

## THE INFLUENCE OF TRUST, SECURITY, CONVENIENCE, AND AVAILABILITY OF MOBILE BANKING FEATURES ON CUSTOMER INTEREST AFTER A CYBER THREAT OCCURS (CASE STUDY OF BANK SYARIAH INDONESIA)

Zahra Suci Ramadhani<sup>1</sup>, Kinanti Agung Suryani<sup>2</sup>, Evrina Ross Pratiwi<sup>3</sup>, Muhammad Ramizal Syahidin<sup>4</sup>, Fifi Hakimi<sup>5</sup>

<sup>12345</sup>*Undergraduate program of Islamic Economy, Faculty of Economics and Business, Universitas Muhammadiyah Lamongan*  
*Email: zramadhani761@gmail.com*

### Abstract

The rapid development of information technology is balanced with the demands of high mobility, and humans follow all existing corridors. Efficiency and effectiveness are needed for high mobility and rapid technological development. Mobile banking is one of the tools for technological development in the banking sector, so that it can be one of the supports for activities in everyday life. Continuous use of the internet increases the speed of mobile banking, so that internet access causes criminal acts such as cybercrime, hacking, and hoax news. Therefore, an analysis is needed to determine the effect of the level of Trust, Security, Convenience, and Availability of Mobile Banking on customer interest after the cyber threat on Bank Syariah Indonesia's mobile banking. This study aims to determine how the level of Trust, Security, Convenience, and Availability of Mobile Banking affects the interest of Bank Syariah Indonesia customers. This study is a quantitative study using primary and secondary data. The results of the study indicate that the variables of the level of Trust and Availability of mobile banking features have an effect on attracting customers to use mobile banking. While the variables of Security and Convenience have no effect on attracting mobile banking customers. This study is useful as a reference for Bank Syariah Indonesia, customers, academics, and researchers in the future.

**Keyword:** *Mobile Banking, Cybercrime, Customer Interest, Islamic Bank, Bank Syariah Indonesia*

### A. INTRODUCTION

In this very modern life, technology and information with mobility are tall. No, let go of all aspects of life, man. Such a development fast makes all matter can be done with easy and efficient. Moreover, the existence of internet technology provides lots of benefits as well as Convenience in all fields. With the Internet, information and communication can be reachable without limits of space and time through devices and electronics that can be connected. Currently, the role of the Internet is increasingly important in social, economic, and political life in the global world. Every internet year is getting bigger and influencing the lives of every individual. Cannot deny that technology has changed world civilization fast.

Banking in Indonesia follows the development of technology, information, and communication. Technology has opened new markets, products, services, and channels for efficient delivery for industry banking. The Bank has changed from provider solution banking based on paper to technology. Developments in banking make it easier for customers to use various products when and where only.

Now, customers choose services that are practical and straightforward. Facilities support, service products, and banking services must also be paid attention to. In no direct Way will the CustomerCustomer interact and transact using facility support provided by banking. So that required a system that answers choice Customers will fulfil need service banking effectively and efficiently. Development This is marked by the rapid use of electronic banking (e-banking) to support operational activity banking and make it more accessible for customers to do transactions. With the growth of people who like Internet banking and applications, banks worldwide are introducing "Mobile banking," a banking channel. Mobile banking has been introduced as a channel for mobile payment, a solution for facilitating and creating micropayments that are easier for customers and holders of bank accounts.

Mobile banking has profit for banking: enduring competition, saving cost, increased customization on a large scale, activities marketing and communications, maintaining and attracting customers. Using mobile banking is rated as profitable for the Bank and the Customer. Because all transactions become more accessible, practical, and efficient. Electronic banking users are growing worldwide. Attitudes of the public toward multi-channel banking have also developed with consumer value convenience and low cost from ATMs, internet banking, channels of banking, and other available electronic services. With the growth of people who like Internet banking and technology, banks worldwide are introducing " Mobile Banking ", which is a channel banking.

Mobile Banking has been introduced as a channel for mobile payments, which are solutions For facilitating and creating micropayments more easily For customers and holders' bank accounts. Mobile banking is the use of mobile terminals such as mobile phones and Personal Digital Assistants (PDAs) for access network banking through protocol application wireless (Audi, 2021) (Tao Zhou, 2010) (gumussoy, 2016). Through mobile banking, consumers access information accounts, make payments, and do Lots of related activities with banking others. In addition, the ease, Convenience, and accessibility of mobile banking can be considered important for engaging customers (Murpin Josua Sembiring, 2022) . Gummosoy in his research, mobile banking is a system service from an institution that finances like a bank for several transactions. It can be accessed directly by customers through mobile devices such as telephone mobile (gumussoy, 2016) . The Bank provides facilities for mobile banking because of the demands of humans who often do business transactions.

The increasing use of the Internet means a more significant number of goods used in transactions through mobile banking and social media such as Facebook, Instagram, Twitter, WhatsApp, and others. Continuous internet use can also increase the speed of mobile banking. Internet access can cause emergency crimes like cybercrime, hacking, news Lies, or hoaxes against internet users. Hence, governments and institutions find it challenging to balance technique crimes committed with technique computers, particularly internet networks. Progress knowledge and technology bring various implications complex in life, humans, and relationships between countries. The development of Internet technology caused the emergence of the so-called K crime, which is cybercrime or crime through Internet networks. The emergence of several cybercrime cases in Indonesia, such as theft of card credit, hacking some sites, tapping and transmitting other people's data, such as email, and manipulating data with method prepare commands that are not desired in computer programming.

