creating eBERKAT platform and building the Fintech Booster program. (see figure 13).

Figure 13 MDEC Initiatives

eBERKAT (Bina Ekonomi Rakyat)

The eBerkat platform is an intiative by MDEC that aims to increase awareness and access for micro SMEs and B40 household communities via SLIP (Savings, Lending, Investment, Payment) to Digital Financial Services with a focus on Shariah compliant Islamic products and services. The platform is to result in empowering Malaysian communities of B40 and SMEs to have a better financial management, ensuring sustainable future, and be digitally savvy in financial services.

Islamic Digital Economy (IDE) Mi'yar

Islamic digital economy (IDE) refers to any commercial or social activities undertaken within the digital space that is Shariah compliant and Shariah neutral. Activities that fall within the realm of IDE include but is not limited to any activities related to customary Islamic practices as well as practices that are branded Shariah or Halal certified. MDEC is a proponent of the IDE in line with Malaysia's status as one of the countries leading the evolution of the Islamic industry landscape. The objective of the IDE is to set out a clear guide for startup companies on the processes involved in obtaining a Shariah Compliant and Halal Certified business and product. The IDE Mi'yar is established to be the comprehensive guide for regulators, venture capitals, startups and other ecosystem players towards the overall components of Islamic digital economy in Malaysia.

Malaysia Digital Hub

The Malaysia Digital Hub is an initiative that supports tech and digital co-working spaces. It offers startups with the opportunity to expand globally, have ready access to high-speed broadband connectivity, funding and facilitation opportunities, and a workforce-ready ecosystem. The initiative focuses on four categories, namely growing startups, global tech companies, accelerators and talent builders or investors. The incentives under the Malaysia Digital Hub initiative include corporate tax exemption for tech startups, access to funding, coaching and mentoring, working passes, and others.

Fintech Booster

A Fintech capacity building platform developed in collaboration with Bank Negara Malaysia (BNM) providing capacity building resources to Fintech companies through three strategically crafted verticals; i) Legal & Compliance, ii) Business Model, and iii) Technology. The objective of this program is to; i) enhance the due diligence of legal, compliance, and regulation of the companies, ii) provide resource support for fintech solutions with high value propositions to be investment and market ready, as well as to iii) improve lead time and operationalization of the companies.

Source: Authors' Own

2.2 Cradle Fund Sdn. Bhd.

Cradle Fund Sdn Bhd (CFSB) is Malaysia's early stage start-up influencer, incorporated under the Ministry of Finance Malaysia (MOF) in 2003 with a mandate to fund potential and high-caliber tech startups through its Cradle Investment Program (CIP). Throughout its 16-year history, CFSB has helped fund over 900 Malaysian tech startups and holds the highest commercialization rate amongst government grants in the country. Having more than a decade of experience in the nation's grant funding scene, CFSB further expanded its role from grant provider to investor through the establishment of its venture arm, Cradle Seed Ventures in 2015, and followed its portfolio expansion to equity investments in early 2017, CFSB now offers both funding and investment assistance. Cradle's product offerings are not only restricted to monetary aid, but also include commercial support, coaching, and various other value-added services to cater to the diverse needs of today's entrepreneurs. Cradle is presently being administered by the Ministry of Science, Technology and Innovation (MOSTI).

2.3 Malaysia Venture Capital Management Berhad

In 2001, the Malaysian government formed 'MAVCAP' with the vision to be a leading venture capital company in the technology space, developing the Malaysian venture capital ecosystem via smart partnerships while enabling access to venture capital funding for technology companies.

MAVCAP aims to support seed to late stage companies in the ICT industry as well as other high-growth industries, including, but not limited to, content and digital media, IOT, e-commerce, fintech, etc. through providing funds, networks and other kinds of support. MAVCAP's involvement in the venture capital space started with direct investment in strategic sectors, before evolving into a fund, or fund with a commercial mandate. At this juncture, MAVCAP partners with several local and international fund managers to co-manage 9 funds.

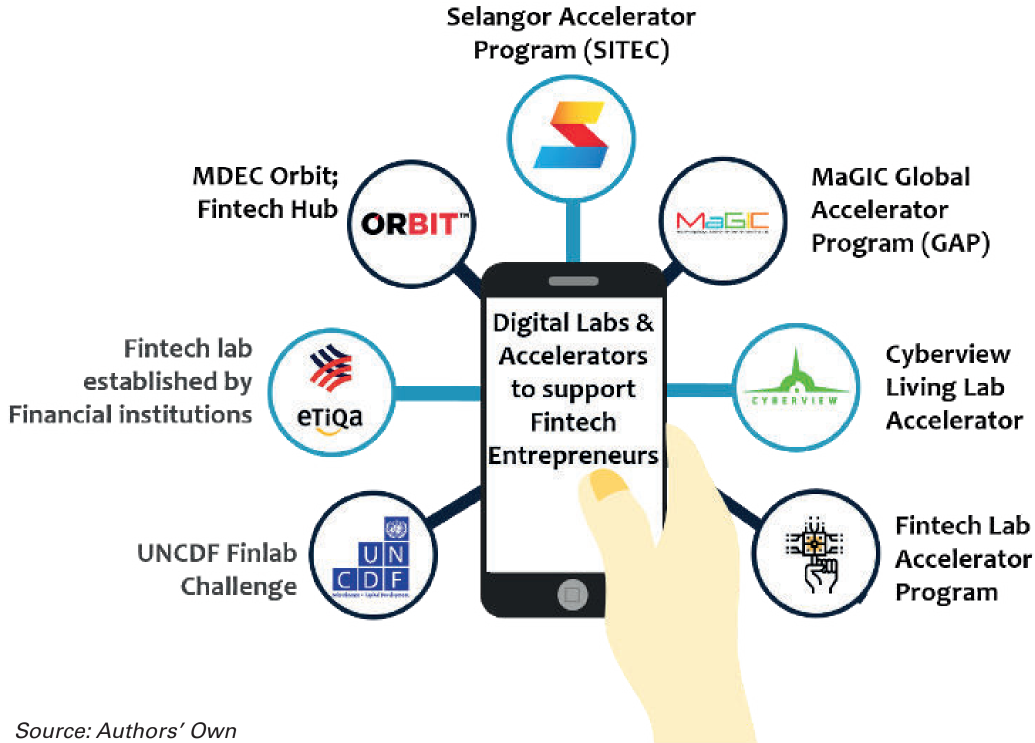
2.4 FinTech Association of Malaysia

FinTech Association of Malaysia (FAOM) aspires to be a key enabler and a national platform to support Malaysia to become the leading hub for fintech innovation and investment in the region. The association was registered in 2016 and has members from a wide range of fintech companies. FAOM connects various stakeholders in the industry, engaging them in conversation and fostering potential collaborations.

2.5 Accelerators & Digital Labs:

Digital labs serve as congregational points for local and foreign fintech players, allowing them to interact with industry leaders and regulators to ease solution development and early market entry. The Accelerators are programmes designed to support early-stage, growth-driven companies through education, mentorship, and financing.

Figure 14 Accelerators & Digital Labs



Source: Authors' Own

Selangor Accelerator Program (SITEC)

Selangor Accelerator Program (SAP) is a top-tier accelerator that targets high-potential startups by providing an intensive 4 months program of training to become an investor-ready company. Firstly, announced in 2018, the program which is organized by the Selangor Information Technology and E-commerce Council (SITEC), has recruited two cohorts of startups made up of around 60 teams in the past two years. A total of 55 Minimum Viable Products (MVPs), and a gross market value worth RM 26 million has been created. From the past cohort 20 out of 60 startups have secured seed funds and angel investment ranging from RM 300,000 to RM 1.4 million. The program offers startups with guidance and mentorship from experienced mentors, fully sponsored local and overseas trips, valuable networking opportunities, as well as connections to support communities.

MaGIC Global Accelerator Program (GAP)

The Global Accelerator Programme (GAP) is Malaysia's leading mid-to-late stage startup growth program that is tailored for startups with an ambition to expand in the ASEAN market. The program has been conducted in 3 cohorts and has accelerated over 100 startups. In 2020, the program was redesigned using virtual means. The Virtual Global Accelerator Program 2020 (Virtual GAP 2020) is an online program to accelerate local & international startups from all over the world, with an interest to expand their business in the ASEAN region, to be investment-ready in 3 months. The program targets startups that have established product-market-fit with a target market and those that have launched a product with some traction, and are highly scalable with a growth-potential business model, which ideally would be less than 3 years old and would be focused on the ASEAN market.

Cyberview Living Lab Accelerator

The Cyberview Living Lab Accelerator is a program by Cyberview, a government owned company mandated to drive the growth of a holistic Global Tech Hub ecosystem. The Living Lab Accelerator offers mentorship, access to venture capital, free co-working space, prototyping with Cyberjaya City Innovation Council, and value-added services.

Fintech Lab Accelerator Program

The Fintech Lab provides tailored educational and technology training modules by experienced investment professionals aimed to bridge the gap between technology and finance. The courses offered are focused on Islamic Digital Economy (IDE) primary sectors; namely Technology, Islamic Knowledge, and Business and Entrepreneurship. The Accelerator program offerings consist of the IDE Accelerator, Executive IDE Accelerator, Action Camp, and Boot Camp, depending on the needs of the SMEs and startups.

Orbit Fintech Hub

Orbit is a fintech hub that was established with the support from BNM and SC to act as a congregation point for key players of the ecosystem to flourish by facilitating end-to-end support, networking and knowledge-sharing to drive innovation in the fintech industry. Situated in the heart of Bangsar South, Orbit also operates as a co-working space. Spanning over 20,000 square feet, its tenants includes the likes of VISA, United Nations Capital Development Fund (UNCDF), Aeon Credits, and Chaintope.

UNCDF Finlab

The UNCDF Finlab is an initiative by the UN Capital Development Fund (UNCDF) in partnership with BNM and MDEC to drive the agenda of digital financial inclusion especially targeting the B40 segment. Finlab runs challenges to find and support solutions to promote inclusive and connected digital economies such as the Gig Economy Challenge, Financial Health Scale-up Challenge, and B40 Persona Challenge. Top participants can receive technical assistance, seed capital, product pilot opportunities, access to partnerships, and mentoring sessions.

Fintech labs established by financial institutions

The examples of fintech labs provided by financial institutions include HLB Launch Pad by Heong Leong Bank, and Escape Lab by Etiqa Lab. HLB Launch Pad is a mentorship program that aims to cultivate more tech-savvy startups that will rethink financial services. While Escape provides an accelerator program that focuses on early stage startups with business ideas that could improve the insurance industry ranging from artificial intelligence, remote working productivity tools, financial inclusion, customer experience and how insurance companies can innovate in the Environmental Social and Governance (ESG) space. The startups will get access to a group of selected experienced mentors in the fintech and insurtech space, such as PwC, Cradle Fund, Malaysian Global Innovation and Creativity Centre, and Malaysia Digital Economy Corporation.

3. Funding

Malaysia has an extensive and developed research and development (R&D) commercialization ecosystem. Apart from the private sector, the main players in the R&D commercialization ecosystem are the Ministry of Science, Technology and Innovation (MOSTI), the Ministry of Higher Education (MOHE) and the Ministry of Communication and Multimedia (KKM). R&D funding is divided into stages based on Technology Readiness Level (TRL) reflected in Figure 15:

Figure 15 R&D funding based on technology readiness level

TECHNOLOGY READINESS LEVEL & DEFINITION	TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9
	Basic Principle	Formulation of Concept	Experimental Proof of Concept	Lab Validation	Validation in Real Environment	Demonstration in Real Environment	Demonstration of Prototype	Product Complete & Qualified	Product Proven

STAGES	Ideation/Basic Research	Applied Research	Development & Pre-Commercialisation	Commercialisation
(MOSTI)		International Collaboration Fund	MESTECC R&D Fund **MTDC (Bio Tech – Series A&B)** **MAVCAP (Tech/ICT – Series A-C)** **CRADLE FUND** (CIP Ignite)	**MDV** (ICT & Bio Tech – Series C-Expansion) **KMP** (E&E, Green Tech – Series C-Expansion) **MAVCAP** (GreenTech/ICT – Series A-C) **CRADLE FUND** (CIP Accelerate)
(MOHE)	Grant for Research University (RU) Transdisciplinary Research Grant Scheme (TRGS) Grant for HiCoE Fundamental Research Grant Scheme (FRGS) Long Term Research Grant Scheme (LRGS)	Prototype Research Grant Scheme (PRGS)		
Other relevant ministries				**MDeC** (Global Tech Fund) **MIDA** (Domestic Investment Strategic Fund) **MATRADE** (Service Export Fund (SEF), Market Development Grant (MDG) & eTRADE Programme (for e-commerce) **SME CORP** (SME Investment Partner. Business Accelerator Programme, Soft Loan)

Source: Authors' Own

3.1 Ministry of Science, Technology and Innovation (MOSTI)

MOSTI's Fund Division is traditionally known for providing grants to Malaysian Small and Medium Enterprises (SMEs), institutions of higher learning as well as research institutions. To fulfil its developmental role, the area of interest is wide-ranging and includes fintech.

MOSTI and its funding agencies namely Malaysian Technology Development Corporation (MTDC), Cradle Fund Sdn Bhd (CFSB), Malaysia Venture Capital Management Berhad (MAVCAP), Kumpulan Modal Perdana (KMP) and Malaysia Debt Venture (MDV) play wide-ranging roles which begin at TRL 2 until TRL 9. Various funding structures are offered comprising grant, equity and debt catering to different needs and risk profiles. Funding from MOSTI is also driven by commercialization, hence less emphasis placed on very early stage science and technology. The funding scope is extensive and is based on MOSTI's "10 Socio Economic by 10 Science and Technology Matrix" (10 by 10 Matrix).

At the moment, MOSTI is offering two schemes as follows:

a. ***MOSTI R&D Fund***

Grants of up to RM3 million for local SMEs that wish to commercialize R&D products. Projects eligible under this scheme begins at TRL 4.

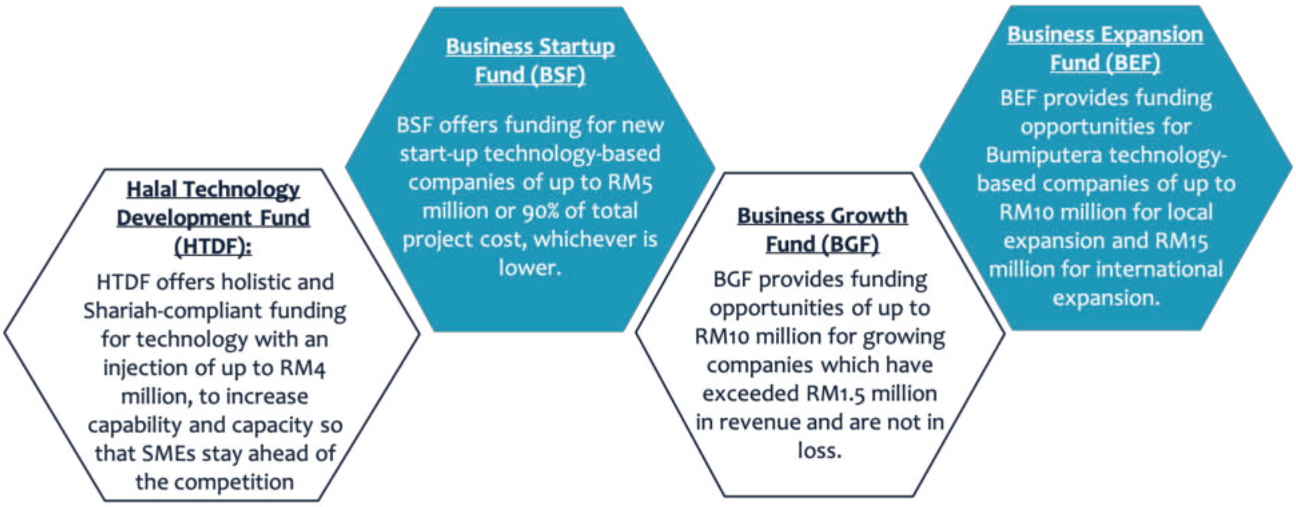
b. ***International Collaboration Fund***

Grants of up to RM 500,000 for local institutions of higher learning and research institutions to undertake applied research which is at TRL 3, in collaboration with institutions of higher learning and research institutions from other countries.

Malaysian Technology Development Corporation (MTDC)

MTDC is a government agency tasked with commercializing technologies in Malaysia and promoting the adoption of technologies by local companies. They provide funding for different types of companies in the form of grants, equity and Convertible Promissory Notes (CPN) as delineated in Figure 16.

