

## Sharia Financial for Market Management Apps in the Money Market

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### Abstract

Industrial revolution 4.0 facilitates access to all information with smartphones connected to the internet. This is an opportunity for the Islamic finance industry to innovate digitally. Various sharia financial application technologies have been registered to Otoritas Jasa Keuangan (O.J.K.) However, it is necessary to adjust the application features to the concept of maqashid sharia (Dharuriyyah, Hajiyat and Tahsiniyat) and analyze the implications of digital applications on sharia financial literacy and inclusion. The division of the dharuriyyah is categorized into 5 basic themes, namely 1) Religion, 2) Soul, 3) Descendants, 4) Intellect and 5) Assets. The study results indicate that the digital innovation of a "Connected, One Stop Solution" is appropriate with the concept of maqashid sharia and could help increase the level of sharia financial literacy and inclusion and support halal needs according to maqashid sharia.

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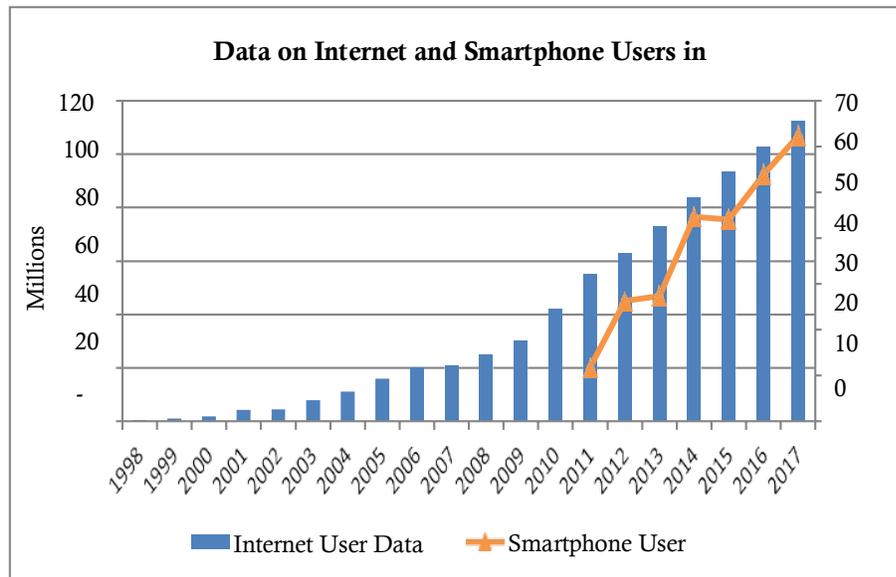
**INTRODUCTION**

Digital technology is currently developing quite rapidly. This is marked by a revolution in Industry 4.0, where the industry develops and utilizes technology to help simplify its operations. E-commerce companies mostly initiate the industrial sector that develops digital technology in its business, Financial Technology (fintech) start-ups, peer-to-peer lending or crowdfunding.

The growth of public consumption of the internet and smartphones is a good indicator in

developing digital-based Islamic financial services and products to reach all regions in Indonesia. The use of this technology must be carried out immediately in order to create more equitable and comprehensive financial inclusion, especially for Islamic financial products and services. Data shows an increase in internet and smartphone use in Indonesia every year. The katadata.com data states that there has been a significant increase of 432% in smartphone use in Indonesia between 2011 and 2017.

