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4- Conclusion

Islamic finance, being a new perspective in understanding finance and an alternative to the capitalist financial system is expected to offer something new in financial dealings. The expectation is not merely in offering financial products that are Shari'ah compliant by using conventional structure, but also in the ability to offer financial products that are distinct coming up from Islamic teachings, worldview and principles. We also want innovations in Islamic finance to continue to develop products and services that will benefit society and drive economic development. Islamic finance is, considered by many, as having potential to offer solutions and be a solid financial system if the participants of the industry are willing and put their effort to produce a new approach and framework in developing Islamic finance.

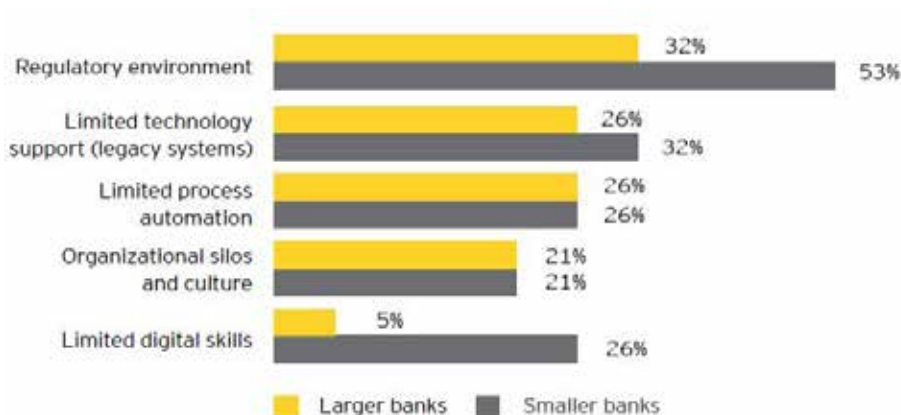


visible. However, mobile banking usage in the UAE stands at 34%, followed by 27% in Kuwait, 19% in Qatar and 15% in Saudi Arabia. Customers are generally not impressed with the mobile proposition on offer, it appears, and this holds true for both traditional and Islamic banks. Among reasons cited for this low take-up is the lack of convenience and simplicity. Less than half of the customers surveyed were happy with their mobile banking experience (EY, 2015).

Clearly, it is not enough for the Islamic banks to introduce new digital channels. They must completely reinvent their customer processes to offer technology-enabled, simple end-to-end experiences. Key solutions in demand are payments, account opening and mortgages, with the potential for banks to increase value per customer significantly. Digitization of these would entail a combination of connectivity, user experience, automation, decisioning, collaboration and execution. The other astonishing finding was the dwindling loyalty among customers. Three out of four customers surveyed felt comfortable to transition to a digital-first relationship and were willing to switch banks for a better digital experience (EY, 2015).

Banks have much at stake with digital; customers have a good understanding of the benefits digital can provide and are ready to spend more with their bank if more digital convenience is provided. On the other hand, they are also ready to switch to another institution if their expectations are not met. They expect their bank to provide more convenience and speed, less paper, pinpoint accuracy and a friendly service environment (EY, 2015).

Diagram 5: Major Hurdles Faced by Financial Institutions in the GCC in Their Digital Transformation



Source: EY, 2015



Another innovation is Awqaf New Zealand (NZ) which combining the element of waqf into sukuk. Monies raised from the issuance of sukuk will be used to acquire New Zealand farm land and farm operating apparatus and expertise. Besides that, the sale of waqf revenues from unused parts of the sacrificed animals like wool, skin, and bones will be channelled to the waqf beneficiaries (ISRA Consultancy Sdn Bhd, 2016).

Another important aspect that need our attention in the digital age is the aspect of knowledge dissemination. The Global Islamic Finance Education 2013 report produced by Yurizk highlighted that Asia hosts 43% of global Islamic finance education and knowledge service providers (IFEKSP), with Europe 22%, the Middle East and North Africa 19%, North America 8%, Sub-Saharan Africa 6% and Oceania 2%. In line with the development of industry, the research, education and knowledge in Islamic finance will keep increasing. Therefore, International Shariah Research Academy for Islamic Finance (ISRA) has also initiated the digital revolution in the area of knowledge in Islamic finance by introducing Islamic Finance Knowledge Repository (I-FIKR). The I-FIKR is envisaged to be a one-stop hub for Islamic finance reference material and sources which includes papers, publications, fatwa, research, events, list of Islamic finance institutions, The portal was officially launched by the Malaysian Central Bank's Governor Tan Sri Dr. Zeti Akhtar Aziz in 2013 and attempts to provide important sources of reference and guidance for Shari'ah and industry practitioners, policymakers, researchers and academicians, students and Islamic finance stakeholder at large. With a dynamic mechanism for subscribers to connect and interact with materials and information, ISRA aims to disseminate and to promote Islamic finance knowledge to the public at large, both locally and globally and hence could bring Islamic finance industry to the next level.⁽¹⁾

Cyber-trust, convenience, and personalization will be the core of customers' relationship with their bank in the current progression of Fintech and the digitization of banking business. Technology is the enabler of such relationship. This means that the Islamic banks will have to completely reinvent their business model (EY, 2015).