Figure 16 MTDC Funding

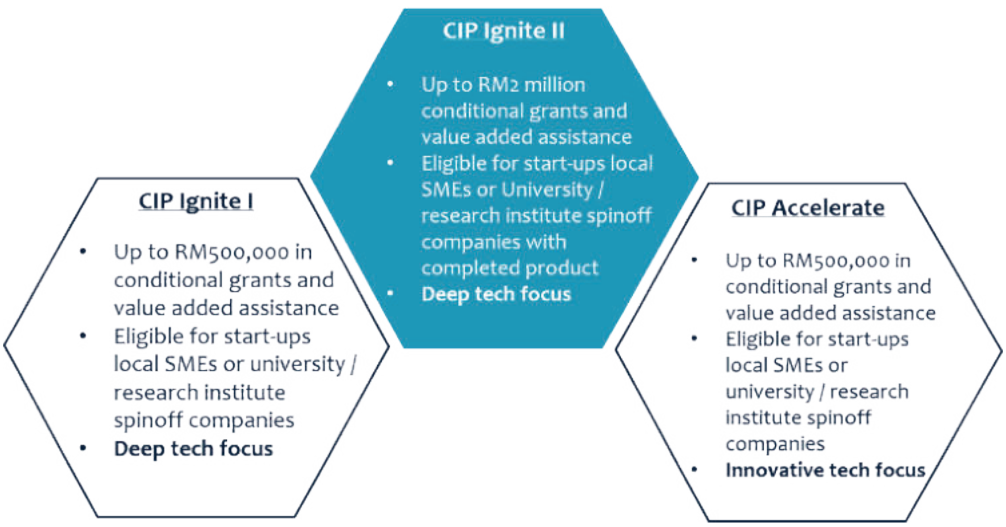


Source: Authors' Own

Cradle Fund Sdn Bhd (CFSB)

As the national startup ecosystem developer, CFSB's role is not limited to capacity building programs but also provision of grants to technology startups, mostly in the digital space. However, beginning 2020 CFSB's focus area has been expanded to include commercialisation of deep technology by universities and research institutions. A summary of CFSB's grants are as follows:

Figure 17 CFSB Grants

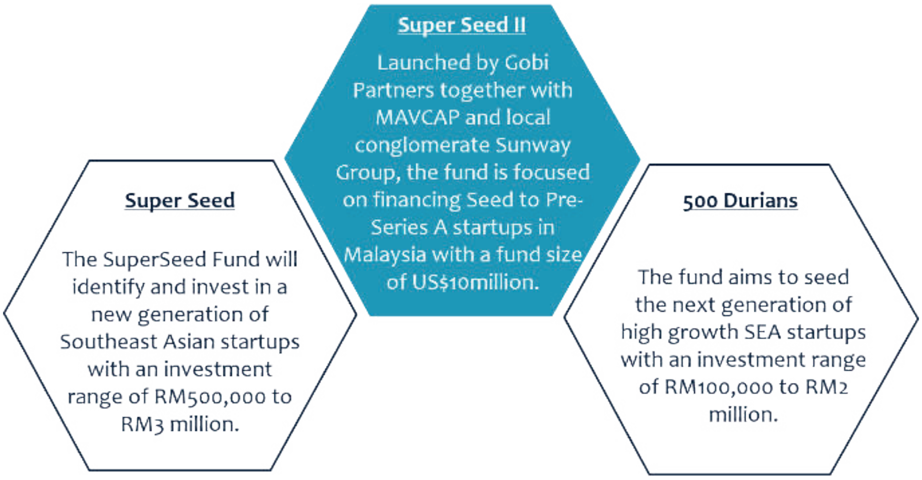


Source: Authors' Own

Malaysia Venture Capital Management Berhad (MAVCAP)

MAVCAP plays its role to develop the venture capital industry mainly as a limited partner of funds. Currently, MAVCAP has jointly established 9 funds for aspiring entrepreneurs. Following are a few examples:

Figure 18 MAVCAP Funds for Aspiring Entrepreneurs



Source: Authors' Own

Kumpulan Modal Perdana (KMP)

Incorporated in 2001, KMP is the only government-backed Venture Capital Company focusing on investing into high growth companies with high visibility. KMP is mandated to invest in Electronics and Electrical (E&E) sectors, however their focus area was expanded to include technology enablers including fintech. Startups at growth stages, and pre-IPO companies compete to obtain equity injection of up to RM15million and to be part in their E&E ecosystem comprising more than 40 portfolio companies.

Malaysia Debt Venture (MDV)

Established in 2002, MDV is the only institution in Malaysia offering debt venture financing for Malaysian companies to venture into technology-based industries. MDV is offering project and contract financing to Malaysian companies for the purpose of growth, working capital and asset financing. In addition to that, beginning in 2016 MDV has been offering a specialised financing scheme for technology startups called MDV Technology Acceleration. This scheme is intended to promote the development and adoption of new technologies and increase the success rate of commercializing new technologies. MDV is mandated to finance in various focus areas such as Information and Communication Technology, Biotechnology, Green Technology as well as Emerging and Strategic Technology.

3.2 Ministry of Higher Education (MOHE)

As the caretaker of higher learning in Malaysia, MOHE is limited to providing grants for researchers of Institutions of Higher Learning to undertake mainly basic research and applied research activities. MOHE plays an integral role at the early stages by focusing on basic research and some exposure in prototyping of R&D in very diverse focus areas.

Grants offered by MOHE include the Grant for Research Universities, Transdisciplinary Research Grant Scheme, Grant for HiCoE, Fundamental Research Grant Scheme (FRGS) and Long-Term Research Grant Scheme (LRGS), and Prototype Research Grant Scheme (PRGS). Although the grants offered are intended for academic purposes, MOHE also highly encourages collaboration with the private sector to ensure the viability of the projects from the commercial perspective.

3.3 Other relevant ministries and bodies

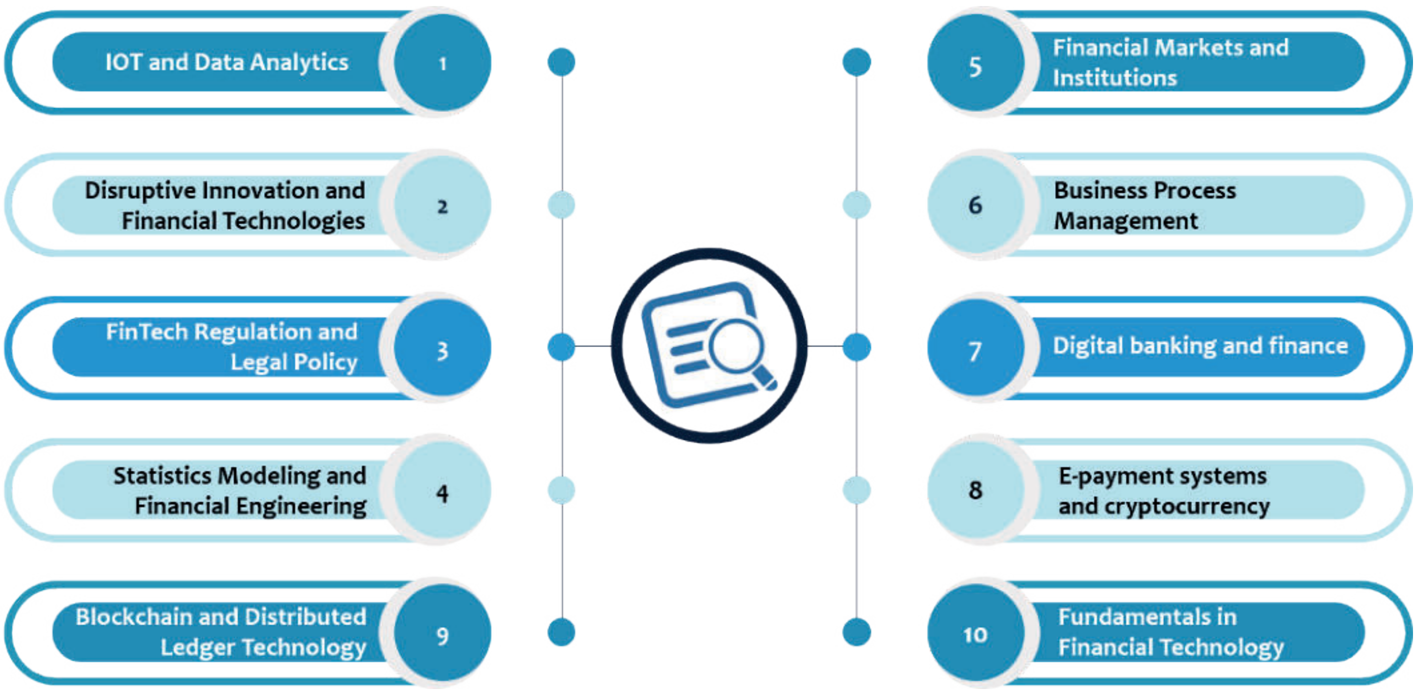
KKM, through its agency Malaysia Digital Economy Corporation (MDEC), plays a significant role in the digital industry, which includes commercialization of relevant technology. Other ministries and government agencies such as the Ministry of Entrepreneur Development and Cooperatives and the Ministry of International Trade and Industry (MITI) play their part mainly with corporations to access foreign markets, promote investment and develop strategic industry sectors.

Malaysia Business Angel Network (MBAN) was established in 2014 as a trade association and governing body for the accreditation of individual angel investors and angel investor clubs. In addition, MBAN has been actively playing their role in the promotion of angel investors and lobbying incentives, in particular the Angel Tax Incentive as well as Corporate Tax Incentives for corporations to invest in technology companies via venture capital funds.

4. Human Capital Development

Human capital in fintech should combine the knowledge of finance, technology and business in addition to entrepreneurship skills. New training and academic programs are really needed to cater to the needs of the emerging fintech industry. In addition to entrepreneurial skills, the key knowledge and skills required for fintech entrepreneurship are presented in figure 19.

Figure 19 Key knowledge and skills required for fintech entrepreneurship



Source: UniKL Business School Survey (2019)

In response to the high demand for fintech skills, several private and public training and academic programs are available in the Malaysian market today. In addition, several initiatives have been launched to attract foreign talents, and to prepare Malaysia to be a fintech hub.

4.1 Malaysia Tech Entrepreneur Program(MTEP)

Malaysia Tech Entrepreneur Program (MTEP) is a designated incentive for tech founders who want to venture into the ASEAN market from Malaysia via a 1-year stay or a 5-year stay. MTEP was introduced in 2017 as one of the initiatives initiated under the Malaysia Digital Hub.

4.2 Premier Digital Tech Universities and Preferred Digital Tech Polytechnics (PDTIs)

The Premier Digital Tech Universities and Preferred Digital Tech Polytechnics (PDTIs) are Malaysia's leading digital tech-focused tertiary institutions. Borne out of a collaboration between MDEC, the Ministry of Education Malaysia and industry leaders, the PDTIs deliver end-to-end solutions to ensure that future graduates are propelled into becoming dynamic members of an innovation-driven and knowledge-powered Malaysia. To ensure that future graduates are able to meet the nation's digital economy demands, the Ministry of Education and MDEC designated eleven universities and five polytechnics as Premier Digital Tech Institutions. These academic institutions are capable of providing students with first-class theoretical and practical training, giving them a head start in the digital ecosystem.

4.3 eXpat Foreign Knowledge Worker program

Established in 2007, the eXpats Service Centre provides services to facilitate foreign knowledge workers' applications for MSC Status and ICT companies operating in Malaysia. The eXpats Service Centre is a department within MDEC, providing constant support through efficient, effective and innovative services such as expats online system, helpdesk, emergency hotline as well as consultancy services. Located in the bustling global technology hub of Cyberjaya, the center also houses the MSC Facilitation & Services Department (MFS) of MDEC as well as the Expatriate Services Division of the Immigration Department of Malaysia.

4.4 Fintech Booster

Fintech Booster is a collaborative effort between MDEC and BNM to facilitate fintech companies understanding the legal, compliance, and regulatory requirements thoroughly. There are three verticals introduced in

1) Legal and Compliance.

2) Business Model.

3) Technology.

Six legal and consulting firms have volunteered to provide their advice in regard to their expertise such as company law and cyber security. Fintech companies do not have to incur any cost or give up their equity to join this programme as it is not intended for profit.

4.5 Academic programs

Globally, education programs in fintech can be classified into two levels, firstly the certificate programs, which are delivered by specialized training institutions for short courses, and distance learning programs that are linked to the industry or online learning platforms such as Coursera, Edx, and Udemy . Secondly, the academic programs including undergraduate and postgraduate. Specifically, fintech education at universities is more comprehensive that covers the area of finance and technology background. Many universities worldwide have already started offering fintech programs. However, these programs have different focuses. A clear standard on the content of this new multi-disciplinary field is yet to be established.

A recent market survey shows high acceptance rate of fintech programs by prospective employers in Malaysia (figure 20). In Malaysia, only two universities provides academic programs on financial technology Asia Pacific University (APU) and Malaysian Multimedia University (MMU).

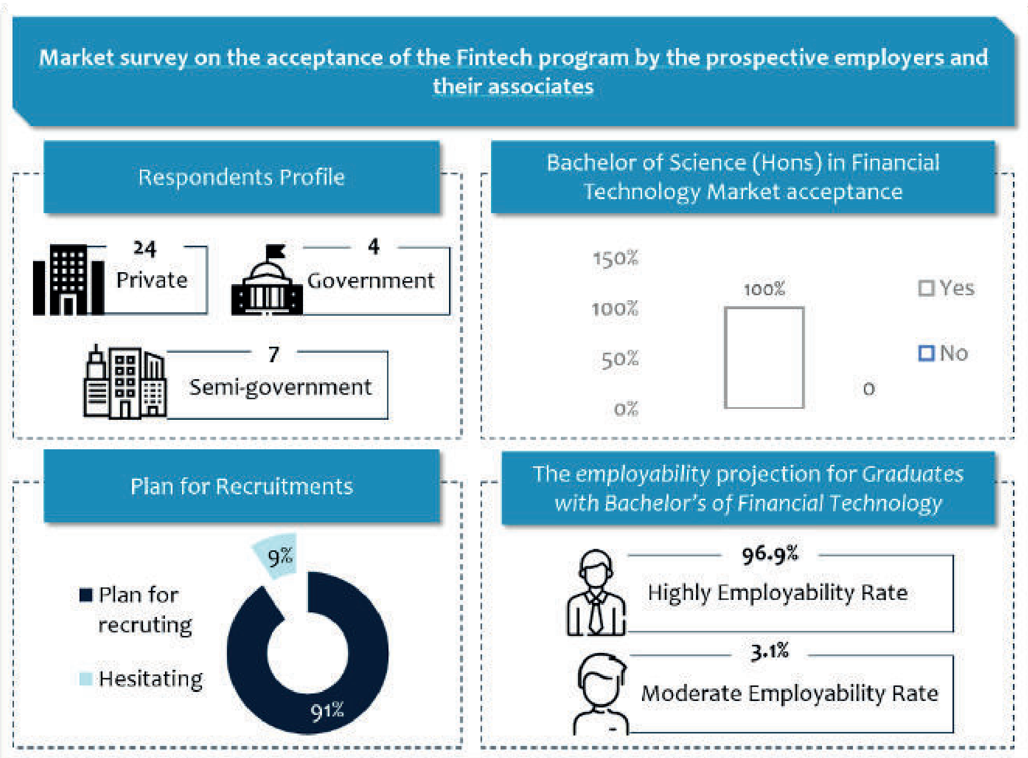
*** Coursera and Edx platforms provide plenty of courses on fintech from well-known global universities such as Duke University, the Hong Kong university of science and technology, Berkeley (university of California), university of Michigan, and INCEAD.**

- Asia Pacific University (APU) was the first university to offer undergraduate programs related to fintech in Malaysia as part of the Bachelor's Degree in Banking and Finance. These programs are offered in collaboration with Supercharger; the fintech accelerator, with offices in Hong Kong and Kuala Lumpur.

- The Malaysian Multimedia University (MMU) offers a Bachelor of Financial Engineering (Hons.) program focused on the key fundamentals of the financial development framework, as well as on developing multimedia and ICT literacy to compete in today's financial industry.

- On the other side, the Business School of the University of Kuala Lumpur (UniKL) in collaboration with the Malaysian Institute of Information Technology is developing a new Bachelor's degree in financial technology. The program covers a variety of subjects including finance, technology, and fintech. Comparing these Malaysian universities' programs from the perspective of course subjects offered, MMU focuses more on the finance-oriented courses, which represent more than 70% of their courses. On the other hand, APU has more specialised modules in financial technology, while UniKL plans to balance between the three disciplines of finance, technology, and fintech.