**Figure 1:**  
Internet and Smartphone Users in Indonesia



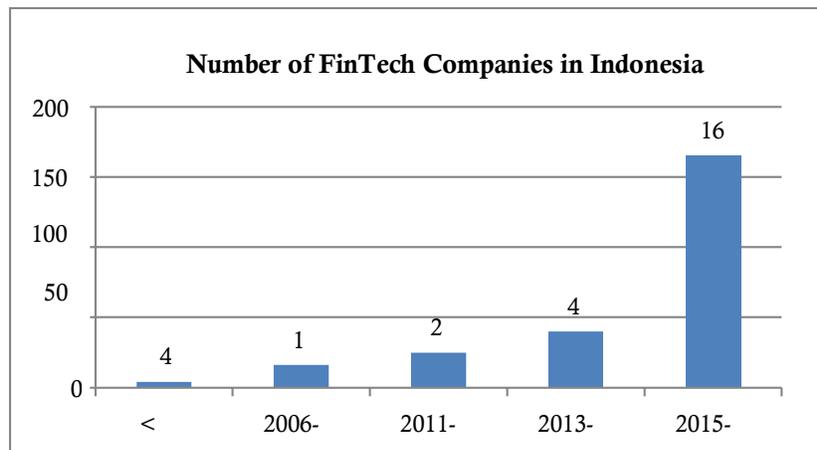
Source: adapted from databoks katadata.co.id 2018, data processed

This growth is an opportunity and a challenge for Islamic finance companies to immediately switch to digital services. Based on a survey conducted by Sharing Vision in 2015 about payment instruments often used by the public in online transactions, namely online transfers via automated teller machines (A.T.M.) (42%), internet banking (28%), direct transfers to accounts (25%). (<https://sharingvision.com>) This survey proves that the amount of persons that switched from carrying out offline transactions to online transactions is quite large. This is also supported by the growth of digital application-based financial start-up companies in Indonesia.

As we know, currently, the potential for the development of the Islamic finance industry based on fintech or financial technology companies in Indonesia is quite open and a large potential exists.

Although, according to research conducted by Rusydiana (2018), several obstacles are still being faced, such as 1) the lack of policy instruments that maintain the fintech work process from upstream to downstream and 2) the availability of qualified human resources for fintech. Meanwhile, according to Webster and Pizalla (2015), competition between fintech and traditional financial services is becoming relatively more intense every year due to the continued development of information technology.

**Figure 2:**  
Development of Fintech Companies in Indonesia



Source: Adapted from D. Hadad 2017, data processed

Based on Otoritas Jasa Keuangan (O.J.K.) data, fintech companies in Indonesia are divided into several sectors, namely: 1) financial planning, 2) Crowdfunding, 3) Lending, 4) Aggregators, 5) Payments, and 6) other fintech. Hadad (2017) explains that the payment sector dominates fintech companies in Indonesia comprising of 42.22% market share, the lending sector with 17.78% of the market share, the aggregator sector with 12.59%, the financial planning sector with 8.15%, the crowdfunding sector with 8.15 % and other fintech sectors with 11.11%.

The Islamic financial system combined with technology must comply with the standardization of sharia financial contracts because the concept of sharia finance is different from conventional finance, in that the concept of sharia finance transactions containing maysir, gharar, tadlis, ikhtikar and usury are not allowed. In addition, in its implementation, every transaction carried out must refer to the main goal of sharia, namely maqashid sharia. Therefore, every innovation in Islamic financial products and services must consider these two things. Ismail (2014) divides maqashid sharia into three categories: dharuriyat, hajiyat and tahsiniyat. Maslahah dharuriyyat is also called maqashid al-khamsah, namely religion (al-Din), Soul (al-Nafs), Descendants (al-Nasl), Intellect (al-'Aql) and wealth (al-Mal). Maslahah hajiyat aims to eliminate narrowness and difficulties in meeting basic human needs. Maslahah tahsiniyat is everything that aims to maintain the honour of the maqashid al-khamsah. (Ismail, 2014) Thus, fintech innovation for Islamic finance must be based on Islamic maqashid as stated in the Qur'an and

Hadith.

From this background, the more open public information and easier access to the internet, allows for an opportunity and the potential to develop innovative digital-based Islamic financial products and services. This development can also increase Islamic financial literacy and inclusion, especially for people in remote areas. The authors aim to study and lay out the problems and their solutions, faced when/to developing digital innovative Islamic products and services due to Islamic financial literacy and inclusion. Specifically we aim to study 1) The recognition and the inclusion of Islamic finance and sharia fintech products in Indonesia, 2) Whether the solution is in accordance with the maqashid sharia concept, 3) The implications for Islamic finance.

