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# Improving Financial Technology Uptake in Underbanked Communities in Indonesia

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#### **Abstract**

This study explains financial technology (FinTech) as technology-based financial services, which includes all types of FinTech with all its services. Generally, people are categorized into banked, underbanked, and unbanked based on their access to financial services. Indonesia happens to have the fourth-highest number of unbanked people in the world. However, Indonesian people's access to the internet and use of smartphones have increased in the last 5 years. Based on the data above, it can be concluded that Indonesia has great potential for Fintech adoption. FinTech has been proven to increase access to financial services for the unbanked in developing countries such as Kenya, but it is not the case in Indonesia. The researcher suspects that there are some factors that play a different role in the FinTech acceptance model in Indonesia compared to other countries. As part of a program to provide financial services to unbanked individuals in both developed and developing countries, Indonesia is seen as having great potential for FinTech growth. Despite this, there is currently limited research available which can explain and analyze the adoption of FinTech within the country. The research aims to explore the adoption of FinTech in the unbanked community of Indonesia using the perspective of Islamic economics. This study is a quantitative analytical type that employs path method for data analysis. analysis respondents of this study were 304 individuals who were selected through random sampling author(s)

## **INTRODUCTION**

Financial Technology (FinTech) refers to technology-based financial services (Booz-Allen & Hamilton Shugoll 1997). In this study, FinTech includes any financial service provided through internet technology, such as digital wallet services (Bernardo Nicoletti 2017). As people's financial service needs continue to grow, FinTech provides a simpler financial service scheme by prioritizing the user's side of financial services (F.D. Davis, 1986). The unbanked refers to people who do not have access to banking financial services at all. FinTech provides facilities that the unbanked can use to access financial services by utilizing internet access and applications on smartphones (Dana 2021). The FinTech adoption model in the unbanked community can be measured in terms of user actions in their adoption process (Ahmad Arisatul Cholik 2013). FinTech is a means of access to financial services that disrupts banking services in the unbanked community (Viswanath Venkatesh, Michael G. Morris, Gordon B. Davis, and Fred D. Davis 2012). Research on FinTech in Islamic economic studies is still very limited, while the potential for growth in Indonesia, with the largest Muslim population in the world, is still very large.

The development of easy and fast financial services is the focus of FinTech, a growing choice in various financial services. In Indonesia, 92 million productive-age individuals lack access to banking financial services and are considered unbanked 92 million productive-age Indonesians lack access to banking services (John P. Caskey 2001). The study utilized the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2), as proposed by Venkatesh in 2012. The UTAUT 2 model is a revised version of Davis's Technology Acceptance Model (TAM) theory from 1986. In this study, several constructs were tested based on UTAUT 2, including required effort, reliability, social influence, facility conditions, hedonic motivation, habit, and trust indicators. These constructs were evaluated for their impact on both the intention to reuse and the actual use of a technology. Additionally, a preference variable was used to measure a person's background and tendency to evaluate something, which was deemed crucial in this study. It was found that the unique values and backgrounds of the unbanked community in Indonesia had a significant influence on the adoption of FinTech within this group.

The UTAUT 2 theory measures the public's adoption of FinTech by taking into account their intention, attitude, and motivation. These three aspects are then converted into research variables, each with its own set of indicators. This study consists of two X variables, namely benefits and ease of access, one intervening variable, namely preference, and two Y variables, namely intention to reuse and actual use. The convenience variable is broken down into four main indicators, namely reliability, effort required, social influence, and facilitating conditions. The ease of access variable is measured by three indicators, namely habit, hedonic motivation, and trust (Venkatesh 2012). The study measures preferences through three indicators: namely, response, response, and assessment. The intention to reuse variable is gauged by measuring the use and satisfaction of application services. The final variable in this study is the actual use, which can be seen and measured through FinTech technology utilized by unbanked individuals in Indonesia during their daily financial transactions (Venkatesh 2012).