Figure 20 Market survey on the acceptance of the fintech program by the prospective employers and their associates



Source: UniKL Business School Survey (2019)

The Purpose and Mechanisms of Islamic Fintech

Source: State of the Global Islamic Economy Report (2020)

In recent years, market interest in Islamic fintech has noticeably increased. The number of Islamic fintech companies has reached 150 worldwide by November 2020 (IFNFintech.com, 2020). Malaysia is among the few markets that has the highest number of Islamic fintech startups. Currently, there are at least 20 Islamic fintech companies in Malaysia.* The legacy of Malaysia as a leader in the Islamic finance industry in addition to the supportive regulatory environment and academic institutions of Islamic finance have attracted a variety of Islamic fintech companies to establish themselves in Malaysia at a time when the Islamic fintech ecosystem is still in its infancy stage. There are efforts by regulators, supporting institutions, fund providers and academic and research institutions to support Islamic fintech. Regulators have developed regulations to consider Islamic fintech. Supporting institutions have started to pay attention to Islamic fintech, for example, MDEC established a dedicated department to support the Islamic digital economy and fintech. MOSTI recently established a fund to support Islamic fintech. INCEIF and ISRA have introduced initiatives to support capacity building as well as research and development in Islamic fintech.

This section explains the purpose of Islamic fintech as a subsector or driver for innovation in Islamic finance. Then the discussion highlights the necessary mechanism to ensure Shariah compliance of the innovative Islamic fintech products and services, and to what extent Shariah governance has been implemented for Islamic fintech solutions in Malaysia.

** Statistics may differ based on criteria of classifications. For example, Fintech News TNG e-Wallet Fintech Report (2019) identified 6 Islamic fintech companies as of December 2019. IFNFintech.com (2020) reported 26 Islamic fintech companies in Malaysia as of November 2020, while the Report team identified 22 local and foreign Islamic fintech companies in Malaysia as of November 2020.*

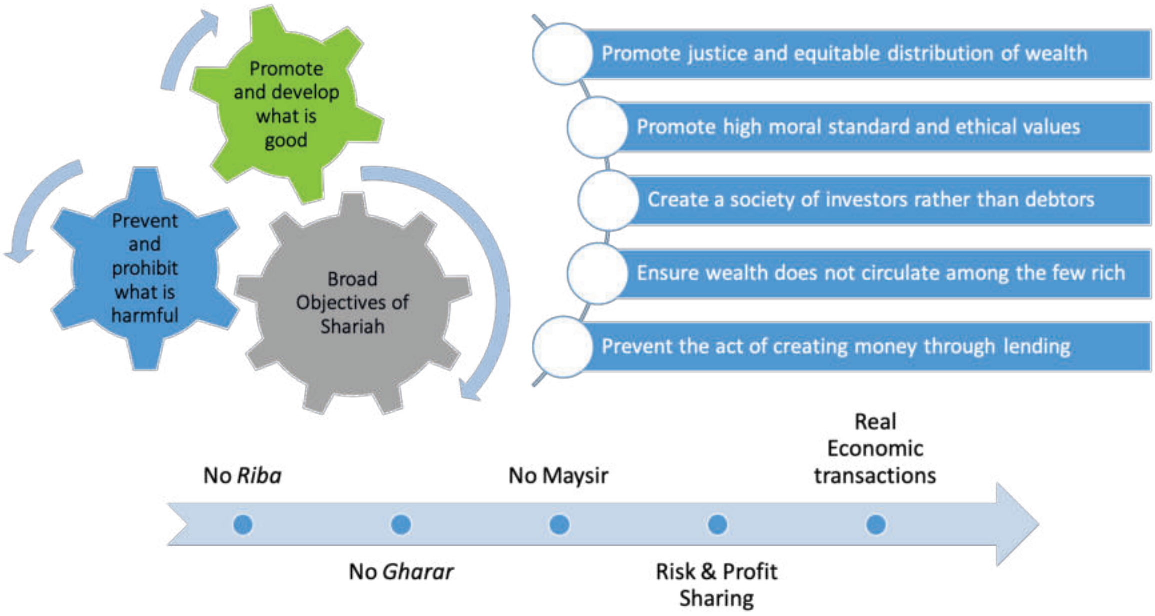
Why Islamic Fintech?

The first formal Islamic bank was established 300 years after conventional banking began (considering the years between the establishment of the oldest conventional bank 'Banca Monte dei Paschi di Siena in 1624 and the establishment of the first Islamic bank, Mit Ghamr Bank in 1963). Although the gap between the birth of Islamic and conventional banking is significant, the Islamic finance industry had the opportunity to embrace fintech solutions at the same time and on similar platforms as the conventional finance industry. The appeal of technology for Islamic finance practitioners lies in the possibilities for exponential growth and unlimited reach that have previously required vast amounts of capital to achieve. This has led to increased interest in Islamic fintech, to consider the options for use cases and expand the Islamic finance footprint. In fact, it may be the first opportunity for Islamic finance, a mere 2% of the total finance market, to expand without relying on branch networks or significant human resources.

At the industry level, Islamic fintech may represent a unique opportunity to inspire Islamic finance stakeholders including regulators, Shariah experts, academicians, Islamic bankers, Muslim entrepreneurs and investors, to adopt the facilitation of technology in their respective fields. Indeed, unlike the development of Islamic banking and takaful, Islamic fintech is supposed to grow at the same rate of conventional fintech. Yet the Islamic fintech sector is still too small compared to conventional fintech. Recently, Islamic fintech is receiving an increasing attention. This can be seen by the establishment of organizations, systems, forums, seminars and conferences on Islamic fintech, especially to cater the needs of Shariah and the Muslim clients. However, there is a need for much investment in Islamic fintech.

One of the features of Islamic fintech is its universality. The application of Islamic fintech caters to all, regardless of their religion, race, status etc. Shariah application is not exclusively for Muslims except in the matters of beliefs and rituals. In addition, wealth and financial matters in Islam are among the topics where Islamic rulings cater for the well-being of all humankind.

Figure 21 What is Islamic Finance?



Source: Authors' Own

The main elements that create injustice in a financial system from a Shariah point of view are Riba (usury), Gharar (uncertainty) and Maysir (gambling) (see figure 21). Shariah aims to promote stability, not only in the wealth and financial system, but it also aims to create balance in the social system by reducing the gap between the rich and the poor. These objectives are pursued via a financial inclusion strategy as well as redistributing wealth through institutions such as zakat and waqf. This ensures wide circulation of wealth throughout the economy by prohibiting hoarding and monopoly. The countries providing Islamic finance products and services have proven that they are a suitable alternative to the conventional financial solutions and have their own competitive advantages.

The principle of tying risk with return in Islamic finance has also made it a unique feature for any Islamic financial activities, including Islamic fintech. In essence, no equity investment is valid from a Shariah perspective if the investor does not bear risk. Likewise, in exchange contracts like sales and leasing, the investor must own the underlying asset and take possession before being able to sell or lease the asset. The justice and balance between risk and return will always be the distinguishing factor between conventional and Islamic finance. For instance, the concept of the 'zero sum game' cannot possibly be a part of the Islamic finance industry as it is totally at odds with the Islamic financial concepts. It is a mechanism which creates extremes in a society and unfavourable outcomes for the masses, ultimately leading to undesirable implications in the whole society.

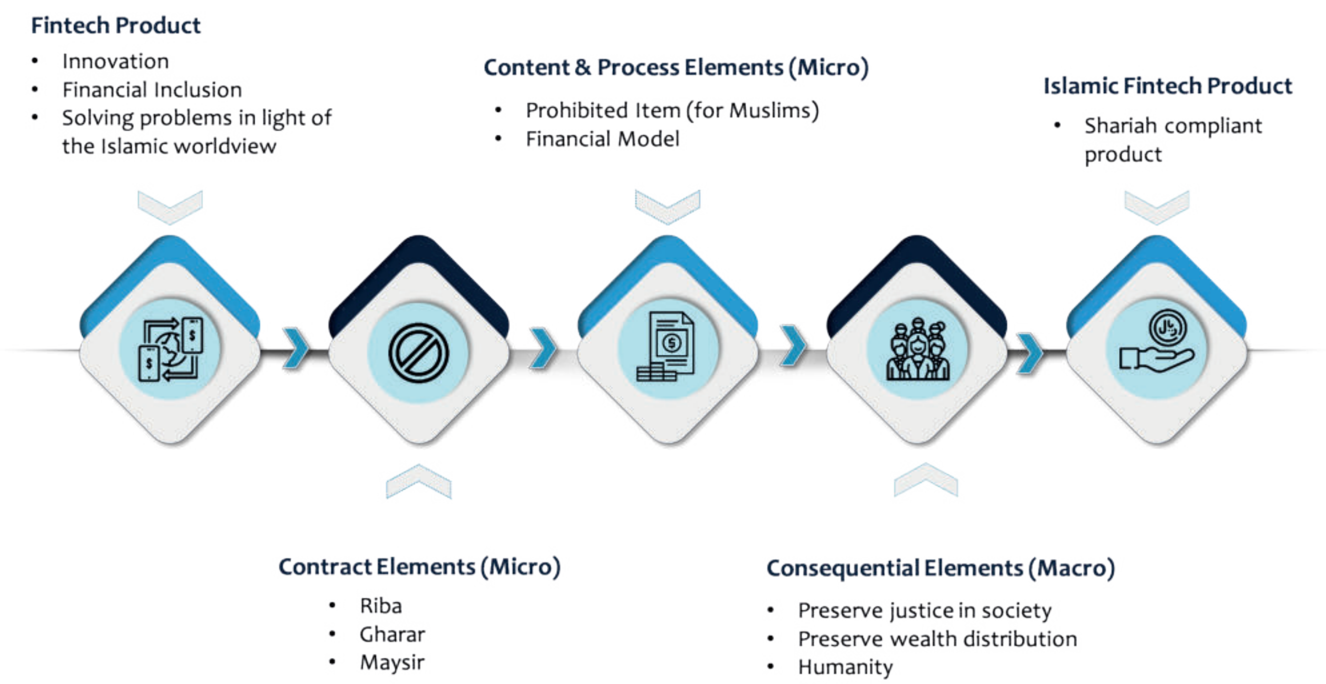
Islamic Fintech Product Development

Fintech is an application of disruptive technology to financial services, with aims of achieving savings and optimization of cost, time and system efficiency. Furthermore, fintech has had a significant impact on the user interfaces and user experience of financial products. Islamic fintech is the delivery of Islamic financial services through digital interfaces and smart back-end operations. One of the unique challenges for Islamic fintech is to ensure that the technology-based Islamic financial solutions are structured and provided in compliance with Shariah.

For example, robo-advisors are among the fintech companies that used complex algorithms to comprehend, analyse, recommend and even execute investments. It replaces the fund managers or financial analysts in their role of giving advice on investment or banking products. The technological innovations that power robo-advisors save a significant amount of time as they give results within seconds, which is nearly impossible for normal humans to do. In addition, it minimizes the misinterpretation and calculation errors due to its efficiency, which is far better than normal human-interpretation. Obviously, it eliminates the factor of agent fees, which benefits the customers in terms of cost. In addition, it eliminates all the potential human errors found commonly in decision making. But the determination of its compliance with Shariah principles is up to the Shariah scholars to investigate and give their verdicts and recommendations.

Whatever decision is made by the scholars, it must be after considering the contract used (to ensure no breach of Shariah), operational processes (that reflect the real values of Shariah – no manipulation and conflict) and consequences (it has to protect the objectives of Shariah – especially preservation of public wealth) (see figure 22). It is believed that the advantage of Islamic fintech is to integrate ethics and justice within fintech solutions.

Figure 22 Islamic Fintech Product Development Process



Source: Authors' Own

The main challenge faced by Islamic fintech is to ensure that the micro and macro factors in the transaction do not contradict with the Shariah principles. Micro factors are there to ensure every single transaction fulfils the Shariah requirements, since many fintech transactions could occur within a millisecond. For instance, Islamic financing products shall follow processes and rules which involve many steps in a particular sequence to become Shariah compliant. Islamic fintech solutions must be designed to ensure that such Shariah requirements are fulfilled.

Islamic fintech must also operate in recognition of the macro factors like ensuring that the solutions are not leading to any unfavourable outcome. For instance, an investment product that complies with Shariah in terms of contract requirements, may still be considered Shariah non-compliant if it qualifies as a Ponzi (scam) scheme from a macro perspective. On the other hand, the Islamic fintech industry has to take measures to ensure that there is no room for manipulation among players. A Shariah governance framework is needed in order to ensure that no one takes advantage of people in the name of Islam.

As far as Shariah governance is concerned, the elements of ex-post and ex-ante controls are also needed for Islamic fintech. As in traditional Islamic finance, Islamic fintech has to establish control functions to ensure that all operations continue to comply with Shariah principles. Review and compliant function, risk management, internal and external audit are all important developments within the Islamic fintech ecosystem.

Indeed, Shariah governance is a standard requirement in any Islamic fintech product and will always inform the process of product development. It complements and gives a competitive advantage to Islamic fintech, and at the same time, acts as a means of quality assurance for the Shariah reliability of the products.

Islamic fintech can be beautifully captured in the spirit of the hadith narrated by Bukhari and Muslim;

> “**Facilitate things to people (concerning religious matters), and do not make it hard for them and give them good tidings and do not make them run away (from Islam)**”

Sahih Bukhari – Chapter 3, Hadith no.69 & Sahih Muslim – Chapter 32, Hadith no. 6.

Shariah Governance Framework for Fintech

The spirit of any Islamic financial product or service lies in its compliance with the principles of Shariah. Islamic fintech solutions must also embody the same spirit so that they truly qualify as 'Islamic'. As for the traditional Islamic financial institutions (IFIs), they are governed by the Shariah governance frameworks drafted by the financial authorities. Not only do such frameworks provide guidance and direction to the IFIs, they also ensure Shariah compliance, which ultimately results in the general population putting their trust in the products and services offered by the IFIs.

For Islamic fintech, there are two models that can be applied. The first model is for fintech to have its own Shariah governance framework that covers the roles and responsibilities of all stakeholders, disclosure, Shariah audit, risk management, and Shariah review. This is currently lacking. The second model is where fintech should be subjected to the same Shariah governance framework of the respective financial authorities, and this seems to be the trend. There is currently no comprehensive Shariah governance framework for fintech anywhere in the world that provides specific guidelines to the Islamic fintech businesses. Instead, every technology-based Islamic financial solution is expected to comply with the same rules as applied to its traditional counterpart. Having said that, it would still be wrong to assume that all Islamic fintech solutions are free from being subject to any kind of Shariah governance framework. Even though there is no all-encompassing comprehensive Shariah governance framework, some Islamic fintech solutions are subject to the traditional Islamic finance Shariah governance rules and regulations. In addition, there are product-focused guidelines available in a few countries including Malaysia.

For instance, a few countries have issued some guidelines to ensure Shariah compliance of Islamic equity crowdfunding and Islamic P2P, while most other Islamic fintech areas are yet to be covered. (See Figure 23 below).

Figure 23 Efforts by Countries to Regulate Islamic Crowdfunding

The Kingdom of Bahrain

- In august 2017, the Central Bank of Bahrain (CBB) formally regulated its Islamic and conventional crowdfunding platforms.
- While the general regulations apply to both the systems, the Islamic crowdfunding platforms are required to meet additional requirements such as engaging a Shariah advisor to ensure Shariah compliance

United Arab Emirates

- In October 2019, the Central Bank of UAE published a draft of regulations for loan-based crowdfunding.
- The new regulations address licensing and guidelines for crowdfunding platforms. In addition, they also provide guidelines for Islamic platforms to ensure that they remain Shariah compliant.

Indonesia

- Indonesia is yet to produce a comprehensive Islamic fintech framework, but it has established a regulatory framework for P2P platforms which are the majority of Islamic fintech services in the country.
- Akin to the regulations in Bahrain. It provides separate regulations for Islamic crowdfunding platforms. Not only are they more stringent, but the business itself is subject to the approval of the country's Higher Council of Ulema and it also must comply with the standard approved Shariah contracts.

Source: Authors' Own

Regulatory Steps to Address Shariah Compliance of Islamic Fintech

In Malaysia, three key fintech areas have received specific considerations from regulators for Shariah compliant solutions: Digital assets, E-Money and Crowdfunding. The available Shariah guidelines are highlighted below.

Digital Assets

At the start of 2020, there was no official resolution regarding the Shariah compliance of digital assets. According to market observers, this has slowed down the development of Islamic solutions using cryptocurrencies or tokens. However, in July 2020, the Shariah Advisory Council of SC issued its resolution on digital assets.

While the resolution allows issuing Shariah compliant tokens with a few conditions, the SC has not yet issued any further details with regard to the Shariah governance requirements. However, the resolution is being seen as a landmark development as it permits the trading and use of digital assets. This is surely expected to enhance the crypto landscape of the country because 60% of Malaysia's population is comprised of Muslims. Following the resolution, a regulated crypto exchange has announced a plan to offer Shariah compliant services in order to attract a substantial number of Muslims to the crypto landscape. While the complete guidelines are yet to be released by the Securities Commission, the resolution is already making waves across the country as the Malaysian Muslim community awaits the launch of Shariah compliant crypto-trading facilities.

"Cryptocurrency is not regarded as legal tender, but it is a legit commodity that can be exchanged. Investors need more time to understand cryptocurrency from the shariah perspective. Crypto has great potential but adoption in the country faced challenges from a lack of understanding about the asset class. The acceptance of digital assets can open up so many interesting areas in Malaysia, in which crypto can be deemed as investment assets where people can buy and hold for trading."