## LITERATURE REVIEW

### Financial Inclusion

Inclusive finance is a form of financial service deepening aimed at all groups of people, especially the lower class. This is so that they can access formal financial products and services more easily and affordably. Services such as saving, safekeeping of money, transfers, loans and insurance. The index used to measure financial inclusion consists of three main factors: access, use, and quality. (www.bi.go.id)

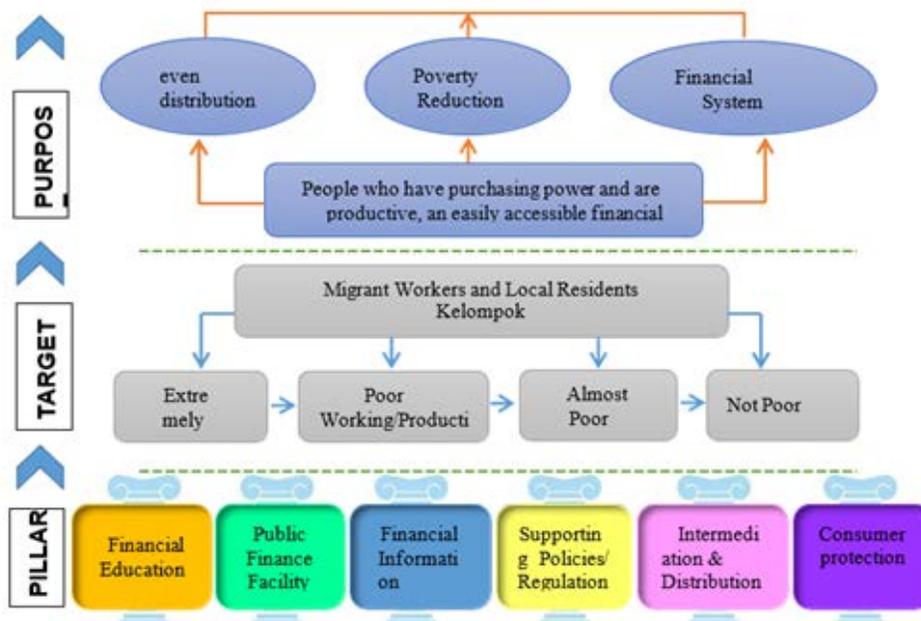
*The Consultative Group to Assist the Poor (CGAP-GPFI)* defines finance inclusiveness as a condition where all working-age people can receive effective access to credit, savings, payment systems and insurance from all financial service providers.

Effective access also includes convenient and responsible services at an affordable price for the community and is sustainable for the provider. It is hoped that in the end, the community can take advantage of formal financial services rather than informal financial services. (www.cgap.org)

The Financial Authority, in this case, Bank Indonesia (B.I.) and the Financial Authority for Financial Services (O.J.K.), has launched a national financial inclusion strategy which is described in 6 pillars, namely: 1) financial education, 2) public financial facilities, 3) financial information

mapping, 4) supporting policies or regulations, 5) intermediation and distribution facilities, and 6) consumer protection. The main targets of the formulation of these 6 pillars are 2 groups of people: community groups of migrant workers/labourers and residents of remote areas with 4 classifications, namely very poor, working/productive poor, almost poor and not poor. This targeting is expected to increase the access of these 2 groups to financial products and services as a whole. This to ensure that the public can easily access financial products and services.

**Figure 3:**  
National Strategy for Financial Inclusion



Source: Adapted from Financial Inclusive Booklet, Dept. Development of Access to Finance & MSMEBI: 2014.