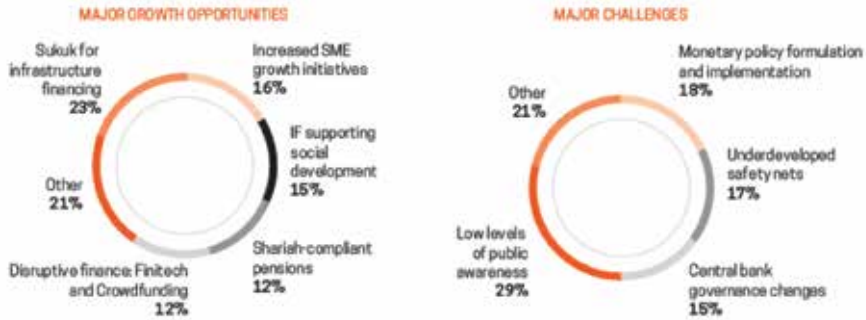
The bigger challenge is the implementation of the digital strategies. Majority of Islamic banks would appear to be struggling to adapt to new customer decision journeys, prototyping of new technologies and the time to market. Addressing customer needs in an increasingly digital world means disrupting and rewiring existing business models for a fresh customer experience. But this investment has to be made wisely because up to 50 percent of retail banks' net profit could be at stake (EY, 2015).

EY's study has confirmed that the future of retail banking in the GCC is a smartphone experience that delights. This customer desire for a "bank in your pocket" is notably

(1) The I-FIKR portal can be accessed at the following website address: <http://ifikr.isra.my/home>



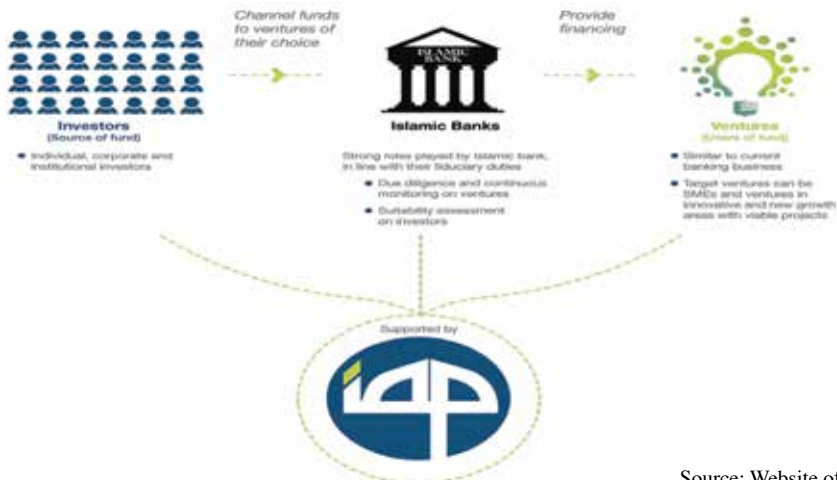
Diagram 3: Major growth opportunities and challenges in Islamic Finance



Source: Thomson Reuters, 2016

In terms of mobile banking and payment systems, Islamic banks have opportunity to offer Shari’ah-compliant Internet-based banking platforms. For example, Investment Account Platform (IAP) which gathered six Malaysian Islamic banks into a central marketplace. IAP serves as an intermediation between the investors and then channel such funds to viable ventures. The first venture listed under IAP is Perak Transit Berhad (Perak Transit), an integrated transportation terminal and public transportation services provider based in Ipoh, Perak. The investment will be in the form RM10 million Term Financing Facility for three years. The return expected to investors is 6.5 percent per annum. The proceeds raised from the facility will be utilised by Perak Transit and its group of companies for its working capital requirements (Sipalan, 2016; Investment Account Platform, 2015; Bank Muamalat, 2016).

Diagram 4: Malaysian Investment Account Platform



Source: Website of IAP



3- Islamic Finance and the Challenges of Digital World

With regards to the Islamic Finance sector where its total asset is \$2 trillion in 2015, its growth and increasing sophistication could be coupled with the emergence of crowdfunding platforms and a greater push towards social impact investing. It is expected that total Islamic Finance asset could reach \$3.5 trillion by 2021, especially in Awqaf and Crowdfunding sectors.(Thomson Reuters, 2016).