Datuk Dr. Mohd Daud Bakar, Chairman of the Shariah Advisory Council at the Central Bank of Malaysia and the Securities Commission of Malaysia, at SCxSC Fintech Conference in Kuala Lumpur on Oct. 6,2020.

Figure 24 Highlights From The SC Shariah Advisory Council Resolution On Digital Assets

Digital currency is recognized as mal (asset) from a Shariah perspective. The SAC views digital currency from two following angles:

- ***Digital currency that is based on technology without anything underlying***

Digital currency is categorized as `urudh (goods) and it is not a currency from the Shariah perspective. Such digital currency is not categorized as a ribawi (usurious) item. Therefore, the trading of such digital currency is not subject to the principle of bai` al-sarf (currency exchange).

- ***Digital currency that is backed by ribawi items***

  – ***Digital currency that is backed by gold, silver and fiat currency***

  If a digital currency is backed by ribawi items such as gold, silver and fiat currency, it is categorized as a currency from Shariah perspective. Hence, the trading of such digital currency is subject to the principle of bai` al-sarf.

  – ***Digital currency that is backed by ribawi items other than gold, silver and fiat currency***

  If a digital currency is backed by ribawi items other than gold, silver and fiat currency, it is categorized as amwal ribawiyyah (usurious forms of wealth). Therefore, the trading of such digital currency is subject to the Shariah requirements of ribawi items.

- ***Digital Tokens***

Digital tokens are recognized as mal under the category of `urudh (goods) from a Shariah perspective. In determining the Shariah status of a digital token, the following matters must be fulfilled:

(i) The proceeds raised from the issuance of the digital token must be utilized for Shariah-compliant purposes.

(ii) The rights and benefits attached to the digital token must be Shariah-compliant.

(iii) In the event that the utilization of proceeds under item (i) and the entitlement of rights and benefits under item (ii) above are for mixed activities of Shariah compliant and Shariah non-compliant purposes, the existing SAC resolution on utilization of sukuk proceeds and the business activities benchmark under the Shariah screening methodology for listed companies on Bursa Malaysia are applicable.

If a digital token is backed by ribawi items, the trading of such digital token is subject to the Shariah requirements for trading ribawi items.

Source: Resolutions of the Securities Commission Shariah Advisory Council (2020)

Electronic Money (E-Money)

After the phenomenal growth rate of e-money usage (see figure 8), the Shariah Advisory Council (SAC) of Bank Negara Malaysia (BNM) at its special meeting on 29th January and 30th January 2020 issued a ruling that e-money is a permissible payment instrument under Shariah. This particular ruling came into effect on 19th of May, 2020 with detailed guidelines for e-money transactions to ensure their Shariah compliance. This is yet another step taken by Malaysia's regulatory bodies to better regulate its fintech landscape. The already increasing trend in the use of e-money is highly expected to grow at an even more rapid pace following this ruling of the SAC of BNM. However, none of the non-bank e-money issuers in Malaysia have announced any Shariah compliant e-money status.

Figure 25 Highlights from SAC of BNM decision on e-money

Electronic money (e-money) is a permissible payment instrument under Shariah, provided that the e-money is structured based on appropriate Shariah contract(s) to preserve the rights and obligations of the contracting parties

Issue 1 : Underlying Shariah contracts between the contracting parties

- E-money has to be structured based on appropriate Shariah contract(s) to preserve the rights and obligations of the contracting parties.
  - SAC is of the view that the contract of agency (wakalah) is one of the most suitable Shariah contracts that appropriately governs the rights and obligations of the contracting parties in an e-money transaction.
  - For the transaction between the approved issuer and the merchant in the current operating structure, the contract of services with fee (ijarah al-khidmat) or the contract of incentives (ju`alah) may be used.

Issue 2 : Fund management by the approved issuer

- The approved issuer of Shariah compliant e-money must place the funds received from the user in a Shariah compliant trust account or a dedicated deposit account.

Issue 3: Imminent presumption of qard jarra naf`an in the practice of reward offerings

- The approved issuer may offer rewards for various reasons such as upon subscription to their service, topping up the balance or utilization of e-money to make payments to merchants. Since the funds received from the user may be construed as qard from the user to the approved issuer, it raises the question on whether the practice of offering rewards contravenes the Shariah principle that prohibits any benefits to accrue to the lender (qard jarra naf`an).

- The SAC ruled that there is no issue of qard jarra naf`an in the practice of rewards offered by the approved issuer based on the following considerations:

  – the qard contract is only a supplementary contract,

  – no inter-conditionality between the funds placed by the user and rewards given

  – the rewards neither intended nor targeted to reward the amount placed by the user,

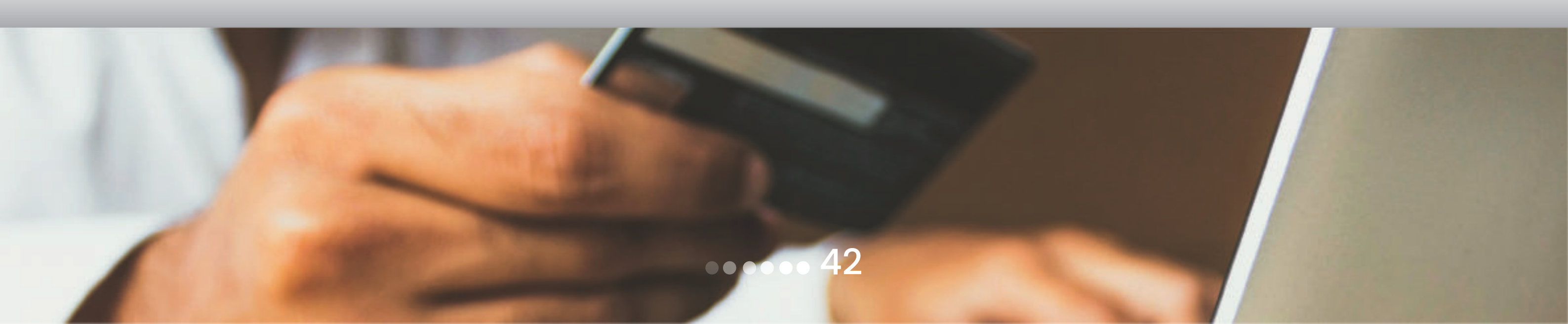
  – the Guideline expressly prohibits approved issuers from issuing e-money at a monetary value that is greater than the amount received; and

  – the practice (`urf) in respect to utilization of the funds by the approved issuers, creates a differentiation from normal banking business, which renders the qard contract as a supplementary contract.

Issue 4: Utilization of e-money to transact with Shariah non-compliant merchants

- It is the user's responsibility to ensure e-money is being utilized for Shariah compliant transactions.

Source: Resolutions of the Shariah Advisory Council of Bank Negara Malaysia (2020)



Equity Crowdfunding & P2P

Equity Crowdfunding (ECF) & Peer-to-Peer (P2P) funding are regulated under the 'Recognized Markets' guidelines. The guidelines, which are revised periodically, cover digital assets, ECF & P2P platforms whether offering conventional products or Shariah compliant products. The guidelines declare that wherever an Islamic capital market product is offered, the operator must appoint a Shariah advisor. In addition, the guideline specifies that a P2P platform operator shall use a Shariah compliant trust account with a licensed Islamic bank for the purpose of holding the Shariah compliant funds being raised.

Figure 26 Highlights from Guidelines on Recognized Markets with regard to Islamic ECF & P2P

Rules Applied to All Offering of Islamic Capital Market Products including P2P and crowdfunding

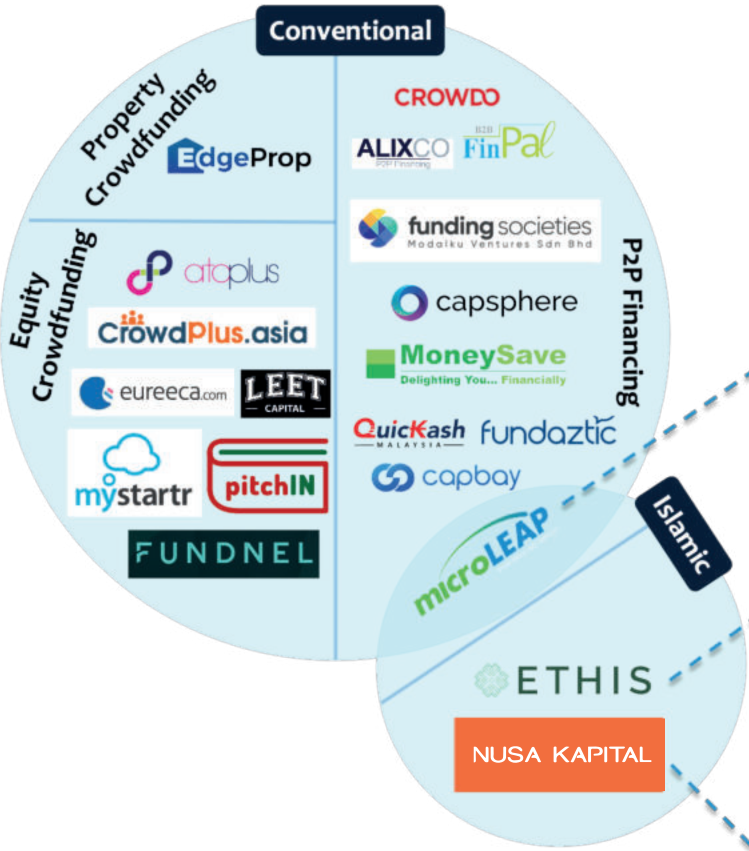
Appointment of Shariah Adviser	Where an Islamic capital market product is offered, the operator must appoint a Shariah adviser. The Shariah adviser must either be– (a) a person or a corporation, registered with the SC; (b) a licensed Islamic bank; or (c) a licensed bank or licensed investment bank approved to carry on Islamic banking business
Role of Shariah Adviser	The role and responsibilities of the Shariah adviser shall include the following: a) Advising on compliance with Shariah principles relating to the offering of the product; b) Providing Shariah expertise and guidance on all matters, particularly in documentation, structuring and investment instruments, and ensure compliance with relevant securities laws and guidelines issued by the SC; c) Ensuring that the applicable Shariah rulings, principles and concepts endorsed by the Shariah Advisory Council are complied with; d) Applying *ijtihad* (intellectual reasoning) to ensure that all aspects relating to the offering of Islamic capital market product are in compliance with Shariah, in the absence of any rulings, principles and concepts endorsed by the Shariah Advisory Council; and e) Where applicable, issue a Shariah pronouncement, which must include – (i) the basis and rationale for the pronouncement; (ii) the structure and mechanism of the Islamic capital market product; and the applicable Shariah rulings, principles and concepts used in the Islamic capital market product.

Rules applied particularly for Islamic P2P

P2P platform: Trust account relating to monies received for issuers	Where an Islamic investment note is executed or offered, on or through a P2P platform, the P2P operator must establish and maintain a Shariah compliant trust account with a licensed Islamic bank, licensed bank or licensed investment bank approved to carry on Islamic banking business, for purpose of the fund raised.

Source: SC Guidelines on Recognized Markets SC-GL/6-2015 (R5-2020) (Securities Commission Malaysia 2020)

Figure 27 Conventional & Islamic P2P & Equity Crowdfunding Platforms



Regulated Islamic Crowdfunding Platforms in Malaysia

microLEAP is an Islamic and Conventional P2P (Peer-to-Peer) microfinancing platform regulated by the Securities Commission Malaysia (SC). Focuses on the microfinance sector. The first P2P operator in Malaysia that offers both Islamic and Conventional financing on the same platform.

Ethis Malaysia, a part of Ethis Group and is a Recognized Market Operator (RMO) approved under Securities Commission Malaysia to carry out Equity Crowdfunding business activities. It is the first Shariah compliant crowdfunding platform to obtain a license from SC Malaysia. A company with global presence. Best known for its crowdfunding impact investment for Indonesian social housing development projects which has been operational since 2014.

Nusa Kapital (NuKap) is a Shariah-compliant P2P Crowdfunding Platform based in Malaysia. NuKap is fully owned and managed by P2P Nusa Kapital Sdn Bhd and it is regulated by the SC Malaysia. NuKap focuses on providing adequate funding opportunities for SMEs.

Source: Author's Own

Case Studies of Malaysia based Islamic Fintech Companies and Solutions

ETHIS

Ethis Malaysia

Ethis Malaysia is part of Ethis Global. Starting as an investment club in 2014, Ethis is widely considered as a pioneer brand in Islamic fintech and is known for its Shariah compliant digital platforms. Headquartered in Kuala Lumpur, Malaysia and with a branch office in Jakarta, Indonesia, Ethis currently runs:

(i) A regulated equity crowdfunding platform that focuses on funding businesses and projects in the agriculture, property, social enterprise and waqf sectors (Malaysia)

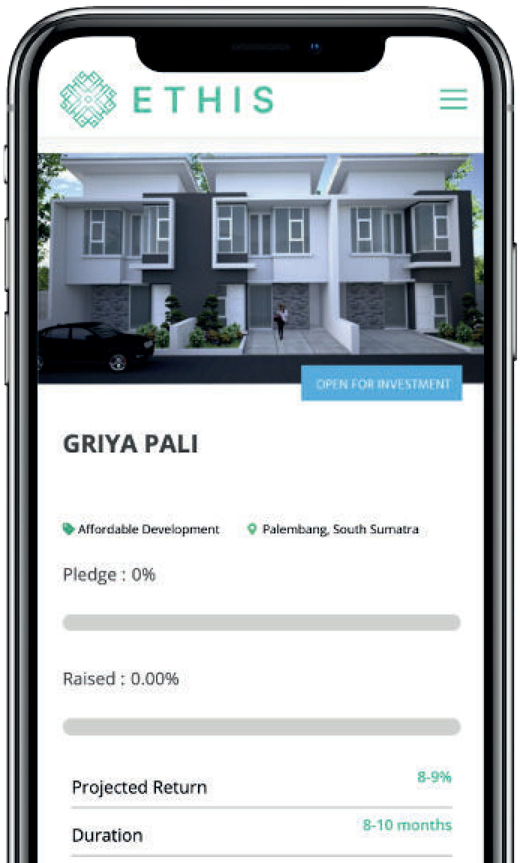
(ii) A regulated P2P platform whose main product focuses on financing social housing developments (Indonesia); and

(iii) A charity, zakat and waqf platform called Global Sadaqah (Malaysia).

Ethis also has a plan to launch another investment platform that focuses on financing property developments in Dubai.

This case study focuses on Ethis Malaysia **(www.ethis.co/my)**

Ethis Team



Fact Sheet

Key Personnel

Ethis Global is led by the Group Managing Director and Co-Founder, Umar Munshi. Ethis Malaysia is overseen by its CEO, Mohamed Shehzad Bin Mohamed Islam, who is supported by its COO and Head of Shariah, Mufti Yousuf Sultan.

Three key seed investors were involved in the early stages of Ethis; Conex Cap, Quest Ventures, and Mountain Partners. Ethis Malaysia is currently also in a private round of fund-raising from selected investors.

Value Proposition

The value proposition of Ethis Malaysia can be summarized in the following points:

- Skilled in tech deployment and access to top developers and providers of emerging/ cutting-edge technologies.
- Strong brand goodwill and wide network of brand advocators.
- Shariah compliant products.
- Existing base of global investors originating from as many as 59 countries.
- Experience with social/ethical and impact investments

Key Activities

Essentially Ethis Malaysia operates a digital investment marketplace with end-to-end capability to onboard SME equity investments.

Business Model

As an equity crowdfunding platform, Ethis Malaysia matches between issuers (Malaysian companies) and investors. Ethis Malaysia charges Malaysian companies that raise funding on its platform a fee equivalent to 6%-10% of capital raised. Other miscellaneous fees apply for services such as registration, onboarding, and post investment updates. Ethis as a group, adopts a financially prudent approach and eschews a growth at-all-cost strategy. While Ethis Malaysia leverages on the group's team of experts, the bulk of costs come from HR, technology and online marketing expenses.

Market Segment

As a digital investment marketplace, the platform must manage and grow both users (investors) and issuers (companies).

- Ethis targets investors that focus on Shariah compliant products and social impact. The spectrum of investors cover retail, angel, sophisticated, corporate and institutional.
- For issuers, while Ethis is sector agnostic, conditional on issuers meeting the Shariah requirements, the preference is for issuers with demonstrable social impact. Ethis also targets issuers within the agriculture and property sectors as well as those with involvement in Waqf projects.

Legal and Regulatory Framework

Ethis Malaysia is approved by Securities Commission Malaysia under the Recognised Market Operator framework

Key Highlights

Ethis Malaysia had its soft launch on 30th July 2020, coinciding with 9th Dzul Hijjah 1441. It targets to have a crowdfunding (issuance) value of between RM10 million to RM25 million in the first year of operation and scaling to three times the value by the fourth year.

Ethis cross-country experience: An interview with Umar Munshi, Founder of Ethis Group.