### Digitization and *FinTech*

Digitization can be defined as using digital technology in new business models and providing new opportunities that generate value. This refers to digital business and the integration of digital technology into everyday life (Gartner, 2016). Digitization is an opportunity for companies and organizations to improve their business activities. In the era of digitization and automation, office work can be produced more efficiently and at a lower cost (Schinkel, 2000). Digitization can be seen as an opportunity to improve customer relationships, business processes with the adoption of new business models (Schumann & Tittmann, 2015).

The digitization of the financial system and technology is called Financial Technology (fintech),

an innovation of the digital financial system to easily access financial products and services and weaken the barrier to entry (Bank Indonesia 2016). KPMG defines the financial technology industry as a technology-based business that competes with, or collaborates with, financial institutions (Pollari, 2016). In a different sense, Chuen and Teo (2015) explain that fintech refers to financial services or innovative products delivered through new technologies. The development of fintech has changed the pattern of the current financial business model. It breaks the barrier to entry and provides a role for fintech in unregulated behaviour that runs a business model similar to a regulated company or institution. (Bank Indonesia, 2016).

The development of fintech in the world has

started since the 1800s with the advent of the telegraph and has continued to develop in the following years, especially in the current digital era. In the 1900s, Automated Teller Machine (A.T.M.), Clearing House, Internet Banking and Paypal began to develop. Then it developed further with Apple Pay, Samsung Pay, Smile to Pay (Alibaba) in the 2000s (Zimmerman, 2016). In Indonesia, fintech payment types are developing rapidly, both those issued by financial institutions such as uniqueQu, Tbank, Ecash and those issued by fintech start-ups such as Go-Pay and OVO.

According to the Financial Services Authority (2016), the advantages of fintech are: 1) Serving Indonesian people who have not been able to be served through the traditional financial industry due to strict banking regulations and the limitations of the traditional banking industry in serving the community in certain areas, 2) Become an alternative funding other than traditional financial industry services where the community requires alternative financing that is more democratic and transparent. On the other hand, the disadvantages of fintech are: 1) Fintech is a party that does not have a license to transfer funds and is not well established in running its business with large capital compared to banks. 2) some Fintech companies do not yet have a physical office and lack experience in carrying out security systems and product integrity procedures.

According to Bank Indonesia, the very rapid development of fintech in Indonesia can bring many benefits to borrowers, investors and banks in Indonesia:

1. For borrowers, perceived benefits such as encouraging financial inclusion provide alternative loans for debtors who are not eligible.
2. For investors in tech, the benefits that can be felt, such as alternative investments with higher returns with default risk, are spread over many investors, with each nominal being relatively low, and investors can choose funded borrowers according to their preferences.
3. For banks, collaboration with fintech can reduce costs by using non-traditional credit scoring for initial filtering of credit applications, adding Third Party Funds (D.P.K.), adding credit distribution channels and being an alternative investment for banks.

Some of the benefits of fintech in Indonesia, which are summarized from O.J.K. (2016), include:

- 1) Encouraging the distribution of national financing that is still unequal across 17,000 islands,
- 2) Encouraging the export capability of MSMEs, which is currently still low,
- 3) Increasing national financial inclusion,
- 4) Encouraging even distribution of the level of welfare of the population,
- 5) Assisting the fulfilment of domestic financing needs which are still very large.

### **Maqashid Sharia**

Rasyuni (1995) in Ismail (2014) defines maqashid sharia asset goalshari'a' (Allah) as a means to ensure the benefit of His servants. Scientifically, maqashid sharia is included in the literature of ushul fiqh science, which can be reviewed by several ushul fiqh scholars who discuss the objectives of sharia that have been set by shari'a (God), namely Imam al-Harmayn, Imam Ghazali, Imam Syatibi and Ibn 'Ashur.

Formulation of the first maqashid sharia is discussed in the book al-Burhan by Imam al-Harmayn in the chapter' illah and usul. He argues that maqashid sharia can be categorized into three, namely dharuriyat, hajiyyat and tahsiniyat. In addition, he has also formulated dharuriyat al-kubra in sharia or better known as maqashid al-khomsah. (Ismail, 2014).

