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**Islamic Banks Fintech in Indonesia**

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***Abstract***

In today's digital age, all segments of human life are easily accessible. Shopping for daily needs, booking accommodation and searching for news can be accessed through the Internet. In financial institutions, mobile banking is developing in which all transactions can be done through an application on a smartphone. All Conventional banks and Islamic Commercial Banks in Indonesia have financial technology (fintech) based applications. At Islamic Banks, mobile banking aims to make it easier for people to make transactions. The purpose of this study is to find out about the use of fintech, especially in mobile banking for Islamic Banks in Indonesia. This research uses a qualitative approach with a bibliometric method. The results of the study are that there are external and internal factors that influence the use of fintech in mobile banking in Indonesia. External factors such as Islamic bank services, application usage, application security and so on. Internal factors are public understanding, environmental conditions and others. This research is expected to be a consideration for Islamic financial institutions that have a fintech system.

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## Introduction

In today's digital era, all segments of human life can be easily accessed. Shopping for daily needs, booking accommodation and searching for news can be accessed online. This is evident from the increasing use of the Internet. Based on data from the Central Statistics Agency (2021), the total number of internet users in cities and rural areas in 2018 was 66.22%; in 2019, it was 73.75%; in 2020, it was 78.18, and in 2021, it was 82.07. Most of the Internet is used to access social media, information and financial services.

In developing financial services fintech (Financial Technology), Financial Technology uses technology in the financial system to create new products, services, technologies or business models. That can impact monetary stability, financial system stability and efficiency, smoothness, security and reliability of payment systems. Meanwhile, Sharia fintech is a financial system that produces Sharia products. There are three legal bases related to fintech, namely PBI number 19/12/PBI/2017 concerning the implementation of financial technology, POJK number 13/pojk.02/2018 concerning digital financial innovation in the financial services sector and the fatwa of the standard council of the Indonesian Ulema Council number 117/dsn- mui/ii/2018 regarding information technology-based financing services based on sharia principles.

The Financial Services Authority (2020) stated that the development of FinTech users has also continued to grow from year to year. Based on the World Bank, FinTech users were initially 7% in 2007, grew to 20% in 2011, then increased to 36% in 2014, in 2017 it had reached 78% or recorded as many as 135-140 companies, with the total value of FinTech transactions in Indonesia in 2017 is estimated at IDR 202.77 trillion.

Fintech applications in Indonesia can be used for several transactions, such as payment services for all bills such as credit & postpaid, credit cards, or PLN electricity tokens. An example of Fintech engaged in this digital payment system is Payfazz, which is agency-based to help Indonesian people, especially those who do not have access to a bank, pay various bills every month. Fintech can also function as a financial planner. With the help of Fintech, users can get several investment options for their future needs. Fintech can help people who need financial access to meet their needs and financial services for the lower middle class to help with their daily lives and finances. Fintech can be used in crowdfunding or fundraising.

Banks, as financial institutions, carry out the development of banking services using technology. Customers can make online payments, plan finances, invest in fundraising, and other bank features. The fintech used by the Bank is mobile banking. Mobile banking is an application where all transactions can be made through a smartphone application. All Conventional Banks and Sharia Commercial Banks in Indonesia have applications based on financial technology (fintech).

Based on OJK records (2018), the number of e-banking users (SMS banking, phone banking, mobile banking and Internet banking) increased by 270% from 13.6 million customers in 2012 to 50.4 million in 2016. Meanwhile, the transaction frequency of e-banking users increased by 169%, from 150.8 million transactions in 2012 to 405.4 million in 2016.

Most Islamic Banks already have a mobile banking application. Some are Bank Syariah Indonesia, Bank Muamalat, Bank Mega Syariah, Bank BCA Syariah and others. However, each bank has advantages and disadvantages. The advantages and disadvantages of mobile banking can affect the interest and use of the application. Customers need help using the mobile banking application even though it is very useful because of the shortcomings of the

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application. Some of the disadvantages of mobile banking applications are difficult to use, network, and data security. Some problems occur using mobile banking applications, including at Bank Syariah Indonesia (BSI).