Mr. Umar Munshi has been a social entrepreneur since the age of 18. He has experience in health-tech, Islamic finance and education. His entrepreneurial journey has brought him from Singapore to Saudi Arabia, to a long stint in Indonesia in a partnership with Ronald Wijaya, (Ethis Co-Founder) and now to Kuala Lumpur. Umar is also the CEO of Global Sadaqah, the Chairman of the Islamic Fintech Alliance, and a committee member of Fintech Association Of Malaysia.

Why did you choose Malaysia for headquarters while the main operation is in Indonesia?

Malaysia has always been a leader in Islamic Finance and has shown the willingness and determination to keep that status. SC Malaysia adopts a forward-looking approach, and this is evident when Malaysia became one of the earliest countries to regulate the crowdfunding space.

As a fintech start-up, we have to find the right balance between resources, talent and costs. Moving forward, physical office location will no longer be a consideration as remote work is already a norm; this will allow us to explore resources with a more global approach, which suits us very well because Ethis has a global ambition. Despite the more global spread of resources, we are confident that Malaysia will continue to offer the right ecosystem for Islamic finance and fintech, and therein lies its appeal.

Indonesia, given the state of its economy, its large Muslim population size and the expansion of its middle class is a natural market for Ethis. Its regulatory system for fintech has also undergone tremendous improvements not least due to commendable efforts by OJK.

Why did you establish the property crowdfunding in Indonesia and equity crowdfunding in Malaysia?

Ethis is a portmanteau for ethical financing. Having a positive impact is part of our DNA. In Indonesia, we recognised and acted on the potential to bring global investors into the country to make impactful ethical investments. One such area of investment is in the social housing program. The government introduced the Housing Loan Liquidity Facility Programme (FLPP) in 2010 to provide state-subsidised mortgages and mortgage insurance, and in April 2015 President Widodo officially launched the One Million Houses (OMH) programme. Through the OMH, the government plans to provide adequate housing for low-income Indonesians. Given the government's focus in this area as well as the added security of having real estate assets backing the financing campaigns we had for our global investors, most of whom were making their first investments into Indonesia, property crowdfunding or rather, crowd financing social housing developments, made sense for Ethis.

Malaysia has close to a million SMEs that collectively contribute about 38.3% to the national GDP and in 2018 employed over 66% of all workers. While bank funding continues to be the main source meeting the needs of SMEs, alternative sources of funding, such as equity crowdfunding (ECF) and peer-to-peer (P2P) lending are expanding strongly and becoming increasingly important in the SME financing landscape. Based on the OECD publication, "Financing SMEs and Entrepreneurs 2019: An OECD Scoreboard", SMEs are turning to non-bank financing sources at a faster pace than in the past. As far as Shariah compliance is concerned, profit and risk sharing based equity financing seems to be the closest to the spirit of Shariah. Having said that, P2P financing can also be done in a Shariah compliant way and we will not rule out entering this space too, subject to getting regulatory approval. SME funding is one area of focus for us. We also see a huge market gap in terms of funding agriculture investments and Waqf related projects. Of course, we will remain true to our founding principles and funding social enterprises will be a key area of focus too. Malaysia offers a huge market for these areas of focus.

Based on your experience, what is your assessment of Malaysian crowdfunding regulations?

Malaysia is recognized as being among the top jurisdictions for benchmarking regulations for alternative finance at a global level. Malaysia issued the first regulations for equity crowdfunding in the ASEAN region, and its alternative finance industry has steadily grown.

As a whole, Malaysia's regulators are forward looking and responsive to change. I think all regulators recognise the changing landscape of finance and financial services but in terms of speed of response, I would say Malaysia has done a laudable effort.

What is your assessment of the Malaysian crowdfunding ecosystem?

It can be improved. Market outreach within the country for example needs more work. In terms of investment participation in crowdfunding (both ECF and P2P), Malaysia has probably not seen more than 10,000 investors participating in the alternative financing space. This is based anecdotally from data shared by a leading platform with the largest current market share where they reported having 1,256 investors in 2018.

It would be also meaningful if Malaysia adopts a more global approach in terms of the issuances allowed. Malaysia is after all recognised as the leading global centre for Islamic finance. Right now, only Malaysian companies are allowed to raise funding on Ethis Malaysia. It would be useful to have global (non-Malaysian) companies, subject to the right regulation including proper assessment and due diligence screening, be allowed to use Malaysia to launch their start-up operations or raise funding.

What are the challenges that you faced in operating cross-countries?

For multinational corporations, geographical expansion is supported by a set of robust and well internalised set of systems, processes, policies and procedures. Regulatory context may differ, but the execution of tasks would have similar if not the same approaches. Often, these systems, processes, policies and procedures would have been developed and refined over a considerable stretch of time. Under Industrial Revolution (IR) 4.0, it is commonly argued, and to an extent, already demonstrated that jobs with these three qualities are most likely to be automated; repetitive, based on rules and involving limited or well-defined physicality. However, set processes, systems and procedures are necessary to bring predictability and consistency. What I am trying to say, perhaps in an elaborate way, is that as a start-up we need to develop these systems, processes and procedures almost from scratch but that is a challenge that our team embraces and I believe we have successfully navigated through.

Of course, the regulatory complexities are another matter of significance when operating cross-countries. Again, I would like to emphasise that Ethis, despite these challenges, believes that it can, and in-sha-Allah will have, a global presence.

Amongst the specific operational challenges we encounter is foreign exchange volatility and cost of payment transfer for our global base of investors.

What is the impact of COVID-19 on Ethis' operation?

COVID-19 has caused a reduction in operating revenue and with that we have had to "right-size" but the positive outcome of that is our core team is now more focused, alert, hungry and nimble towards new opportunities whether these opportunities are discovered or created.

As an entrepreneur, what is your recommendation for those who would like to start their journey in Islamic fintech?

One of the main challenges for most fintech solutions and ideas, is to obtain regulatory approvals or exemptions. This must be seriously considered right at the beginning, including understanding the likelihood of obtaining such approvals, the time it may take, technical and compliance requirements and the costs involved. Some licenses in some countries are no longer available, which means that new startups will have to try to partner with existing licensed fintech operators. The journey in starting and growing an Islamic fintech company is going to be a challenging one, so my other main advice is for founders, to be mentally prepared to last the distance

escapade
by eTiQa

Escapade by Etiqa Digital Solutions

Etiqa, the Insurance and Takaful arm for Malayan Banking Berhad (Maybank), introduced Etiqa Digital Solution (EDS) as the digital lab for the organization, to enable the capability of capturing new value from digital initiatives. EDS established Escapade program in 2019, an incubator and accelerator for takaful and insurance startups.

Located in the heart of Bangsar at Level 16 of Menara Etiqa, the 14,136 square feet space named "Escape" is a new co-working space for tech startups and the physical space for Escapade program; aiming to bring together talents from across the region in order to build a symbiotic ecosystem amongst the startup community.

Escape Office, Kuala Lumpur

Key Personnel

Etiqa Digital Solution (EDS) is led by its Chief Executive Officer; Amran Hassan. The company ventures into the realm of fintech operators; focusing on, but not limited to, insurtech and takafultech startups comprising of multidisciplinary teams that are experienced in Design Thinking, Design Sprints, User Interface & User Experience (UI/UX), and Agile methodology; to name a few. The company works hand-in-hand with startups across the region to bring digital capabilities to the organization and also introduce new products and services to the market.

Key Activities

- Workspace: Escape offers startups the flexibility of hot desking or renting a fixed desk as their day-to-day office. Another option would be the cozy private office rooms which target startups that demand privacy. Spacious meeting rooms with high speed internet connectivity, discussion booths, studios for podcasting, and mothers' rooms are some of the available amenities that are prepared especially for members of the co-working space.

- An incubator and accelerator for takaful and insurance startups: The Escapade program serves as Etiqa's platform to collaborate with startups to achieve the goals of either scaling their business, or raising funds

Value Proposition

The unique proposition of the Escapade's platform is the flexibility of the program. Through the platform, startups are invited to submit their proposals to Etiqa regarding possible collaboration models. The Escapade collaboration further enables startups to expand their market reach, not only in Malaysia but also regionally. Etiqa's presence in the region has remained resilient amidst the uncertain economic climate. With countries such as Singapore, Indonesia and Philippines already under Etiqa's belt, the group's recent foray into Cambodia's insurance market has seen the insurance and takaful company further expand its wings outside Malaysia, allowing the organization's start-up partners the chance to explore markets beyond Malaysia.

Business Model

The business model behind the initiative was a hybrid between 'Incubator' and 'Accelerator'. Incubators typically 'incubate' disruptive ideas in hopes that the idea will develop into a viable business model. Accelerators on the other hand 'accelerate' the growth of established startups by scaling their businesses. As both incubators and accelerators have similar goals of helping out startups in growing their businesses. The programs and initiatives were modelled to mimic the framework of an incubator and also an accelerator, but not entirely. The assimilation of the two models allows Etiqa to tap into the strength of each model and at the same time reduce the high average number of program drop-outs, which remains one of the pressing issues for incubator and accelerator programs.

Market Segment

Entrepreneurs in the field of Islamic and conventional insurance.

Legal and Regulatory Framework

As a digital lab, there is no specific regulatory framework.

Key Highlights

To date, Escapade has garnered interest from more than 50 startups from all over the South East Asia region applying to be part of the inaugural program, with close to a dozen projects being identified and finalized for deployment in the near future.

Islamic Fintech Labs: An interview with Mr. Amran Hassan, CEO of EDS:

Amran Bin Hassan, CEO of Etiqa Digital Solutions Sdn Bhd, and formerly Head of Maybank Corporate Development & Innovation (CDI). Prior to joining Maybank in 2012, Amran was a Senior Executive Partner-Technology Consulting (Malaysia) & Infrastructure (Southeast Asia) at Accenture Malaysia.

What is the motivation behind establishing Escapade?

The constant pursuit of wanting to introduce new technologies, products, services, sales channels and markets has been the catalyst for Etiqa to achieve the objectives of:

(1) Disrupting the insurance experience

(2) Enhancing the insurance ecosystem

With these objectives in mind, one of several key initiatives is the introduction of Escapade.

What does Escapade offer its participants?

In principal, Escapade offers 4 key forms of support:

1) Co-working space: Participants will have access to the Escape co-working Space,

2) One-to-one tailored program: Each startup will have a unique program with Etiqa, based on the ventures identified and would be working closely with the teams, leaders and partners of Etiqa,

3) Product validation: Participants of the program will have access to our customers across the region to help validate any products or ideas, and

4) Raising funds: Participants can leverage on Etiqa's network to connect with potential investor and funding partners

How does Escapade nurture the hosted startups?

As each startup that partakes in the program typically has different goals, the platform would bring the startup's offering and capabilities, and later match them with the objectives of the project sponsors within Etiqa group. This method minimizes program drop-outs as there would be a mutual understanding and expectation from both parties (i.e. the startup and the project sponsors) when projects are being rolled out. The appeal from treating the program similar to a project style is the ability to track success. There is no specific time frame for how long a start-up would be in the program as the approach is treated similar to a project with a pre-agreed timeline.

What are the key focus areas/verticals of the lab in relation to Islamic fintech and Why?

Leading verticals such as payments, wallets and insuretech have been Malaysia's top three dominant segments in the country's overall fintech ecosystem. The introduction of Escapade has sparked collaborative interest from several Islamic-based 'tech-prenuers' toward the programme. These startups are involved in multiple sub-verticals of Islamic fintech, garnering interest from TakaTech players, Islamic community enablers and also from the Halal industry. As part of Escapade, these Islamic fintech players will have funding access depending on the company's appetite to scale up the business beyond their current market.

Does Escapade target a specific stage in a startup's lifecycle

The Escapade program caters to the different stages in a startup's lifecycle; ranging from early stage startups, to growth and also matured players in the ecosystem. Startups that collaborate with Etiqa will have access to resources from Etiqa such as coaching and mentorship from the senior management teams, as well as access and support from program partners which comprises of government agencies, private owned entities, and Venture Capitalists (VCs) from countries within the region. The collaborative business model with the startups from different fintech verticals allows Etiqa to penetrate various market segments.

FINTERRA

THE FINANCIAL FRONTIER

Finterra

A technology company providing blockchain-based Islamic applications. It was established in 2017, and currently has presence in Malaysia, Singapore, Hong Kong and UAE, with plans to further expand to Africa, Saudi Arabia and Oman. Finterra has developed blockchain solutions for Islamic social finance including charity (Sadaqah), endowment (Waqf) and alms (Zakat), integrating crowdfunding technology. With its solutions, Finterra hopes to revitalize Islamic social finance across the globe, with a major focus given to Waqf in order to unravel numerous endowed assets globally that were previously deadlocked due to regulatory restrictions.

Fact Sheet

Key Personnel

Finterra is founded by Hamid Rashid and Satesh Khemlani who is also the Managing Director.

Finterra's top management comprises of Sreecharan Kunutur (Chief Technology Architect), Syed Abid (Head-Business Operations), Fathimath Badeeu (Head–Compliance & Governance), Mamoun Khanfar (Director – International Sales) and Rajesh Tarasia (Head – Finance & Audit). Finterra also has an advisory board that consists of Prof. Dr. Syed Khalid Rashid, Prof Dato Dr. Ahamed Kameel Mydin, Dr. Ahcene Lahsasna, Dr. Umar Oseni, Dato Manap Wahab and Mohamoud Dualeh.

Key Activities

Though Finterra is established with a focus on providing Islamic social finance blockchain solutions, it also offers other blockchain based fintech solutions including:

- **Gallactic Blockchain**
- **Token Sales System**
- **FINVault – Digital Wallet**
- **FINPay – Payment Gateway**
- **FINUnion – Invoice Financing**
- **FINMicro – Micro Finance System**
- **FINEx - Crypto Exchange**

Value Proposition

With technological advancements in the area of blockchain and crowdfunding intermediation platforms, Finterra offers a breakthrough by using modern technology that could help to resolve the global dilemma of revitalization Islamic social finance. The aim of Finterra is to deliver innovative solutions that address the bulk of issues faced by Islamic social finance in order to utilize these tools at its highest potential to benefit our communities.

Market Segment

The main market segment is Islamic social financial institutions including waqf entities and NGOs.

Finterra also caters to businesses looking for technology and operational experts by offering blockchain solutions, software and mobile app, consultation and training. It also targets financial institutions by developing blockchain-based products including digital wallets, and payment gateways, among others.

Business Model

As a waqf crowdfunding platform, Finterra's business model is based on intermediation. Yet, Finterra's businesses expand into other areas in which there are several revenue streams including:

- Cloud software subscription fees charged to different stakeholder users on the Waqf Blockchain platform, transaction fees applied to the transfer of funds within the blockchain, and success fees applied charged to charitable, waqf, or investment projects for raising funds.
- White-Labelled software implementation services charged to clients who purchase software licenses
- Other fees charged for consulting, advisory, and training services. Finterra also makes profits via its investments in projects.

Legal and Regulatory Framework

Finterra is mainly a technology provider that caters to the financial industry. However, some of Finterra's products may fall into regulations of central banks and the purview of capital market regulators.

The company is in the process of acquiring relevant crowdfunding & P2P licenses from the Securities Commission of Malaysia.

Key Highlights

Finterra concentrates on acquiring/onboarding reputed large enterprise client accounts. It has secured 12 global enterprise clients including IsDB, Al Rajhi Endowment in Saudi Arabia, Alizz Islamic Bank in Oman, Yayasan Waqf Malaysia and HAL Micro Finance in Kenya.

Blockchain for Islamic Social Finance: An Interview with Mr. Hamed Rashid, founder and CEO of Finterra

Hamid Rashid is the Founder of Finterra and responsible for developing the WAQF Blockchain (WaqfChain). Hamid has over eighteen years of technology consulting experience in Enterprise Software Business Management and Business Development. He is a specialist in technology IP development, technology commercialization, venture capital investment and property investments with a record of work experience in corporate giants such as Hewlett-Packard (HP), PETRONAS and U&Me Communications.

Despite the success of Finterra, what are the reasons behind the limited number of campaigns/contributions on the WaqfChain platform?

Finterra utilizes an extensive due diligence process in creating causes and funds within the platform to ensure that all accepted projects are adding value to society. As a result, many causes and funds submitted are rejected due to missing information, misrepresentation, investor safety, Shariah structuring and other such matters. Hence, limited, yet verified and legitimate causes and funds are published on Finterra's platform. On average, we publish 2 causes per quarter, averaging about RM3 to RM4 million to be raised. That's about RM12 million to RM16 million per annum.

Would you briefly explain about FIN digital asset?