In the 12th century AD, Imam Ghazali, an expert on law (fiqh), Islamic-doctrinal (aqidah), Islamic-spirituality (tasawuf) and philosophy, argued in his book syifa al-ghalil that maqashid sharia is divided into 2 parts, namely: 1) religion and 2) duniawi (world). As for the division into world categories, he focuses on 4 things: taking care of oneself, maintaining reason, maintaining offspring, and maintaining property. As for the category of religion, this is everything that refrains from heinous acts. (Ismail, 2014).

Imam Syatibi, also known as Shaykhul Maqasid in his work al-Muwafaqat, divides maqashid sharia into two important parts, namely qasdu al-syari' and qasdu al-mukallaf. Then qasdu al-Shari'a' is reclassified into four parts, namely: 1) the purpose of Shari'a to establish the Shari'a, 2) the intention of Shari'a to establish the Shari'a of understanding, 3) the intention of Shari'a to establish the Shari'a for legal orders, and 4) the intention of Shari'a to include the mukallaf in the laws of the Shari'a. Maqashid al-syari' refers to the maintenance of three basic human goals: dharuriyatt, hajiyyat and tahsiniyat. Meanwhile, maqashid al-mukallaf can be realized in the form of behaviour or implementation that the Shari'a limits. (Ismail, 2014).

Overall, the four madhhab scholars who

discuss maqashid sharia, distinguish between maslahah levels and classify them into three: dharuriyat, hajiyatdantahsiniyat. Maslahah dharuriyyat is also called maqashid al-khamsah, namely religion (al-Din), Soul (al-Nafs), Descendants (al-Nasl), Intellect (al-'Aql) and wealth (al-Mal). Maslahah hajiyat refers to eliminating the narrowness and difficulties in meeting basic human needs. Maslahah tahsiniyat is everything that aims to maintain the honour of the maqashid al-khamsah (Ismail, 2014). In the Islamic finance and banking industry, the application of Islamic maqasid can be found in research conducted by Bedoui and Mansour (2013), Jazil and Syahrudin (2013), Muayyad and Esya (2016), Rusydiana and Alparisi (2016), Saoqi (2017), Rusydiana and Firmansyah (2017) and Rusydiana and Sanrego (2018).

## RESULTS AND DISCUSSION

### Sharia Finance Digitization

The development of Islamic finance in Indonesia began with the establishment of one of the Islamic banks in 1992, namely Bank Muamalat. Then two years after that, precisely in 1994, the first sharia insurance company was established, namely PT Asuransi Takaful Keluarga and in 1997, the first sharia mutual fund was published in Indonesia. Islamic finance is more identical to Islamic banking because Islamic banking assets control about 83% of the total assets of the entire Islamic finance industry. (Statistics of the Indonesian Financial System, Feb 2017).

Since then, the development of Islamic finance has begun to grow quite rapidly, especially for the Islamic banking sector, where several conventional banks have sharia subsidiaries or sharia business units. Sharia banking statistics in 2009 showed that the number of Islamic commercial banks (B.U.S.) in Indonesia was 6 (B.U.S.) and in 2010 increased to 10 B.U.S. The latest data in 2018 shows that currently, there are 14 B.U.S. operating in Indonesia.