Bank Syariah Indonesia is a merger of three large Islamic banks in Indonesia: Bank Mandiri Syariah, Bank BNI Syariah and Bank BRI Syariah. So that Bank Syariah Indonesia is a Sharia bank with the largest assets in Indonesia. This large BSI asset is a positive thing because it can convince the public to become customers, and BSI assets can be used, one of which is for fintech development within the Bank. However, some problems occur in BSI. On May 8, 2023, the BSI system received threats of cyber-attacks for four days, making all applications used by BSI unusable. In addition, some customer data has been leaked.

Based on the advantages and disadvantages of Islamic Banks above, the use of Fintech Islamic Banks in Indonesia needs to be made clearer. Interest in using Fintech is a person's attitude tendency that aims to use information technology services (Chuang, Liu and Kao, 2016). When someone is interested and looking for more information related to fintech applications, it can be said that they are interested in using fintech applications. At the same time, Fintech is the intensity or frequency of using information technology.

Several previous studies have produced several factor models that influence interest and use of Fintech, such as the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), Combined TAM and TPB (C). -TAM-TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), Social Cognitive Theory (SCT), Unified Theory of Acceptance and Use of Technology (UTAUT). However, previous research was done with different objects, not Islamic banks. As time passes, the factors influencing interest in and use of Fintech are not only the UTAUT model, namely performance expectations, business expectations, social impact, and environmental conditions. Based on the background above, researchers want to research related to the interest and use of Fintech in Islamic Banks in Indonesia.

### **Literature Review**

#### **Financial Technology**

According to Bank Indonesia regulations regarding the implementation of fintech, the use of technology in the financial system to create products, new models, services and technologies that have an impact on monetary stability, financial systems, effectiveness, security and system sophistication is a form of financial technology (fintech). According to Hendra (2020), fintech can create business models, applications, processes or products that significantly impact financial services. In addition, fintech has creative ideas and innovations, paying, transferring, and activities defined as innovations in financial services. Implementation of financial technology is categorized into:

1. Payment system A system includes a collection of regulations, institutions, procedures, markets, settlement funds, and access to settlement funds used to transfer data to fulfill obligations resulting from economic activities.
2. Fintech is a market supporter by using information technology and electronic technology to facilitate the provision of faster and cheaper information related to financial products and services to the public.
3. Investment and risk management. The form of financial technology implementation in the investment and risk management group is procuring investment products and digital

insurance.

Funding, financing and provision of capital Providing financial services to bring together lenders and loan recipients in the context of entering into loan agreements in the rupiah currency directly through an electronic system using the internet network.

### **Preference For Use**

The intensity or frequency of use of information technology by users can indicate the attitude of users of information technology (Thompson, 1991). One's belief about the benefits of a system that can increase interest causes involvement in using a particular system in its activities or beliefs about future rewards that can increase the enjoyment of use (Thompson et al., 1991). Venkatesh et al. (2003) showed a direct and significant correlation between their preference for using information systems and their behavior. Technology usage behavior is an act of using actual technology by a technology user. Venkatesh et al. (2003). So that the indicator of technology use is the duration of use, namely how often customers use mobile banking.

### **Methodology**

Given that this study is a blend of descriptive research and problem-solving and explores information that is sometimes normative, the approach used is an approach with qualitative analysis. Research design or design is a research planning process that starts from identifying, selecting, and formulating problems and their relation to existing theories and literature. This research uses several methods to obtain the required data, including interviews and observations.

### **Results and Discussion**

Based on the results of interviews conducted by several sources, namely the leaders of Bank BSI, Muamalat, and BCA Syariah, customers of Bank BSI, Muamalat, and BCA Syariah and technology practitioners, the results show that there are external and internal factors that influence the use of mobile banking.

#### **1. Internal factors of mobile banking usage**

Internal factors for using mobile banking come from within the customer. Islamic Bank customers will use mobile banking because of several encouragements such as social influence, religiosity, attitudes, hedonic motivation, and habit.