FIN is actually a smart contract and not a digital currency. Finterra WAQF platform is in essence a smart contract based, controlled and automated blockchain ecosystem. Projects are listed to be funded based on various Islamic contracts which are defined in the smart contract, each of these smart contracts will be adhering to ERC 777 standards and are named after the project which they represent. Every contribution into these projects will result in acquisition of a token. Finterra will be deploying an exchange ecosystem where the token can be exchanged and traded. The unit of exchange on this platform is FIN token which is an ERC 20 token. The system was designed in this format vowing to the fact that ERC 20 is a more easily exchangeable and well understood standard than the ERC 777 standard. This FIN token will be exchangeable to other stable tokens in the public exchange. This process will easily enable project owners and contributors to create and access a new asset class respectively.

Operating in 5 different countries, what are the key challenges facing blockchain applications in the Islamic social finance sector in your view?

Many jurisdictions across the globe are now moving towards adapting blockchain in the finance industry. However, it is noted that most countries are at the research phase of this process in order to identify the best means to integrate this technology within the current legal and regulatory framework as well as established operations. One area that is hindering the development of blockchain for Islamic social finance is that of regulatory compliance. Since the technology is new, regulators have to do extensive research prior to rolling out policies and regulations to ensure that this technology is not taken advantage of for malicious activities. With laws and regulations already existing to govern the financial industry, integration of blockchain into the mix is complex and time consuming. Yet, certain jurisdictions have offered a safe and open environment for financial institutions to delve into this area in order to optimize their operations. Finterra is trying leverage on such opportunities.

Based on your experience, what is your assessment of the development of blockchain for Islamic social finance globally?

Over the last few years, experts have recognised the benefits which blockchain technology offers in solving pressing challenges including inefficiency, lack of transparency, and the widespread bureaucracy. Additionally, there is a shift in the current generation of youth who are more tech savvy and looking for solutions which are transparent and convenient. Although not yet seen as the perfect solution, with better understanding and greater adoption, there will be more development of Islamic social finance. Furthermore, many jurisdictions are moving more towards blockchain, especially in Islamic social finance. For example, in Indonesia, Badan Waqf, in collaboration with UNDP, launched a Waqf blockchain with the aim to finance UN SDGs. In Malaysia, Zakat payments were accepted in cryptocurrency by NGOs such as Global Sadaqah. Similarly, in Middle Eastern countries such as Oman, Alizz Islamic Bank is working on using blockchain in their operations, specifically in the area of sadaqah contributions. This is seen in Tanzania as well where large Islamic Banks are looking to adopt blockchain platforms to offer a more transparent and traceable avenue for their customers to contribute Sadaqah, Waqf and Zakat.

What is your assessment of the Malaysian fintech ecosystem in relation to blockchain?

The Malaysian fintech ecosystem has come a long way in relation to blockchain adoption with 3 licenced crypto exchanges in the year 2019. This shift has brought about a great sense of relief in terms of blockchain usage by the general public in a large way. Regulators have also come a long way with their sand boxes and meetings of the minds in various organized events, adapting to this disruptive technology. In fact, crowdfunding, P2P, ICOs, security tokens & crypto currency have witnessed a major shift in regulations within a short span of two years, which is quite a feat achieved by the regulators in Malaysia. This has enabled a new trend in fintech startups and fintech companies to easily adapt to the new blockchain technology with ease.

What is your recommendation to the regulator?

While the above-mentioned feats by the regulators are a great leap forward in the right direction, the view of the industry players is slightly different because they benchmark against the speed of the changing technology landscape. They want the regulators to not only be reactive but also conducive in their approach. Considering countries like Estonia who have embraced blockchain not only as a reactive response but also have largely implemented it in many day-to-day activities of the public like healthcare, identity, voting, banking etc. We hope that the regulators in Malaysia will be more conducive in their approach to enable blockchain applications beyond the support of the key financial activities. Blockchain can then change the landscape of the financial ecosystem, like banking on the blockchain, complete accounting and reporting on the blockchain, use of blockchain in Islamic social financial ecosystem. By re-evaluating various limits and allowances of the existing regulations, it can enable the possibility of larger operations in the fintech space and hopefully bring about regulations to recognise smart contracts as de facto financial contracts on the blockchain.

IslamicMarkets®

Islamic Markets

IslamicMarkets.com is a learning, financial intelligence and collaboration platform for the global Islamic economy that provides tools that help professionals and institutions steer the market, unlocking commercial opportunities. It was founded in 2014 in London with the mission of harmonizing the global Islamic economy. In January 2020, Islamic Markets established its regional hub in Kuala Lumpur, Malaysia as part of its global expansion plan.

Fact Sheet

Key Personnel

IslamicMarkets is driven by a team of people who have deep experience in the industry. Shakeeb Saqlain, the founder and CEO, has worked in the financial services industry for over a decade. Javaid Karim, the CTO, is a veteran fintech developer with wide experience in financial institutions.

IslamicMarkets also has an advisory board including Daud Vicary, a former President and CEO of INCEIF, Yasmin Mahmood, former CEO of MDEC, Adam Sadiq, Co-Founder of New World Capital Advisors, and Khalid Howladar, Senior Managing Director of R.J. Fleming & Co.

IslamicMarkets has closed strategic funding with prominent groups of companies in the global Islamic finance industry including DDCAP Group and New World Capital Advisors in 2019.

Key Activities

IslamicMarkets offers a single digital platform for the global Islamic economy with the following core solutions:

- **IslamicMarkets IQ:** A dedicated market intelligence platform providing access to market data from a growing library of over 50k publications and reports. The platform also provides access to a wide range of actionable content and tools from Sukuk markets and companies to industry reports.

- **IslamicMarkets Learning**: A dedicated platform of industry-led learning modules, designed around the needs of the Islamic economy while leveraging IslamicMarkets' comprehensive learning infrastructure to create customised programmes and delivering on-demand training.

- **IslamicMarkets LIVE**: An interactive live broadcasting platform to share expertise and deliver events to institutions on topical issues.

- **IM Messenger:** A tool that connects more than 250k users on the IslamicMarkets platform.

Value Proposition

Islamic economy and financial markets are fragmented and not easily accessible. This restricts opportunities for firms to start up and grow, create jobs, and spur innovation, hindering overall economic development. IslamicMarkets.com has been founded to address this gap. It provides tools that help professionals and institutions unlock commercial opportunities. IslamicMarkets' proprietary technology also provides clear differentiation against direct competitors, especially in terms of product maturity, functionality, and direct integration with the Islamic finance community, user interface and ease-of-use.

Business Model

IslamicMarkets operates on a subscription model with two key offerings:

- Enterprise offering: Customized solutions to cater to institutional clients' needs
- Professional subscription: affordable subscription plans for individuals to learn and participate in the global Islamic economy.

Market Segment

IslamicMarkets aims to meet the needs of numerous institutions and companies in the Islamic economy such as central banks and government agencies, Islamic banks, investment firms as well as researchers and academicians, amongst others.

Legal and Regulatory Framework

As a learning and financial intelligence platform, there is no specific regulatory framework.

Key Highlights

Having more than 250,000 users, IslamicMarkets.com has become the largest online platform for the Islamic economy.

Entrepreneur journey in Islamic fintech: Interview with Mr. Shakeeb Saqlain, the founder and CEO of IslamicMarkets.

Shakeeb Saqlain is the founder of IslamicMarkets. He brings over 15 years of banking and fintech experience to the company, with a track record of working in two of the world's largest investment banks, Morgan Stanley and Barclays Capital, in Bloomberg, and in the world's oldest Islamic Bank in the capital markets, Dubai Islamic Bank.

Would you please talk to us about your journey? How did it all start?

I started in the banking industry at the height of the financial crisis in 2007; realising that the conventional model of banking was broken, I started exploring the Islamic finance market, eventually joining the world's oldest Islamic bank, at Dubai Islamic Bank (DIB). Immediately, I saw the potential of the Islamic economy, but the market was difficult to scale and was globally disconnected, which eventually led to IslamicMarkets.com

Why IslamicMarkets.com and why the Islamic Economy niche?

The Islamic economy is worth over US$5 trillion, so it's a big "niche". Despite this potential, the market received very little attention, which made it challenging for firms to access and grow. As a result, from day one IslamicMarkets.com aimed to create tools that would allow professionals and firms to steer this market, which has played an important role in unlocking commercial opportunities.

In your opinion, what areas in Islamic finance need fintech solutions the most?

On the institutional level, Islamic banks are facing strong competition from more tech-enabled conventional fintech firms and banks, and I feel they need better distribution and customer engagement, otherwise they will lose market share in the coming years. On the retail level, I'm very excited by the potential of Islamic social finance, and leveraging fintech can support the growth of this segment.

What are the common mistakes new entrepreneurs in this space need to stay away from?

As an entrepreneur, you're in a race to identify product-market fit. Listening to your customers, surrounding yourself with a strong team and iterating fast are all vital. Sometimes, new entrepreneurs can take on too much and lose focus on these three areas.

Lack of funding is argued to be one of the key obstacles facing Islamic fintech businesses. While there are a lot of Islamic banks ready to finance traditional businesses, there are very limited angel investors, VCs and PEs looking into financing Islamic fintech. Why do you think this is the case for a growing economy worth trillions of dollars?

Islamic fintech firms are generally disconnected to the wider ecosystem, which restricts their opportunity to raise funding and grow. There is a strong need to build vibrant tech-clusters in our local economies that bring together entrepreneurs, investors, academia and other stakeholders, creating zones of sustainable development and innovation, thereby attracting VCs and PEs.

microLEAP

microLEAP

microLEAP is a Malaysian P2P (Peer-to-Peer) financing platform that focuses on the microfinance sector. It was established in 2018 and given "Go-Live" permission by Securities Commission Malaysia (SC) in October 2019.

microLEAP team

Fact Sheet

Key Personnel

microLEAP is led by Tunku Danny Nasaifuddin Mudzaffar (founder and CEO), Matthew Fernandez (COO), Marzuki Musa (CMO), and Amir Azril (CTO)

Key Activities

Islamic and Conventional P2P microfinancing

Value Proposition

microLEAP is an online platform that offers both Islamic and conventional alternative financing for micro-enterprises, from as little as RM 1,000 up to as much as RM 50,000, which is funded by P2P Investors. This segment is not the focus of most of the financial institutions.

Business Model

microLEAP allows issuers access to an alternative source of funds: The Peer-to-Peer (P2P) Lending market. The platform allows investors to bypass the intermediary banks and microfinance institutions and directly invest in micro-enterprises.

The platform's source of income is the fees charged to Investors/lenders and to Issuers/borrowers.

Market Segment

On the investment side, microLEAP targets worldwide P2P retail investors that are tech savvy with disposable income to invest. On the issuers side, it targets Malaysian micro-enterprises looking for alternative financing, for e.g. micro businesses selling halal confectionary online or small businesses that sell cookies offline and online.

Legal and Regulatory Framework

Regulated by the Securities Commission Malaysia (SC).

Key Highlights

As of November 2020, 37 projects, (31 Islamic and 6 conventional), have been fully funded through microLEAP.

A dual fintech-based solution: An interview with founder and CEO Tunku Danny Nasaifuddin Mudzaffar.

Tunku Danny Nasaifuddin Mudzaffar is founder & CEO of microLEAP. He is an ex-banker having held senior positions at 2 international banks in Kuala Lumpur and London. He has 15 years of financial services experience and brought all the knowledge and skills he learnt from lending into his P2P microfinancing start-up, microLEAP. Tunku Danny holds an MBA from the Nottingham University Business School.

What is P2P? And what is the difference between Islamic and conventional P2P?

P2P (Peer-to-Peer) Financing is an alternative financing tool that connects P2P Investors (lenders) to Issuers (borrowers). In Malaysia it is regulated by the SC. Financing is only for working capital or business expansion as no personal financing is allowed.

Why did you decided to open conventional and Islamic P2P at same time?

We at microLEAP believe that alternative financing should be open to everyone. If you are a micro-enterprise looking for financing, then microLEAP should be your platform of choice.

The difference between Islamic and conventional P2P is that Islamic P2P financing is based on Islamic principles and must be used for Shariah-compliant industries and products. Conventional P2P does not have to adhere to these principles. At microLEAP, for Islamic financing, we use the concept of commodity Murabahah (via Tawarruq arrangement). Tawarruq involves a purchase of assets or commodities on a deferred payment basis by way of Murabahah as the financing mode. For conventional financing, we use interest-based loans.

What are the strengths and weaknesses of having a dual business (i.e. Islamic and conventional)?

The strengths are that you do not exclude any P2P investors that are looking for ethical investment assets. We have a good mix of Muslim and non-Muslim investors funding many of our Shariah compliant investment notes and you probably would not get this kind of mix if we were only Shariah compliant.

Also, many of our micro-enterprises that we have hosted on our platform may have initially applied for conventional financing, but once we explain to them that there is higher demand for Islamic Investment Notes, that there is also no difference in cost and provided that their business is not on our non-Shariah compliant list, then we have actually managed to convert them to raise Islamic financing. All this helps to grow the Islamic P2P market as a whole.

The weakness is that there may be some P2P investors that do not like to see Islamic and conventional assets on the same platform. However, we do tell them that we have segregated Islamic trustee accounts that never co-mingle with our conventional trustee accounts and that they may choose filters so that they may only see our Shariah compliant Investment Notes. Once we explain to them what we are trying to achieve then they generally come around.

Are there any special requirements by law for operating Shariah compliant P2P as compared to conventional?

Yes, we must have a Shariah Pronouncement signed-off by the Shariah Board of our Shariah advisors and our Islamic Rulebook must be given the green light by Islamic Capital Markets (ICM) of the SC and also the Shariah Advisory Council of the SC. At microLEAP, we don't have our own Shariah Board, but we have appointed SC-registered Shariah advisors to ensure we adhere to Shariah principles in all of our Islamic issuances. We chose a Shariah Advisor who was business friendly, knew about Islamic fintech and dynamic enough to listen to new ideas.

Comparing with the conventional P2P, what is your assessment of the demand for Shariah complaint P2P?

Demand for Islamic Investment Notes from our P2P Investors has been tremendous. We started with conventional Investment Notes first as we were still waiting for the SC to give us the green light for Islamic P2P, but once we launched Islamic P2P in April 2020, we finally started seeing some real traction. My initial target was to be 60% Islamic and 40% conventional. We are now 90% Islamic and 10% conventional. We are now focused on Islamic financing as this is where the demand is.

On the Issuer (borrower) side, we still see a 50/50 split on demand for Islamic financing vs conventional financing but that is purely due to lack of understanding of Islamic financing. Many believe that the costs are higher for Islamic financing, but after we explain to them that there are no extra costs compared to conventional, and that microLEAP absorbs the commodity Murabahah brokerage fee, they are more than happy to try and raise in a Shariah-compliant manner.

Is there any key difference in the credit rating algorithms used by P2P platforms and the ones used by traditional banks?

There will be some differences. P2P may look at alternative credit-scoring methods to enhance traditional credit rating methods. For microLEAP, we use Psychometric Testing, which measures the willingness of a borrower to repay their financing, which is considered alternative credit data.

Do you agree that P2P will always be a complementary business as it is only for those who can't access traditional banking services?

P2P financing will always be an alternative financing tool. It captures the businesses that have fallen through the cracks of traditional banking. P2P is truly increasing financial inclusion. The SC estimated in 2018 that there is an RM 80 billion funding gap for SMEs in Malaysia, so we still have a long road ahead of us.

Based on your experience, what is your assessment of the Malaysian P2P regulation and ecosystem?

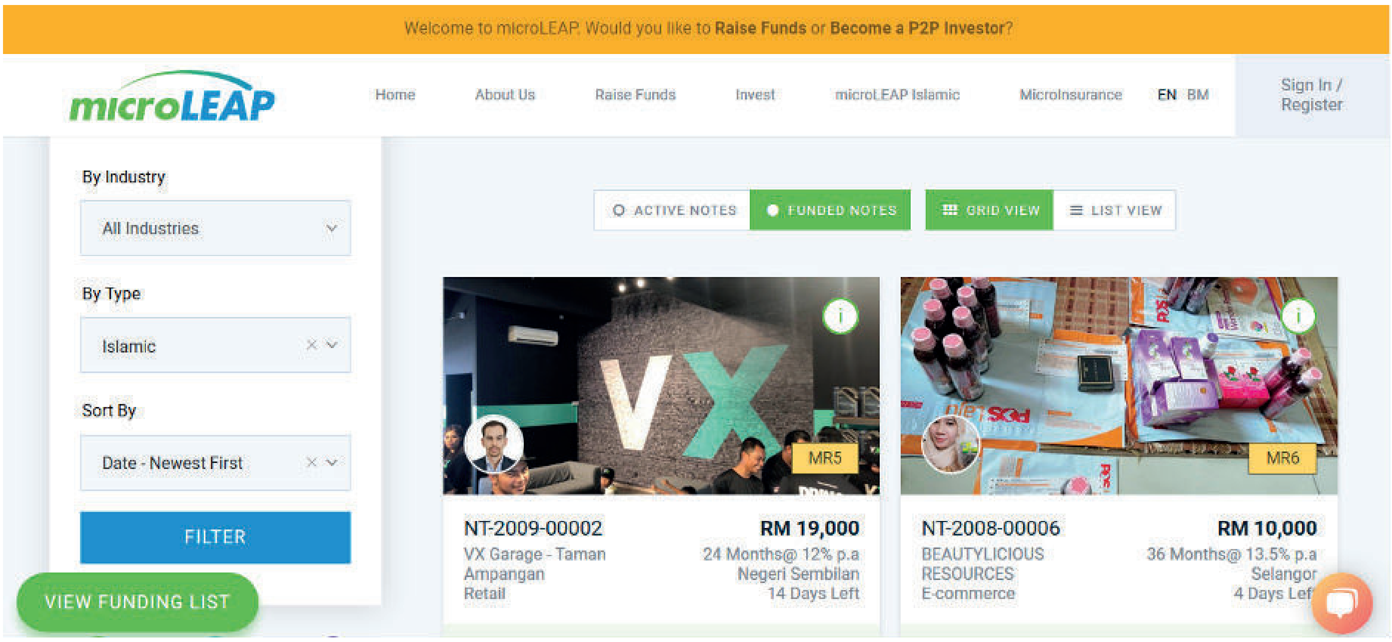
The SC has been a fantastic regulator and they have done a great job. By limiting the number of P2P operators to only 11 in Malaysia, we have not fallen into the problems that happened in China where thousands of legal and illegal P2P operators mushroomed and caused many P2P investors to lose billions when they suddenly closed shop and did not have any proper guidelines to follow in terms of origination and collection.