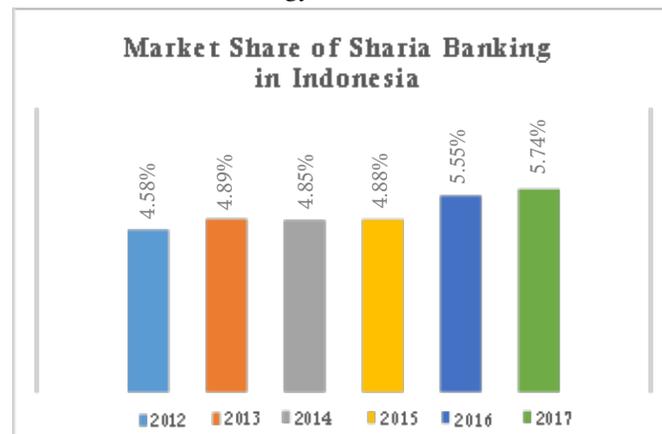
In addition, the total assets of Islamic banking each year has increased quite substantially. O.J.K. data shows that in 2015 the total assets of Islamic banking in Indonesia reached Rp. 296,262 billion or an increase of 9% from 2014, amounting to Rp. 272,343 billion. In 2016, the total Islamic banking assets in Indonesia increased significantly to Rp. 356,504 billion or an increase of 20%, but in 2017 the growth of total Islamic banking assets was less than the growth in the previous year, recording a percentage growth of 19% or around Rp. 424,181 billion. The downward trend in total asset growth

continued in 2018, which was only 13% of total assets in 2017, but in nominal terms, total Islamic banking assets increased to Rp. 477,327 billion. However, when compared to the total assets of conventional banking in 2018, which reached Rp. 8,068,346 billion, the ratio of Islamic banking assets in 2018 was only 5.9%. This data proves that Islamic banking assets are still small when compared to total banking assets nationally.

On the other hand, the market share level of Islamic banking in Indonesia is still at the 5% level. Annual data announced by O.J.K. that the market share of Islamic banking has increased every year but not significantly. In 2017, the market share level of Islamic banking was only 5.74%. The following is a breakdown of the market share of Islamic banking each year:

**Figure 4:**

National Strategy for Financial Inclusion



Source: Adapted from Sharia Banking Statistics, O.J.K. 2012-2017, data processed.

Seeing the tendency of the low ratio of Islamic banking assets to conventional banking, the low market share of Islamic banking and the low level of Islamic financial literacy and inclusion, a solution is needed to increase its value and ratio. Nejatullah Siddiqi (2006), in his evaluation, emphasized that there is a fundamental need that is urgently felt to evaluate what has happened over the last three decades in the field of Islamic banking and finance.

The digital transformation of Islamic banking services is a necessity. In this digital era, the form of media has shifted to online format because it is easily accessible by anyone who needs information. The public easily shares information on their respective social accounts. Therefore, it is assumed that the public will easily accept that information and knowledge about the economy and Islamic banking. One solution to this evaluation is

the digitization of Islamic financial products and services. With this digitalization, the public can easily access all Islamic financial products and services information without being constrained by space and time.

### List of registered Sharia Fintech

The growth of Islamic fintech in Indonesia is increasingly showing positive developments. Based on a list of official information and information from the O.J.K. The total number of fintech peer-to-peer lending or sharia fintech lending providers is 10 licensed at the O.J.K. The total number of fintech companies registered with O.J.K. is 121 companies. The following is a list of sharia fintech licensed by the O.J.K.

a. *Investree* (<https://investree.id/>)

Investree's services are conventional financial services. However, now Investree has launched a sharia-based product. Like other sharia fintechs, Investree receives financing to help MSMEs through invoice financing, buyer financing, and working capital term loans.



b. *Ammana* (<https://ammana.id/>)

Operating since March 2018, Ammana claims to be the first sharia fintech to be present in Indonesia and registered with the O.J.K. Ammana focuses on funding activities for MSME actors. Until August 2021, it was recorded that the funds that had been distributed reached 390 billion rupiah.



c. *Ethis* (<https://ethis.co.id/>)

Fintech Ethis presents alternative financing by forming a community of financiers to participate collectively and use the sharia system in financing activities in the real estate and infrastructure sector.



d. *Kapital Boost* (<https://modalboost.co.id/>)

Kapital Boost was registered with the O.J.K. on October 30, 2019. This fintech started to connect S.M.E.s with global investors seeking fair, transparent and sharia-compliant returns.



e. *Papitupi Syariah* (<https://www.papitupisyariah.com>)

