

# ISLAMIC FINANCIAL TECHNOLOGY (FINTECH): ITS CHALLENGES AND PROSPECT

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## ABSTRACT

Any innovation in technology is permissible in Islam as long as it complies with the Sharia rules. This paper aims to describe the challenges and prospect of the trending topic in Islamic finance, i.e., Islamic financial technology, or Islamic Fintech for short. In this research, we discuss several Islamic Fintech firms in Indonesia and Singapore regarding their profile, prospect, and challenges. The data were collected using questionnaire dissemination to those firms using online media, namely email and Facebook inbox. The results of this research are expected to add the literature of Islamic Fintech which has been scant until recently.

**Keywords:** Fintech, Islamic Finance, Islamic Financial Technology

## 1. INTRODUCTION

With around 1.8 billion population worldwide, Islam is the fastest growing religion in the world, and the number of Muslim is projected to exceed Christian groups in the years to come (Lipka and Hackett 2017). One of the consequences of this rising population is the increasing demand for any products which are compliant to the sources of law of the Muslims, namely the Quran and hadith. One of the developments in the field of Islamic finance, supported by the advancement in technology and internet, is Islamic financial technology (Fintech). Fintech positions itself as a solution providing financial inclusiveness to as many people as possible. Islamic Fintech is different from its conventional counterpart as it is transparent, beneficial for the two parties, and sharia-compliant (Kelana 2018).

As the world largest Muslim country, Indonesia is considered the readiest country to be the hub of Islamic Fintech in the world. According to the Financial Service Authority of the Republic of Indonesia (OJK), among the 64 registered Fintech firms, three of them are the Islamic Fintech peer-to-peer (P2P) lending firms. They were PT Ammana Fintek Syariah (Ammana), PT Dana Syariah Indonesia (Dana Syariah), and PT Investree Radhika Jaya (Investree) (Aldila 2018).

As Fintech itself is relatively new, only a few studies in Islamic Fintech were conducted recently. Some researchers studying Islamic Fintech are Alaabed and Mirakhor (2017), Firmansyah and Ramdani (2018), and Ulya (2018). Alaabed and Mirakhor (2017) studied the role of Fintech in accelerating the implementation of risk sharing Islamic finance. They argued that financial technology is closer to the spirit of sharia as it removes two major risks in a specific industry such as banking, namely uneven maturity and leverage. Firmansyah and Ramdani (2018) studied one of the Islamic Fintech firms in Indonesia, i.e., Angsur. They asserted that the Islamic Fintech such as Angsur innovatively provides a solution for encouraging financial inclusion and solving specific social problem. Meanwhile, according to the study of Ulya (2018), she maintained that the rule of sharia regulating the Islamic Fintech, specifically, peer-to-peer

lending is not sufficient yet. Thus, there is a need for future improvement in the regulations which benefit the involved parties.

This paper aims to study profile, prospect, and challenges of the financial technology firms which are categorized sharia-compliant. This paper adds to the scant literature of Islamic finance, especially the Islamic financial technology which is currently uprising, reducing the gap between the theory and the practice. This paper is outlined as follows. The first part is an introduction, followed by a method in part two. In part three, we outlined the research results, followed by discussion in part four. Conclusion and acknowledgment are in part five and six, respectively, while the bibliography is the last part of this paper.

## **2. METHOD**

The data in this research were collected using an online questionnaire, distributed to the Fintech firms in September 2018. If the email addresses of the Fintech firms were available, we sent the link of questionnaire via email. If not, we asked those firms in the ‘contact us’ section of their websites and Facebook inbox. We limited the firms to the Islamic Fintech firms spread across the globe. The Islamic Fintech firms what we asked are located in USA, Malaysia, Singapore, Indonesia, and India. In Indonesia, the Islamic Fintech firms gather in an association, i.e., AFSI (*Asosiasi Fintech Syariah Indonesia*). AFSI was established in October 2017. The members of this association consist of startup firms, companies, academics, communities, and Islamic experts engaged in technology-based Islamic financial services. We obtained the data of the Islamic firms from the website of AFSI ([fintechsyariah.org](http://fintechsyariah.org)).

The financial services that those firms sell are not against the rule of sharia. The data obtained were analyzed using the descriptive approach. From 24 Islamic Fintech firms that we asked, only six of them returned the questionnaires (25%). This low participating rate is caused, perhaps, they need more time to answer the questions in our questionnaire, so they had not returned it by the time this paper is written. So, in this paper, we only employed six firms for our analysis.

## **3. RESULTS**

### ***Profile of the Islamic Fintech Firms***

The six Islamic Fintech firms participating in this research are the firms headquartered in Indonesia and Singapore. The firms from other countries have not returned the questionnaires. Some of the information of the participating Islamic Fintech firms are shown in table 1 as follows (ordered based on year of establishment).