What is the impact of COVID-19 on P2P operation? In the long run, do you think post COVID19 will be the same as Pre-COVID19?

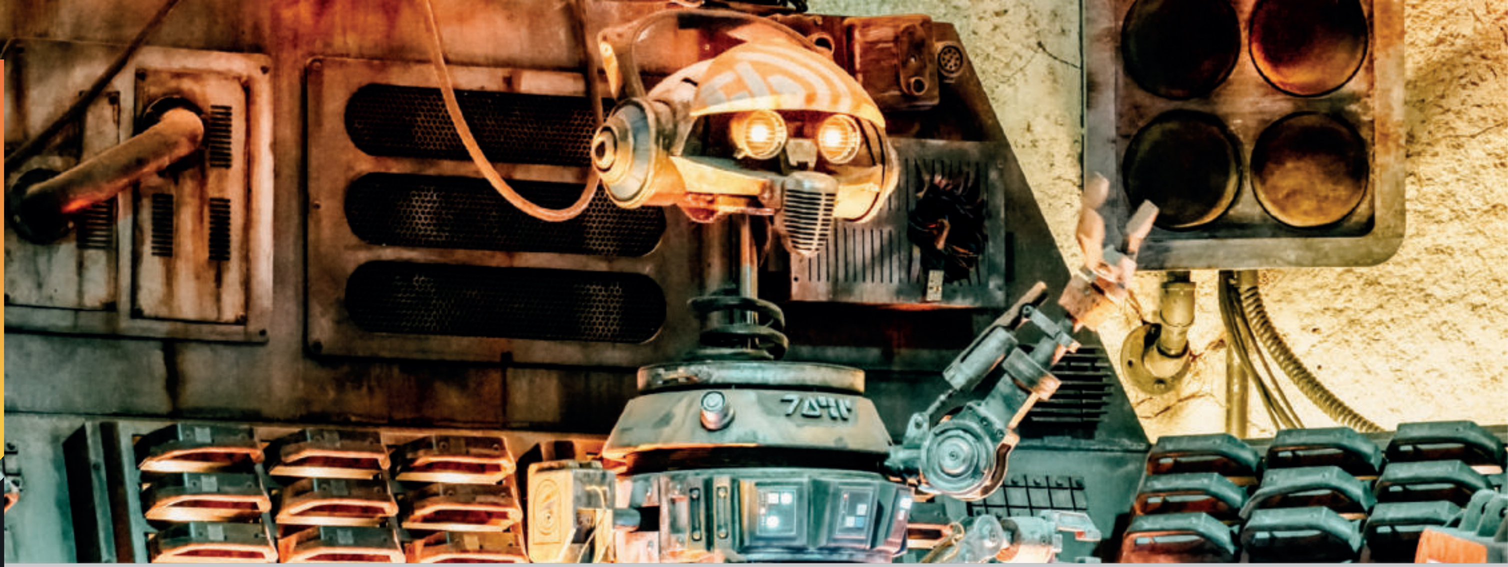
COVID-19 has hit businesses very hard. Many will not survive. This has caused many P2P operators to be more vigilant with their credit screening. For microLEAP, we are keen to onboard issuers that have some online presence that can weather this pandemic.

Once the dust settles, and a vaccine has been found, I expect to see a V-shaped recovery as consumers start to spend again and businesses thrive. microLEAP will be ready and waiting to give these micro-businesses an extra boost when this happens.

Snapshots of micorLEAP website – the successfully funded notes



SKILIK



SKILIK

SKILIK is a start-up established in 2019 as a commercial vehicle for marketing SKIL Robo Shariah Advisor (SKIL-RSA) in Malaysia and abroad. SKIL-RSA is an online learning platform that utilises artificial intelligence technology. In addition, it aims to be a decision-support system for Islamic financial institutions. SKIL-RSA capitalizes on a rich portfolio of patents of automated engines for smart processing and presentation of Islamic financial products and processes.

> "With this SKIL-RSA, we aspire to make our bank officers comfortable with handling Shariah-related issues through utilising a practical and simplified educational system. As for our banking clients, they can be more well-informed of their contract terms and financing modes."
>
> *MBSB Sustainability Report 2019.*

Fact Sheet

Key Personnel

SKILIK has been founded in May 2019. Since its inception, SKILIK has been managed by its founder Dr. Ahmed Mabrouk.

Value Proposition

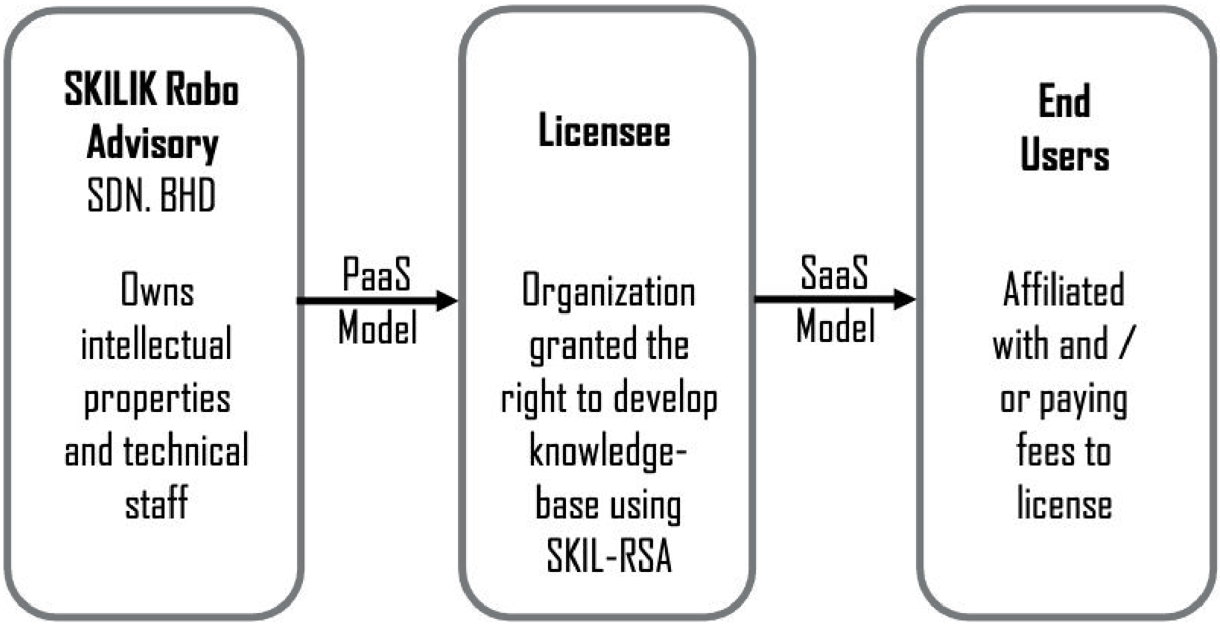
SKILIK is a response to the shortage of automated and Artificial Intelligence (AI) based tools for Islamic Financial Institutes (IFIs), which are available to their conventional peers. The lack of such tools curtails the productivity of IFIs. With the provision of Expert Systems for educational, regulatory, data analytics, and decision-support for Islamic financial applications. SKILIK hopes to contribute to the advancement of Islamic fintech.

Key Activities

SKILIK develops product-based modules for Islamic banks' officers and customers. SKIL-RSA Banker Modules focus on the Shariah aspects of product development and compliance.

SKIL-RSA Customer Modules uncover the financial and legal aspects of the respective product, and provide users with an automated financial planning advice regarding investment options and financing facilities. MBSB was the first bank to use the modules.

Business Model



Market Segment

SKIL-RSA modules are designed for Islamic banks and takaful operators. They can also be used by standard setters, chartered organizations, and academic institutes that provide educational modules of Islamic Finance.

Legal and Regulatory Framework

SKILIK represents the counter part of Oracle and SAP in providing financial services on the Islamic front. SKIL-RSA modules naturally follow the regulatory scheme adopted by our customers, e.g. BNM resolutions in Malaysia, and AAOIFI standards.

Key Highlights

SKILIK is a new startup. Yet, it has recently secured its first customer that is the Malaysia Building Society Berhad (MBSB). The project with MBSB focused on its first stage on developing banker modules to facilitate handling Shariah- related issues through utilizing a practical and simplified educational system.

AI Applications in Islamic Finance: Interview with Dr Ahmed Mabrouk, founder and CEO of SKILIK

Dr. Ahmed Mabrouk is a professor of artificial intelligence and an author in Islamic finance and Islamic philosophy of science. He received his PhD degree in Electrical and Computer Engineering from Boston University, USA, in 1998. Over the past thirty years, Dr. Mabrouk has worked for industry and academia in US, Canada, and Malaysia.

Is SKIL-RSA already adopted by any of the IFIs?

Yes. In Malaysia, MBSB Bank has already adopted SKIL-RSA modules for their Tawarruq-based products. Both the Banker and Customer Modules have been launched and ported on MBSB Bank's website. The Banker module is used by Shariah officers and internal staff who are looking for an automated tool to configure new products and conduct compliance checks and audit reporting. And the Customer module is used by the clients who are looking for better understanding of offered products, as well as a smart financial planning tool. Additionally, discussions are underway with a local bank and an international university in the Middle East for regulatory and machine learning applications respectively.

Could you highlight the key features of SKIL-RSA, with some examples?

SKIL-RSA provides an integrated online platform for studying selective topics of Islamic finance in a user-friendly manner. Additionally, users can ask questions, conduct comparative analysis of contracts and financial products, and explore legal maxims and their related cases. For example, users can ask about the type of losses the customers would be liable for under a formal promise, as per the central bank policy for instance. They also can ask about the difference between applicable Shariah contracts in terms of the rendered service.

How is SKIL-RSA is different from traditional search engines and databases?

Traditional search engines use keywords to extract the desired paragraphs from databases, leading to substantial redundancy. Google search engine, for example, generates many pages of results, which require significant time and effort to locate the desired data. On the other hand, SKIL-RSA addresses concepts and themes, which can be explored through semantically-related topics and across various schools and related sciences. It is also important to note that Semantic Web3, which represents the latest technological trend in web development, enables machine-to-machine communication, in addition to the machine-to-human communication, enabled by Web2. Web3, requires knowledge to be in a machine-processable format, which is achieved in SKIL-RSA through the use of a Usul-based ontology, specifically designed for Islamic Finance applications.

Moreover, SKIL-RSA distinguishes itself with a powerful navigation system for easy transition between related topics. Such navigation systems shorten the turnaround time of researchers and product developers by integrating all required resources in a single platform. Accordingly, users of SKIL-RSA can selectively browse the entire knowledge base, eliminating the serial notion of flipping the pages of a book.

You have mentioned that SKIL-RSA enables consulting an automated Legal Advisor. Would you elaborate on this, please?

The Legal Advisor handles the complex financial scenarios where outcomes vary based on the combination of several parameters. To determine the correct answer, the user is prompted with a set of questions for a full description of the situation under question. An example of a complex scenario could be; "When does the fund manager of a Mudharabah become liable for covering the incurred business losses?"

Despite the promising features of AI, the cost of developing seems to be high. Do you think AI is a feasible option at this juncture?

We have to remember that all AI solutions add an extra layer of computation to enable intelligent services, which are not originally offered by digital computers. This unavoidably imposes computational overhead, as well as higher development costs. However, the good news is that the recent increment of the speed of computational devices has made the CPU time of AI tasks reasonable. To reduce the deployment cost of an AI solution, users need to simplify the problems to be solved. Additionally, managers have to ensure that the AI solution under consideration indeed addresses their needs and that most of the features of the AI solution will be in use.

Does an advanced level of AI mean that machines are able to develop an opinion that is not explicitly stated by any authorities or Shariah scholars?

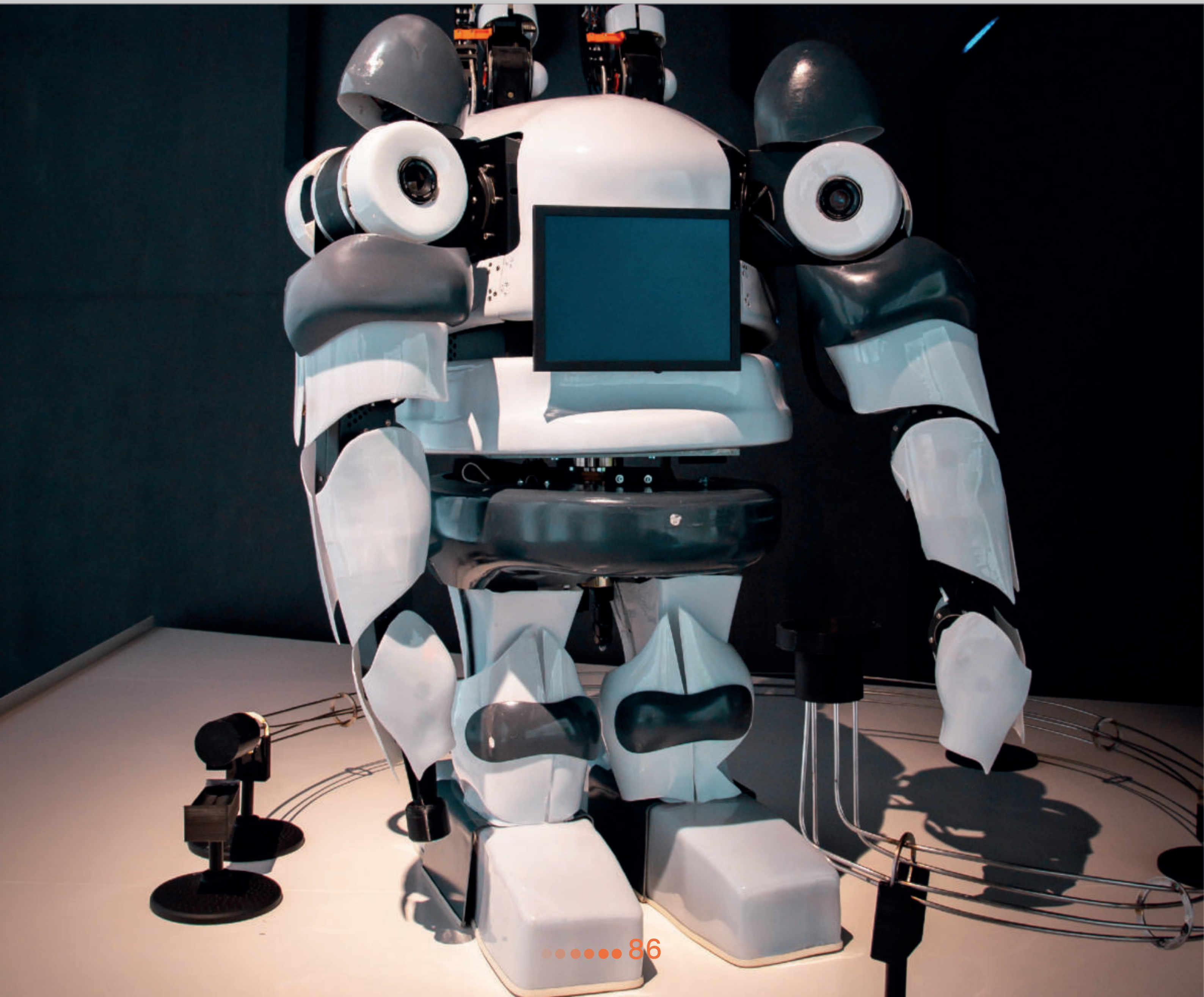
I am more inclined to the notion of "Mufti-Companion," or "Mujtahid-Assistant," which keeps the final say in the hands of the human scholar, while providing him/her with all required resources. Development of a Shariah view is a highly complex process, and thus a high-risk one, even when conducted by outstanding scholars. To reduce the inherent risk of this process, human confirmation is needed, not only at the level of an individual scholar, but preferably on a collective basis. However, as our AI algorithms get smarter and smarter, the likelihood of offering acceptable automated advice will surely increase.