Papitupi Syariah is one of the Fintech Syariah in Indonesia that is here with the aim of playing an active role in providing sharia financing solutions. As seen on its website, the total funding that has been disbursed until August 2021 has reached 34,460 billion rupiah.



f. *Sharia Finteck* (<https://www.finteksyariah.co.id>)

PT Berkah Fintek Syariah is one of the pioneers in operating an electronic



- namely paying zakat, waqf and savings for Hajj and Umrah.
- b. Guarding the Soul (Al-Nafs): This is related to maintaining mental health and keeping away from various diseases that impact well-being. The need for nutritious and healthy food intake to keep the soul healthy. In the financial context, takaful is the main access to health facilities. The Connected application facilitates this problem with the health insurance feature. People can easily enjoy health insurance facilities on this application.
  - c. Protecting Descendants (Al-Nasl): this problem is related to marriage which is the way of sharia (sunnah) in obtaining pious and pious offspring. Marriage is human nature and becomes obligatory if someone is already able to get married because marrying can keep one away from evil deeds. The Messenger of Allah (S.A.W.) said: "O youths! Whoever among you can marry, then marry, because marriage lowers the gaze and fortifies the genitals. And whoever is not able, then let him fast because fasting can fortify himself." (H.R. Muslim No 1400) Connected facilitates this masalahah with a future tube feature where people can save for their future needs, including marriage plans.
  - d. Keeping Intellect (Al-'Aql): This masalahah is related to science as the basic foundation of religion. Someone who is not knowledgeable will not be able to think about the virtues of Islam which are rahmatan lil 'alamin. Allah S.W.T. glorifies knowledgeable people. In Surah Al-Mujaadilah verse 11, Allah S.W.T. says: "Surely Allah will exalt those who believe among you and those who are given knowledge by several degrees." Connected features that match this are education insurance and future savings. This feature facilitates every community that wants to continue their education to the highest level.
  - e. Safeguarding Assets (Al-Mal): Property is a medium of exchange to obtain basic human needs such as staple food, with one's assets being able to fulfil these needs. Wealth can be obtained from trade, profession or inheritance. In Islam, the property must be obtained from halal ways free from all elements of gharar, maysir, tadbis, ikhtikar and usury. If it is related to

finance, assets can also be obtained from investment channels in financial markets and capital markets. In addition, to keep assets safe, a takaful scheme is needed that protects assets from loss or accidents. The Connected application facilitates this with the features of mutual investment, stocks and gold savings, and takaful Connected provides features for accident insurance, vehicle insurance, and property insurance.

Maslahah hajiyat has a function to eliminate narrowness and difficulties in fulfilling basic human needs (dharuriyyat) (Ismail, 2014). The context of this masalahah with finance or property management can be realized by allocating needs that facilitate economic activities such as buying vehicles, buying houses, buying gold and others. The features that facilitate the masalahah hajiyat in the Connected application are the dollar tube feature, the instalment feature, the payment feature, the pawn feature, the restaurant feature, the travel feature, Q.R. scan and N.F.C. These various features can be a way to make it easier for people to meet their basic needs.

Finally, masalahah tahsiniyat or kamaliyat is a complementary masalahah whose purpose is not to realize maqashid dharuriyyah and masalahah tahsiniyat but to maintain the honor of maqashid dharuriyyah itself. At this level, the community is focused on procedures or ethics in managing assets and praying.

The combination of the three main masalahah (dharuriyyah, hajiyat and tahsiniyat) has been formulated by scholars and the division of masalahah dharuriyyah into 5 categories is the main basis in making the concept of the Connected application, where the formulation of the features in the application is adjusted to maqashid sharia. This so that in later practice, there are no services and products that come out of the norms and teachings of Islam.