#### **METHOD**

This study utilized analytical quantitative methods, which were chosen due to the measurable data being collected. The sample size consisted of 304 respondents, randomly selected using a sampling technique. To acquire data from the unbanked community in Indonesia, questionnaires were distributed through digital media. The respondents were individuals aged between 17 to 40 years who were unbanked and FinTech users from all regions of Indonesia. The data collected was analyzed through path analysis techniques. This approach was favored because the UTAUT 2 theory proposed by Venkatesh in 2012, which was the fundamental theory in this study, uses path analysis techniques. UTAUT 2 theory explores the adoption of FinTech in the general public by examining their motivation and behavior in the FinTech adoption process.

## **RESULT AND DISCUSSION**

The UTAUT 2 theory explains that reliability, facility conditions, social influence, and hedonic motivation, habit, and trust affect the intention and behavior of using a service. These variables form the latent variable of ease of access benefits in UTAUT 2 theory. In 2012, three additional constructs were added to the theory (F.D. Davis 1986). In this study, the usage behavior variable was replaced with the actual usage variable to focus on the adoption of FinTech in daily transactions among the unbanked community. Additionally, the preference variable was added as an important factor in the FinTech adoption model among the unbanked community in Indonesia. The preference in question refers to the tendency of subjective adherence to Islamic values in considering everything, including the adoption of FinTech services (Musa Gün 2020).

The study considers this factor important. In Indonesia, the unbanked community's preference for Islamic economic values plays a significant role in their transaction choices ( Hassan, M.K., Hossain, S. and Unsal, O. 2018). However, even with their preferences, people can

still make rational decisions when considering the adoption of FinTech services. This means that in the Indonesian society's FinTech adoption process, there is a unique adoption model due to the diverse background of unbanked individuals (Delta Khairunnisa 2019). Consequently, their preferences towards FinTech adoption also vary. The results of research on FinTech adoption in unbanked communities in Indonesia indicate that the benefit variable significantly and positively affects the ease of use variable.

Additionally, the benefit variable negatively affects the intention to reuse variable, but the value is insignificant. The ease of use variable has a significant and positive effect on the preference variable. The preference variable negatively affects the intention to reuse variable, but the value is not significant. The preference variable positively affects the actual use variable, but the value is not significant. Finally, the intention to reuse the variable positively affects the actual use variable, but the value is not significant.

The research suggests that there are differences in the adoption of FinTech among the unbanked population in Indonesia compared to other countries. It identifies the key factors impacting this adoption, with the preference variable having a negative effect. This variable refers to an individual's tendency to follow Islamic economic values when it comes to financial transactions. The study shows that there is a correlation between FinTech services and Islamic services. Additionally, the study highlights the importance of features that make it easier for users to access Islamic economic transaction services, such as zakat and infaq payments that are directly channeled to trusted institutions. This provides an alternative option for the development of FinTech adoption in Indonesia.

Preliminary data shows that the unbanked population in Indonesia has a low adoption rate of FinTech due to the high level of social influence indicators in the benefits variable. In general, the majority of Indonesians understand FinTech as an online lending application with a very high-interest rate, which troubles the community. This perception distinguishes the FinTech adoption model in the unbanked community in Indonesia from other countries that have a more open perception of FinTech. There is a lot of room for development in FinTech, but unfortunately, the limited definition understood by both the unbanked and banked communities in Indonesia makes this potential disruption invisible. This has a negative impact on the unbanked community's adoption model of FinTech in Indonesia.

#### **CONCLUSION**

The research on FinTech adoption in unbanked communities in Indonesia yielded the following results: Firstly, the benefit variable has a significant positive effect on the ease of use variable. Secondly, the benefit variable has a negative impact on the intention to reuse variable, but the value is not significant. Thirdly, the ease of use variable has a significant positive effect on the preference variable. Fourthly, the preference variable has a negative effect on the intention to reuse variable, but the value is not significant. Fifthly, the preference variable has an

insignificant positive effect on the actual use variable. Lastly, the intention to reuse variable has an insignificant positive effect on the actual use variable.

The research shows that the FinTech adoption model for unbanked people in Indonesia is different from that of other countries. Integrating additional features that facilitate access to Islamic economic transaction services can be an option for the development of FinTech adoption in Indonesia. However, the limited definition of FinTech understood by both the unbanked and banked communities in Indonesia makes the potential of this disruption invisible. This has a negative impact on the adoption model of the unbanked community in Indonesia towards FinTech. Overall, FinTech has a vast potential for development and growth in Indonesia.

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