**Table 1. The profile of participating Islamic Fintech firms**

No	Name of the Fintech firm	Headquarter	The services provided	Year of establishment	Number of employees	Number of customers
1	InvesProperti.id (PT. Berkah Inovasi Nusantara 2018)	Indonesia	Crowdfunding platform to make property investment accessible to everyone	2018	3	189
2	GOOLIVE (PT Sinergi Inti Berkah Investama)	Indonesia	Peer to peer lending	2018	5	67
3	ALAMI Teknologi Sharia	Indonesia	Other financial services (Fintech Aggregator)	2017	9	9
4	Syarfi (PT Syarfi Teknologi Finansial)	Indonesia	Peer to peer lending	2017	6	
5	Qasir (PT Solusi Teknologi Niaga)	Indonesia	Application of Point of Sales (PoS)	2015	44	5,000
6	EthisCrowd (Ethis Pte Ltd)	Singapore	Real estate investment	2015	15	25,000

Source: Processed data (2018)

Table 1 shows that all the firms participating in our study are relatively new firms. The newest one is InvestProperti.id located in West Bandung, Indonesia. InvestProperti.id is a sharia crowdfunding platform in Indonesia focusing on property investment. The vision of this firm is to provide ease to everyone to invest in property. With a tiny number of employee, since its establishment, InvestProperti.id is progressive as it has served 189 customers.

Goolive comes as a digital platform aiming to synergize the agriculture and all potentials associated with it to produce high-quality agricultural products which are safe, healthy and halal (lawful according to sharia). Goolive enthusiastically educates people, especially young people from various educational backgrounds, to work together to re-develop pride and understanding that Indonesia is an agricultural and maritime country. This peer-to-peer lending firm is also relatively new and has a small number of the employee.

ALAMI Teknologi Sharia is a Fintech technology startup sector that aggregates small and medium enterprises (SMEs) funding, focusing primarily on the fast-growing sharia segment. As an Islamic Fintech aggregator, ALAMI helps SMEs get funding from the Islamic banks. This firm has a target to facilitate financing of up to IDR 100 billion to the SMEs until the end of 2018 (Pitoko 2018).

Syarfi is a company which specializes in Islamic crowdfunding and sharia-based services. Syarfi was founded with the spirit to improve the economy of the Islamic communities according to the Sharia and to eradicate the practice of usury. Sharfi connects investors from various countries and Indonesian people who need funds for financing, both individual and business.

Qasir is a free cashier application helping traders to record sales, manage products, monitor stocks, and view sales reports. Qasir is available in two platforms, namely web, and mobile application. For mobile application, Qasir is available for the Android operating system. At the beginning of 2018, Qasir began to develop features that connect users with financial institutions to obtain loans.

EthisCrowd is the world's first real estate crowdfunding Islamic platform that has been recognized by the Global Islamic Finance Awards. The branches and representative offices of EthisCrowd are in Jakarta, Kuala Lumpur, and South Africa. EthisCrowd is the largest Islamic Fintech firm participating in our study as it servers around 25,000 customers from 65 countries. With the money as little as S\$250, an investor of EthisCrowd can invest his money in real estate projects and build a property portfolio.

### ***Prospect of Islamic Fintech***

Based on the questionnaire result from the respondents in this research, the prospect of Islamic Fintech is generally promising. The results of the questionnaires are shown in table 2.

**Table 2. Prospect of Islamic Fintech**

Question or statement	Answers				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<i>The prospect of Fintech in our country is bright</i>	100%	-	-	-	-
<i>The prospect of Fintech in Muslim countries is bright</i>	83%	-	17%	-	-
<i>The prospect of Fintech in the world is bright</i>	83%	17%	-	-	-
<i>Our number of customer keeps increasing</i>	50%	50%			
<i>Our revenue is growing</i>	33%	50%	17%		

Source: Processed data (2018)

According to table 2, all the participating firms strongly agreed upon the idea that Islamic Fintech has a bright and promising future in their country and the world. Also, they stated that the number of their customers keeps increasing. However, when this question was specified to the Muslim country, one of our respondents was not sure that the Islamic Fintech would flourish in the years to come, answering neutral. The result of this study also shows that there is an indication that the Islamic Fintech is flourishing, indicated by the growing revenue of most of the participating firms.

### ***Challenges of Islamic Fintech***

Regarding the challenges of Islamic Fintech firms, we investigated three aspects attached to them, namely the financing, human resource, and regulatory aspects. The results of our study, as shown in table 3, showed that most of the Islamic Fintech firms found no difficulty in raising fund for their operations. Most of the participating firms also argued that they have sufficient skillful human resources. Regarding support from the government, most of the participating firms agreed that they have enough support. One of the firms in our study stated that the support from the government is considered fair (neutral answer).

Another indication of the lack of support from the government is that there was no firm answering “strongly agree” option.