#### **• Social influence**

Individuals are more receptive to being influenced by the ideas and views of their reference groups, e.g., family, colleagues, and even relatives, especially those related to new technologies. Among the causes is the need for more experience and information about the technology (Tarhini et al., 2019). Thus, the opinions of those around him regarding the technology are believed to encourage individuals to use it (Ramadhan & Hendratmi, 2023). This follows research conducted by (Sholihah et al., 2023) that there is a relationship between social influence and interest in using fintech.

#### **• Religiosity**

Religiosity refers to devotion, belief, and reverence for God. Thus, religiosity is an individual's belief and commitment to obey the commands of Allah SWT (Alhazmi, 2019). Suhartanto et al. (2020) stated that religiosity, which indicates a person's adherence to religion, significantly influences the preference to adopt Islamic mobile banking

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services. The influence of religiosity on individual behavior is due to the role of religion in their attitudes and beliefs, shaping their mindset and participation with the world and the world around them. This finding follows research conducted by Riptiono et al. (2021) that the role of religiosity positively encourages consumer perceptions and usage intentions of Islamic mobile banking services. Islamic mobile banking services. Similarly, religiosity can substantially moderate the relationship between behavioral intentions and the use of mobile payments (Alkhowaiter, 2022).

- Hedonic motivation

*Hedonic motivation* is "the enjoyment or satisfaction gained from using an innovation." This follows research (Al Tarawneh et al., 2023). Everyone interested in using mobile banking has satisfaction related to the application used. People feel more modern when they have transacted using the application.

- Habit

*Habits* are "perceptual constructions that reflect the results of one's previous experiences." The existence of the COVID pandemic has made people have new habits, namely related to online shopping. Online shopping is also accompanied by online payments that can use mobile banking applications. People can easily carry out payment transactions using the mobile banking application, which has become a habit until the COVID pandemic no longer exists.

## 2. External factors of mobile banking usage

External factors are factors that come from outside the customer. These external factors often come from Islamic Banks. Some external factors are service quality, information quality, performance expectations, business expectations, application functions, ease of use, usability, trust, service features, facility convenience, risk, and application design.

- service quality

Good service quality can increase an individual's intention to accept technology. Service quality refers to the support facilities provided by service providers provided by service providers, including information technology. The quality of support that users get from technology includes reliability and responsiveness. Reliability is the most critical aspect that drives adoption intention for technology users. Users, while non-users, are more interested in security aspects. information quality

- performance expectancy

Performance expectancy is the degree to which a person believes that any technology can help him achieve benefits in his activities. Performance expectations represent the functional and instrumental usefulness that can generate an individual's intention to adopt a new technology. The usefulness refers to several indicators, such as productivity, functionality, productivity, functionality, time and effort savings, and increased usability relative to traditional activity methods (Dillon, 2006).

- effort expectation

*Effort expectancy* is consumers' comfort when adopting technology appropriately (Dillon, 2006). When a new technology is easy and practical, a person will be more enthusiastic about using it. A higher level of effort expectation increases a person's intention to use it because they do not need much effort to learn to operate it (Farah et al., 2018). (Dillon, 2006) state that several indicators of effort expectation are essential.

- service features

Features differentiate from other products, while services are activities aimed at intangible property and have no ownership from competitors. According to an expert named Schmitt, a feature is a product as a function with different characteristics. Features choose a product to choose the desired product, and for a marketer, this feature is an essential key for the company to compare with other competing products.

Compare with other competing products. Service features are one of the factors from competitors that will prove trust for consumers in online and offline transactions (Ramadhan & Hendratmi, 2023). The various service features provided by the company to consumers according to their needs so that they feel satisfied in using the desired product.



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## **Conclusion**

Based on the research, internal and external factors influence the interest and use of fintech in Islamic banks. Social influence, religiousness, motivation, hedonism, and habit are internal factors. Service quality, performance expectations, business expectations, and service features are external factors. Recommendations from this study are that Islamic Banks can do more socialization related to fintech and improve service quality, performance, and business features.

## **Declaration of Competing Interest**

There is no conflict of interest among authors.

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