One of the major growth opportunities in Islamic Finance is disruptive finance, Fintech and Crowdfunding as shown in Diagram 3. For instance, Islamic Fintech Alliance (IFT Alliance) which gathered eight crowdfunding platforms from eight countries and territories in facilitating business matching between investors and entrepreneurs. EthisCrowd.com which offer Islamic real estate crowdfunding platform, Narwi-Waqf through Narwi.com, and Blossom Finance which use Bitcoin to provide microfinancing in Indonesia are other examples of Shari'ah-compliant crowdfunding platforms.

Being a cooperative, transparent, and economical way to invest in Shari'ah-compliant equity financing, crowdfunding platforms offer benefits both to the entrepreneurs and the investors. For the former, the entrepreneurs could save a lot of time, effort, and money as the fundraising campaign is done by pitching the product idea on the crowdfunding website. Meanwhile, the benefits of crowdfunding for the investors are ability to evaluate potential of the business soliciting funds through the pitches, reducing the risk of losing huge amounts of money through investing a subtle amount and diversifying the portfolio of their investment, and obtaining higher returns as well as a fair share in the stake of the business that they are investing in(Andaleeb & Mishra, 2016). However, lack of proper laws and regulations for financing through crowdfunding could hinder its potential and growth (Department of Finance, Ireland, 2017; Engine Advocacy, 2015; Ying, 2015).For example, lesson could be learn from United Kingdom where the investors are entitled to tax deduction (Andaleeb & Mishra, 2016).

A report by Thomson Reuters (2016) observes the potentials for digital innovation in Islamic finance industry are the booming of sukuk for infrastructure financing (23%), increased SME growth initiatives (16%), social development fund (15%), Shariah compliant pensions funds (12%), and the emerging Fintech application and crowdfunding in Islamic finance industry (12%). Looking at the potentials, Islamic finance industry players will certainly grab the market and allocate more funds to develop innovation in digital financial services.

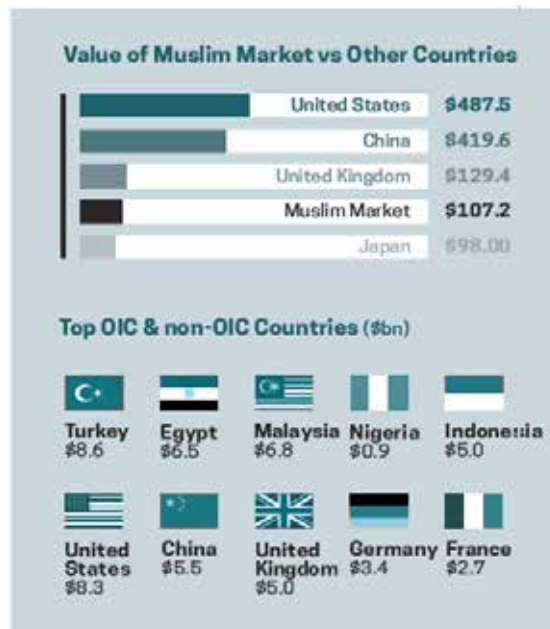


Digitization has driven almost 12 percent of the global goods trade through international e-commerce like Alibaba, Amazon, eBay, Flipkart, and Rakuten. Instantaneous exchanges of virtual goods such as e-books, apps, online games, MP3 music files and streaming services, software, and cloud computing services could be transmitted to the customers with the help of digitization (MGI, 2016).

Digital platforms could transform small and medium-sized enterprises (SMEs) into micro-multinationals and digital start-ups are born global. At the same time, individuals are participating in cross-border connections where estimation of 914 million people have at least one international connection on social media, and 361 million people are cross-border e-commerce shoppers (MGI, 2016).

Muslim consumer value is estimated at \$107 billion out of the whole global digital economy which is estimated at \$1.9 trillion in 2014. By 2020, the global digital economy is projected to grow at \$4.3 trillion in which the Muslim represents \$277 billion. Two main drivers of Muslim digital needs are (1) general lifestyle needs such as information & media, functional tools & services, commerce & exchange, and social & crowd networks; and (2) Islamic law and spirituality related lifestyle needs, for instance religious lifestyle productivity, halal food rating and review, and modest clothing(Thomson Reuters, 2015).