How do you asses the acceptance of Shariah scholars and bankers to the idea of Shari-ah robo-advisory?

Shariah Robo Advisory belongs to the bigger theme of automation and smart services. The degree of acceptance of this theme is largely tied to the culture of the society. Notwithstanding the cultural impact, I strongly feel that the increasingly expanding role of AI has become a one-way road and already reached the point of no-return. The only point of caution is that the potential of AI should be objectively assessed and correctly positioned. Unfortunately, the marketing campaigns associated with AI solutions exaggerate their capabilities and create unrealistic expectations in the minds of customers.

Despite the global success of many fintech startups, they still face challenges in penetrating the traditional market. Do you think that IFIs are ready to work with fintech start-ups? Or do they prefer to work with bigger, more established tech companies?

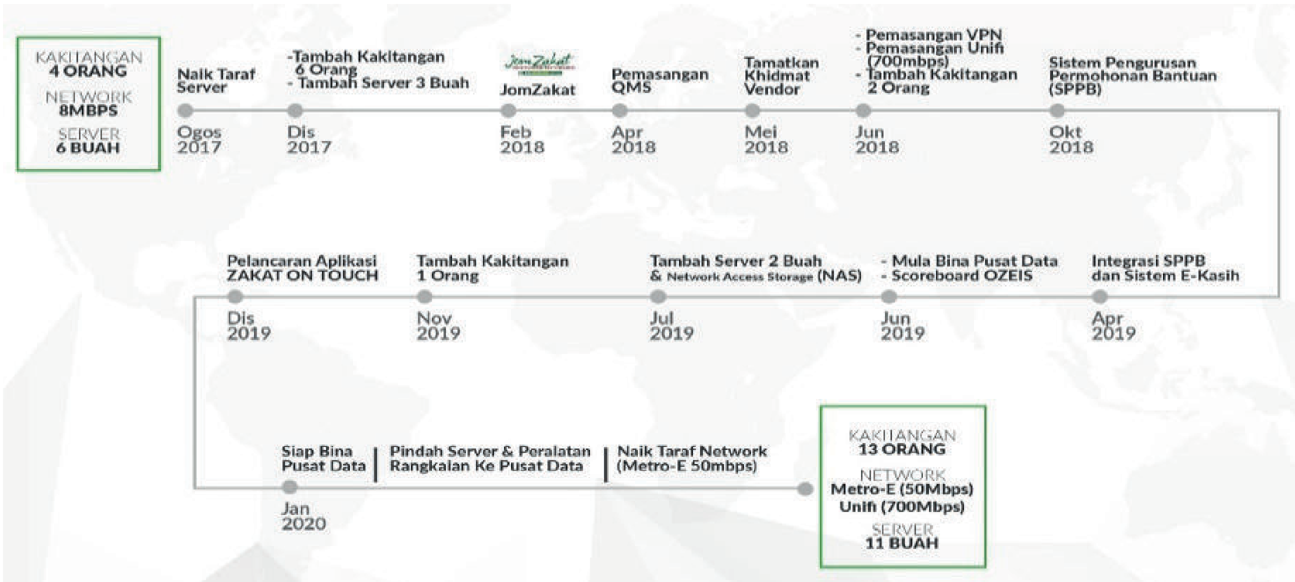
The difficulty of market penetration is not unique to fintech. The same challenge exists in all areas of production and services. Corporates are more at ease in dealing with a high-profile vendor. Startups can capitalize on lower cost, customized products, and more personalized customer service. The good thing about fintech for startups is that the market is still evolving, and many new applications are being unfolded. I do not see fintech approaching saturation in the near future.



ZAKAT KEDAH

FinTech Applications by Zakat Kedah (LEMBAGA ZAKAT NEGERI KEDAH DARUL AMAN)

Lembaga Zakat Negeri Kedah Darul Aman (Zakat Kedah) started using “Sistem Maklumat Zakat” (SMZ) in the year 2003 to manage zakat collection, while the Workplace System Portal (WSP) which manages zakat distribution and other operations was put in place in 2005. WSP includes an accounting system, local order system, human resource management system, security management system, distribution system, scholarship system, and employee training management system. Believing in the ability of technology in maintaining efficacy, Zakat Kedah took a futuristic and strategic step toward ‘technology transformation’ in 2017 by employing more software developers to develop in-house systems. As a result, Zakat Kedah succeeded in launching its first in-house developed application in 2018, which is called “JomZakat System” for managing zakat collections.



Zakat Kedah Technology Transformation Journey

Snapshots of applications developed by Zakat Kedah: JomZakat, Asnaf Care, Zakat on Touch (ZOT)

Fact Sheet

Key Personnel

Under the management of a tech and innovation savvy CEO, Syeikh Zakaria Bin Othman, Zakat Kedah has a strong team of 15 people under the Information Technology department which is headed by Mr. Zulkefli bin Abu Bakar. The team consists of 8 app developers with diverse skills, supported by 7 administrative and technical support officers.

Key Activities

Zakat Kedah IT department is developing a comprehensive system that covers the entire operation, including zakat collections, management, and distributions. The system also serves multiple other functions including finance. This is reflected by several apps and online portals such as Jom Zakat App that serves as a zakat collection app while it also includes e-Wakaf and Jom Sedekah. Zakat on Touch (ZOT) is another example. Through this app, people have access to view real-time data about how much zakat has been distributed and what kind of assistance is channelled by Zakat Kedah. Earlier this year, Zakat Kedah also launched, Asnaf Care online system to provide financial aid to those directly affected by the Covid-19 outbreak.

Value Proposition

While face-to-face zakat collections will be restricted to a limited number of working hours, Zakat Apps and online systems can be operative 24/7. In addition, face-to-face collections incur high operational costs, while online systems are much more cost efficient in the long-run with great outreach ability and scalability. Furthermore, online systems can provide the management, zakat payers and all stakeholders with real time destitution data and reports at any time with almost no additional cost. Overall, Zakat Kedah believes that technology can bring higher efficiency and better outreach and hence increase zakat collection and its impact.

Business Model

Zakat Kedah leverages on its long-term experience in zakat management and its internal IT department in the development of the required apps and system.

By leveraging technology, more savings in the distribution process are expected as less agents will be required to collect zakat. This seems to be reflected already in 2019 data which shows that the amount distributed to Amil (zakat collectors) was reported to be 13% of zakat collections as compared to 16% in 2018.

Market Segment

For Zakat Kedah, Zakat on corporates represents only 20% of total zakat collections, while zakat on income represents more than 60% of total collections. The rest of collections include zakat on savings, EPF and others. Thus, the new systems and apps target individuals.

Legal and Regulatory Framework

Zakat Kedah is supervised by the board of Lembaga Zakat Negeri Kedah, which is chaired by Kedah State Secretary and its members including State Mufti of Kedah, Kedah Syarie Chief Judge and others. It is governed by the State law ‘Enakmen Lembaga Zakat Negeri Kedah 2015’ and supporting bylaws together with a state fatwa.

Key Highlights

The annual budget allocated to the IT department was around RM 1.5 Million for 2018 and 2019, just a little up from the RM 1.3 Million in 2017. Yet the output of the department was the development of several systems and apps that helped Zakat Kedah to increase zakat collections from RM 183 million in 2018 to RM 207 million in 2019.

Zakat Kedah’s new apps are receiving increasing demand. Initial assessments of ‘Zakat on Touch (ZOT) Mobile Application’ for instance shows a rating of 4.88/5 in Google Play Store (Android) and 4+ in Apple App Store (iOS) with more than 10,000 users.

FinTech Trends in Zakat: Interview with Syeikh Haji Zakaria Bin Othman, CEO of LEMBAGA Zakat Kedah

Syeikh Haji Zakaria Bin Othman has been the CEO of LEMBAGA Zakat Kedah since 2017. He was also approved by His Royal Highness Tuanku Sultan of Kedah to be appointed as a Board Member of the Kedah Islamic Religious Council (MAIK) as well as a Board Member of the Kedah Islamic Foundation

The real time Zakat monitoring system was among the well-known projects of Zakat Kedah. Would you provide us with some insight about this project, please?

This system is now offered not only to the management team internally but also to the public through 'Zakat on Touch' (ZOT) which includes two types of data modelling covering collections and distribution. The information made available through the ZOT platform includes location of District Zakat Office, mosques & agencies all around Kedah, Amil Collection Agents / Assistants, Total Current Zakat Collection, Current Zakat Distribution Amount, Mosque Zakat District / Headquarters Collections & Distribution Information, Food Bank Inventory Information, Information about 'Jom Cari Asnaf', 'Jom Zakat', 'kira dan bayar Zakat', 'LZNK Cari Asnaf', 'Qadha Zakat Fitrah', 'Asnaf Care', 'Sahabat Zakat', 'Usahawan Asnaf' and 'Pekeliling Arahan Wajib

When and why did Zakat Kedah decide to develop Zakat apps?

In the year 2017 Zakat Kedah decided to develop several applications to manage the operation of collection and distribution of zakat funds.

Using the newly developed apps and systems, Zakat Kedah equipped the public with transparent zakat real time data regarding zakat collection and distribution. Making zakat payment accessible anytime and anywhere with user friendly mobile apps.

In adopting new technologies, one of the key challenges is the cost, does this apply to Zakat Kedah? Is it developed internally or externally by a third party?

Our zakat management systems and apps are developed internally to achieve system scalability, cost effectiveness and data protection/security (inaccessible by third-party personnel/vendor). Zakat Kedah had to upgrade its IT infrastructure & hardware including the network, servers, and devices. This also required us to upgrade the knowledge of the staff with high impact courses and to hire more developers. The cost was still acceptable as it is limited to the hardware installation and salaries in addition to professional and technical training programs which yield significantly well overall.

What is your assessment of the Zakat App performance so far? What is the impact of Zakat App on cost and collection?

Early feedback on our apps is quite positive and we can sense the success by looking into the data in the below table.

	COLLECTION 2019 (RM)	COLLECTION 2020 (RM)	INCREASE (RM)	PERCENTAGE (%)
Online Zakat Fitrah Collection (JomZakat Application)	90,979	**1,492,512**	**1,401,533**	**1540%**
Total Zakat Fitrah Collection	10,200,354	10,641,127	**440,773**	**4.32%**
Total Zakat Collection (Q1 and Q2 only)	103,112,614	113,171,061	**10,058,447**	**10%**

Considering the culture, do you think Muslims in Malaysia prefer traditional methods of paying Zakat as compared to new fintech solutions, such as the app?

I believe the Muslim community today is already accepting toward the use of online systems; though there may still be some old folks that prefer the traditional methods of paying zakat. At Zakat Kedah we welcome technology. We are not only offering more online systems/apps to the public, but we are also using many online platforms in our daily operations. We hold meetings and conduct conferences using Zoom, and we use Facebook live for collection promotion among many other applications and technology software.

Has COVID-19 positively contributed to the usage of the Zakat App? Do you think COVID-19 will accelerate the adoption of fintech?

Yes, surely. People would appreciate technology more as it solves real problems. At zakat Kedah, we have introduced the Aasnaf Care System for donation during the pandemic of COVID-19 and received a good response from the public. The public is also using the online system 'JomZakat' to pay Zakat Fitrah during the pandemic.

What is your view on blockchain? Do you think it could help in strengthening governance and transparency in managing zakat? Is there any plan to adopt/develop a blockchain solution?

Blockchain technology enables distributed public ledgers that hold immutable data in a secure and encrypted way and ensures that transactions can never be altered. Thus, by implementing the blockchain technology, it will allow Zakat Institutions to track transactions and ensure transparency, integrity, and traceability of data. In theory, this will strengthen governance and transparency in managing zakat. However, Zakat Kedah has yet to develop/adopt blockchain technology at this moment. Nevertheless, we are looking into the adaptation of blockchain solutions in developing our system operations. This, at the end of the day, will allow the muzakki to track the data footprint of their zakat contribution up to the information of asnaf (or wakalah project) that received the zakat funding.

Does Zakat Kedah have any plan to venture more into e-wallets?

Yes. In fact, Zakat Kedah is in the process of developing a prototype e-wallet platform/-module to systematically handle zakat distribution. We want to ensure the zakat money received by the asnaf is used in line with Maqasid Shariah. For example, it shouldn't be used to buy cigarettes or illegitimate items. Thus, the e-wallet needs to be able to trace the use of Zakat funds.

What is your view regarding collaborating with fintech companies? What are the challenges prevent successful partnership between traditional Zakat institutions/authorities and fintech companies?

We are looking at to have partnerships with fintech companies. Indeed, a few fintech companies (Islamic and conventional) already offered their solutions and willingness to collaborate with Zakat Kedah. Some solutions need to be customised for our requirements. One of the main challenges is the limited coverage of internet in the rural areas where a lot of asnaf live. For example, it will be difficult for them to use an e-wallet. Therefore, fintech companies need to provide innovative and customized solutions.

What is the main challenge in digitalization?

Normally the cost. If you want to have good technology you generally need to spend more, therefore, you need to have a strong justification to convince the internal and external stakeholders for each investment.

Venture Capital Insights: Interview with Victor Chua, President of Malaysia Venture Capital and Private Equity Association (MVCA)

Victor is also the Founding & Managing Partner of Vynn Capital. He was formally the Vice President of Investments for Gobi Partners and managed two Southeast Asia focused early stage funds. Some of his notable investments include Carsome (Malaysia), Triip.me (Vietnam) and Travelio (Indonesia).

Is Malaysian Fintech and Islamic Fintech primed for Venture Capital and Private Equity investment?

I feel that the demand for fintech, including Islamic fintech in general will continue to grow especially with the need for companies to provide digital services and having online presence. In the hindsight, a pandemic like COVID-19 has become a huge reason for more consumers to use digital services and thus, has accelerated its uptake.

As such, fund managers are always on the lookout to invest in fintech startups in Malaysia, especially in Islamic fintech due to the fact that it is still at a nascent stage and with promising potential of growth. The nature of Islamic fintech being an enabler rather than an industry vertical has opened up the possibility of discovering exciting deals in various sectors, and not limited to only the financial sector.

However, founders of Islamic fintech startups have to overcome challenges to attract investment from fund managers. Amongst the key factors that need the attention of founders includes the ability to demonstrate value proposition, backing from strategic partners, especially from the corporate sector, and the flexibility to work with other investees in the same portfolio. Noting that most Islamic fintech startups are still at an early stage, it is most likely that the investment may come from a venture capital fund, rather than a private equity fund.

In the end, founders of Islamic fintech should not limit their growth exclusively to the vertical they begin with, but rather they should be open to convergence of different verticals. Founders should strive to communicate more of their story to win the heart of not only consumers, but also potential investors.

Concluding Remarks

The nature of fintech existing outside of the highly regulated financial system realm allows space for the creation of new financing structures and innovative financial intermediary functions that reflect the essence of Islamic finance. Malaysia has succeeded in building a supportive fintech ecosystem that includes building a balanced regulatory framework that allows innovation while ensuring financial stability, establishing institutions that incentivize fintech companies, enabling various public and private funding schemes, and more recently, devising a number of academic and professional human capital development programs. While this ecosystem tends to cover both conventional and Islamic fintech, the latter may require further developments. The number of Islamic fintech companies is still small compared to the number of its conventional counterparts. Regulations for Islamic fintech are limited to areas of crowdfunding, digital assets, and very recently, e-money. There is much room for human development programs focusing on Islamic fintech. There is a need for innovation labs and accelerators dedicated to Islamic fintech. Though some Islamic fintech startups have succeeded to secure funds from general funding schemes, there is also a need for specialized funds dedicated for Shariah complaint fintech solutions. Additionally, fintech supporting institutions should give more attention to Islamic fintech by having dedicated departments and programs.

Malaysia has firmly established itself as a world leader and global hub for Islamic finance, therefore, it has the potential to play the same role for Islamic fintech. For many observers, the success of Islamic finance in Malaysia is attributed to the regulatory support through a top-down approach. The approach for Islamic finance covers setting up a regulatory framework for a dual financial system, as well as a legal and Shariah framework, providing incentives for the financial institutions to develop Shariah compliant products, encouraging market competition, and establishing institutions to build knowledge and expertise. In a similar fashion, Malaysia can adopt a top-down approach to nurture and expand the horizons of Islamic fintech. Providing supportive regulations with clear Shariah resolutions from the relevant authorities and establishing dedicated funds for Islamic fintech companies will certainly attract local and foreign startups to establish themselves and grow in Malaysia. Lastly, while tailored academic and professional Islamic fintech programmes will provide the required human capital for the industry, establishing innovation labs with incubator and accelerator programs committed to Islamic fintech will ensure a conducive environment to conceive, construct and champion Islamic fintech solutions.

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