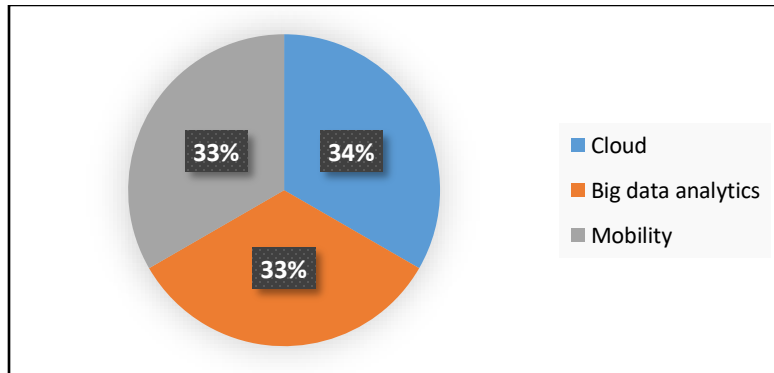
**Table 3. Challenges of Islamic Fintech**

Question or statement	Answers				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<i>Our company has access to the funding</i>	33%	50%	17%	-	-
<i>Our company has skillful and sufficient human resources</i>	33%	50%	17%	-	-
<i>Our government provides sufficient support regarding regulation</i>	-	67%	33%	-	-

Source: Processed data (2018)

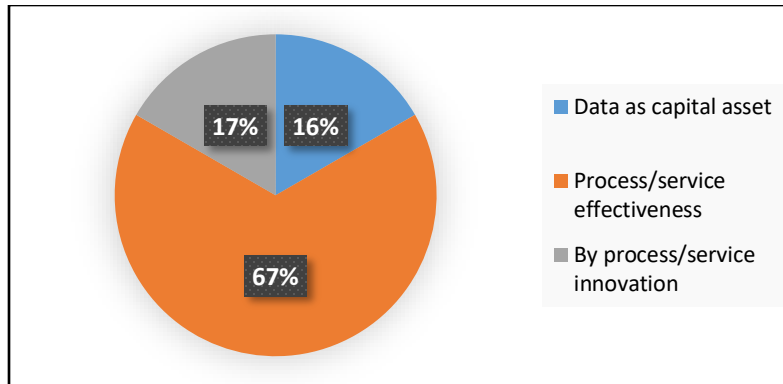
***Technological Investment and Key Performance Indicator***

As the technology-based companies, the Islamic Fintech firms invest in supporting technologies, both hardware, and software. This characteristic makes them different from conventional companies. Regarding software, those firms invest their capital in cloud technology, big data analytics, and mobility. The most substantial technological investment for those technologies varies among the participating firms in our study. The percentage is shown in figure 1.



**Figure 1. The largest technological investment**

Another characteristic of Islamic Fintech firm is the parameter they use in achieving their goals. We offered three KPIs (key performance indicators) that they could choose from, namely data as a capital asset, process or service effectiveness, and service innovation. Our study revealed that most of the participating firms used the process or service effectiveness as their KPI. The rest of the firms used data as a capital asset and service innovation as shown in figure 2.



**Figure 2. Measurement of the success of key performance indicators**

#### **4. DISCUSSION**

Seen from the growing number of customers and revenues of the Islamic Fintech firms, the prospect of Islamic financial technology is bright, especially in Muslim countries. This idea is in line with (Wintermeyer and Basit 2017). The new growing trend in Islamic finance requires all stakeholders to support it in order that the Islamic Fintech thrives. As in any field of Islamic finance, Malaysia is leading in this sector. Malaysia has the most Islamic Fintech firms, followed by London and Indonesia (Cooper 2018).

In general, one of the challenges faced by the Islamic Fintech firms is in the aspect of regulation. The government needs to provide supportive regulations for the Islamic Fintech sector, not too loose or too strict. The too loose regulation will result in problems such as neglecting customer protection and privacy. While the too strict regulation in a country may hamper the development of Islamic Fintech as has happened in Latvia. As a result, the customers and investors in Latvia were not aware of the Fintech (Saksonova and Kuzmina-Merlino 2017). The rules should protect all parties involved in the Islamic Fintech practice, namely, the firms, customers, and investors.

In Indonesia, Islamic Fintech firms have taken a right step by forming an association of Islamic fintech firms. This association facilitates the members to build awareness and educate people about Islamic Fintech.

#### **5. CONCLUSION**

The prospect of Islamic Fintech is bright, especially in the Muslim countries. This new movement in Islamic finance is supported by the development of technology such as the penetration of smartphone. The challenges faced by the Islamic Fintech firms are many, one of them is the regulation. In order that this movement to thrive, the policymakers should provide favorable regulation. Finally, academia is required to explore the practice of Islamic Fintech, balancing the practice and theory.

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