Diagram 2: Value of Muslim Market vs Other Countries



Source: Thomson Reuters, 2015

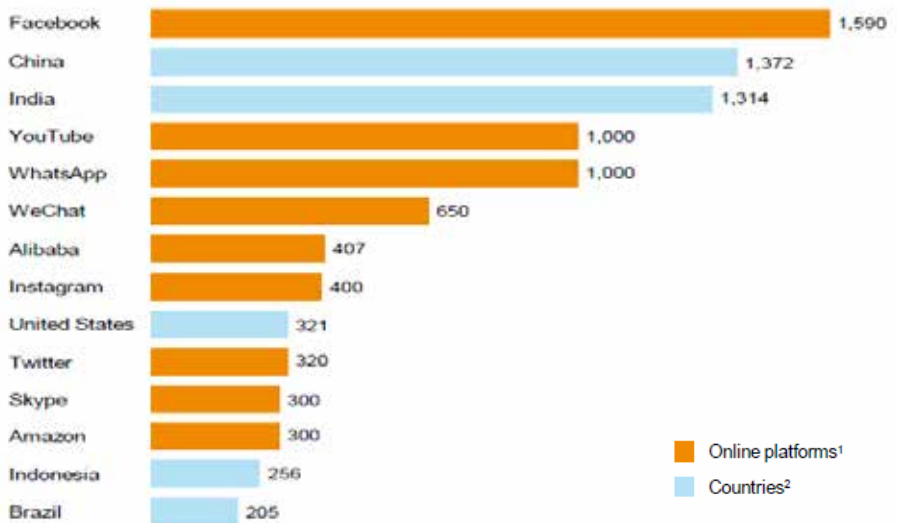


In the past 10 years, innovation in financial practices was very tremendous. In the current digital world, for example, the account opening process of a bank take less than seven minutes from the time the customer walks into the branch. Likewise, payment solutions, customized alerts, and efficient account opening are among popular new technologies that we can see nowadays.

Therefore, in order to avoid loss up to 50 percent of their retail banking profit in couple of years, many banks and financial institutions have approved to spend on digital initiatives such as channels, customer journeys, automation, and new technologies. A report by EY (2015) observes that a range of US\$15 million to US\$50 million will be utilized for the next three years, meanwhile, larger banks are allocating more spending for digital initiatives.

According to McKinsey Global Institute’s report, digital globalization has contributed to the growth of data flows up to 45 times that transmit information, ideas, and innovation. Consequently, cross-border communications and transactions could be done at lower cost while connecting customers and suppliers in any country. This is possible through the emergence of public internet platforms such as operating systems, social networks, digital media platforms, e-commerce websites and various online marketplaces. Surprisingly, the users of biggest online platforms could surpass the populations of the biggest countries, as shown under Diagram 1 (McKinsey Global Institute [MGI], 2016). This clearly shows the potentials that need to be tapped by Islamic finance industry if it wants to be remain competitive in the digital world.

Diagram 1: Active Users of Online Platforms vs. Country Population (Million)



Source: MGI, 2016

1 4Q15 or latest available.
2 2015 population.



1- Introduction

The evolution of the Islamic finance industry is viewed by many as fantastic. From its small beginning in the 1970s, Islamic finance has now considered as a global industry. The audience of Islamic finance industry is expanding to non-Muslims and Western countries. It is now in the stage of global integration to be adopted as an international financial system.

One of the biggest challenges for Islamic finance in the next decade is financial innovation. In the digital world, traditional financial practice will be left behind. Customers are expecting more innovations that would facilitate their needs and transactions in the most convenient way. Therefore, financial innovations by structuring products that are new or significantly improved with respect to its characteristics or intended uses is one of the aspects in innovation in Islamic finance that must be considered.

This paper attempts to explore the phenomenon of financial innovation in the digital world and how Islamic finance addresses the challenges.

2- Financial Innovation in the Digital World: Tapping the Opportunities

Finance is one of the important aspects in human life in fulfilling various needs as well as in increasing the quality of life. Finance assists economic development by allocating funds within society from those who have extra funds to those who needs funds to fulfill their needs.

In line with human progress, financial practices have been evolved from a simple transaction into a complicated and sophisticated arrangement. Throughout the history of mankind, financial innovations have been attempted that would assist human being in their financial arrangement in an efficient and effective way. Financial innovations involve all aspects from the design, development and implementation of innovative financial instruments and processes and the formulation of creative solutions to problems in finance (Report of World Economic Forum 2012).

Innovations in the history of financial market varied hugely in terms of the size and nature of their effect, which may be profound or relatively trivial. Some innovations are quite radical and bring significant impact in the way finance is practiced. A radical innovation is defined as an innovation that significantly disrupts the market into which it is born. This disruption has costs attached to it but these are generally outweighed by the long-term benefits. Importantly, the benefits largely accrue to the innovator and the consumer of the product, and the costs accrue to established market suppliers (World Economic Forum Report, 2012: 13).



Islamic Finance In The Digital World : Opportunities And Challenges

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