The following are the details of the features in the Islamic financial application that are in accordance with the maqashid sharia:

**Table 1:**  
Features Sharia Application & Maqasid Sharia

Maslahah	Category	Connected Features
<i>Dharuriyyah</i>	Religion	Zakat, Waqf and Hajj Umrah Savings
	Soul	Health Insurance
	Descendants	Future Tube
	common sense	Education Insurance and Future Savings
	Treasure	Mutual, Stock, Gold Savings, Vehicle Insurance, Accident Insurance and Property Insurance
<i>Hajiyat</i>		Pay, Buy, Withdraw Cash, Borrow/Lend Capital, Instalment, Pawn, Resto, Travel, Scan QR and N.F.C.
<i>Tahsiniyyat</i>		Add Friends, Chat

Source: processed by the authors

### Implications of Islamic Finance Application Development towards Islamic Finance

The application of Islamic finance as a form of technological innovation for Islamic finance has a positive influence on the development of Islamic finance in Indonesia. This both in the bank financial industry and the non-bank financial industry, and include:

a. Supporting Increasing Islamic Financial Inclusion.

Digitalization of Islamic financial services and products is one form of effort to increase public awareness of the presence of Islamic finance in Indonesia. In addition, to the convenience of current technology developed through Islamic financial applications, the public can easily access Islamic financial services and products wherever and whenever they need them with additional features in accordance with sharia maqashid. Therefore, the ease of public access to Islamic finance through the application of Islamic finance will have a major impact on increasing the level of Islamic financial inclusion in Indonesia. (O.J.K., 2016).

b. Improving Financial Literacy by Digitizing Services and Sharia Finance Products.

The level of smartphone and internet usage, which continues to increase every year, is a moment that must be utilized by all industrial sectors, including the Islamic finance industry. With information technology that is increasingly open and with applications that make it easier for the public to access Islamic finance, the public will know about Islamic financial services and

products that can facilitate every need. In addition, to the many features that exist in this Islamic finance application, the public will increasingly understand that Islamic finance has very diverse services and products and is not inferior to the conventional financial industry. (O.J.K., 2016).

c. Increasing Sharia Financial Market Share

Islamic finance applications have very diverse features to choose various Islamic financial products and services. With the ease of registration and use of this application, it is hoped that the public can easily access all information related to Islamic finance. This information helps the public save their funds and conduct transactions using Islamic financial products and services. It is hoped that this application can help increase the share of the Islamic finance market to be larger and more productive.

d. Support the Government Program “National Non-Cash Movement”.

The government has launched a non-cash national program in which all levels of society are invited to minimize the use of cash for buying and selling transactions. On the other hand, people are expected to use applications or non-cash payment features such as mobile banking or card payments. The sharia fintech application in its development is a very supportive program used by the government, wherein the public could use the Q.R. and N.F.C. scan features to make payments related to their daily consumption transactions.

- e. Supporting Halal Needs in accordance with Maqashid Syariah.

In contrast to crowdfunding and other peer to peer applications that still use conventional interest-based systems, Islamic finance applications develop systems that are compatible with halal and syar'i transactions. Thus, people do not need to worry about the elements of gharar, maysir, tadlis, ikhtikar and usury.

## CONCLUSION

From the previous discussions, we can conclude that the following are the implications of the application of Islamic finance on the Islamic money market: 1) Supporting Increasing Islamic Financial Inclusion, 2) Increasing Financial Literacy by Digitizing Islamic Financial Services and Products, 3) Increasing Islamic Financial Market Share, 4) Supporting the Government Program "National Non-Cash Movement" and 5) Supporting Halal Needs in accordance with Maqashid Syariah.

Fintech digitalization innovation is necessary for the Islamic finance industry to prepare digital innovations to facilitate public access to Islamic financial products and services. This digital innovation requires human resources (H.R.) who excel in combining the concept of sharia contracts with technology. Therefore, the Islamic finance industry needs to provide training for H.R. The government, in this case, the Financial Services Authority (O.J.K.), must make regulations that support digital innovation in Islamic finance and require the Islamic finance industry to have innovative products and services for digital Islamic finance.

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