Cybercrime can be defined as an action by criminals who violate the law and use the computer as a tool for their crime. This cybercrime happens because of progress in technology, computers, or the world of information and technology, especially Internet media. Depending on how far the source of power good is in the form of hardware/software or user, the technology concerned has knowledge and awareness about the importance of security in cyberspace. Because of the rampant acts of criminals in the virtual world and its rapid development growth, digitalization in banking has an impact on increasing cyber risks and attacks that are growing and becoming attention. For some decades, there have been improvements to enormous cyber attacks that have caused a series of damage to critical banking processes and caused loss of financial resources in the system. It is essential for sector banking or finance to implement an effective cybersecurity strategy.

## B. RESEARCH METHODS

### Research Data

Study This uses a descriptive quantitative approach. Data on research This shaped the number that will be analyzed and taken to a conclusion. Research descriptive quantitative is a method that uses see, review, and describe with numeric terms regarding the object to be investigated, what existence and withdrawal conclusions about the matter are by phenomena that appear when the study is done (Arikunto, 2006). In terms of This significant structure, Funds Level of Trust, Security, Convenience, and Availability of Mobile Banking Features and their Impact on Customer Interest After Cyber Threats.

Data on research, including primary data supported with secondary data from books, journals, articles, and official websites, will be used as a base-making questionnaire to explain the research results. Data collection through questionnaires was done online via a Google form. Questionnaire items used in the

study This use is constructed from previously related studies. Construct modified so that can represent variable research studied. The 5-point Likert scale points 1-5 representing Strongly Disagree to Agree Strongly, is used as a base question on the questionnaire (Sugiyono , 2015).

The sampling method is purposive sampling, where respondents are selected as source persons in the study. This must be an appropriate criterion. Criteria The Respondent in this study is a Customer of the Indonesian Islamic Bank. Sample in the study This amounts to 100 Respondents, which fulfils the criteria Respondent from a total of 105 respondents whofill in the questionnaire. The minimum size sample PLS-SEM is 30-100 size sample, so the size sample in the study already fulfils the criteria (Hair , Anderson , Thatam, & Black, 1998)

### Data Analysis Techniques and Tests

Data was processed using the SEM-PLS method. This method used testing and estimation coefficients of the model performed in a way that was simultaneous with the connection between variables. SEM-PLS is component-based and flexible, which means that the results of the alleged prediction without assuming the normal distribution are the most crucial thing (ZUHDI, 2016). SEM and PLS are a technique alternative in SEM analysis that does not require the data to use the multivariate normal distribution. In SEM and PLS, the value of latent variables can estimated by a linear combination of variables manifesting the problem related to a latent and treated variable as a replacement variable manifest (Alfa, (2017)). The use of SEM-PLS is highly recommended when the amount of sample has limitations while the model is built with sufficiently complex.

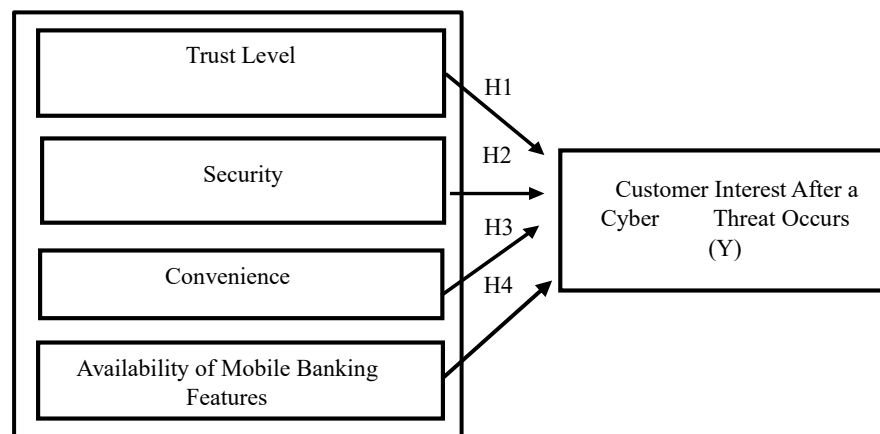


Fig. 1. Framework study

There are four hypotheses in this study:

H<sub>1</sub>: Confidence Level Influential to Customer Interest After Happen Threat Cyber

H<sub>2</sub>: Security Influential to Customer Interest After Happen Cyber Threats

H<sub>3</sub>: Convenience Influential to Customer Interest After Happen Cyber Threats

H<sub>4</sub>: Availability of Mobile Banking Features Influential to Customer Interest After Happen Cyber Threats

## C. RESULTS AND DISCUSSION

### Results

#### Demographics Respondents

Based on the results, this study involved 100 respondents who were customers of Bank Syariah Indonesia, the majority of whom were women (56.2%) who were Muslim. Dominated aged 19-23 years and located living in Lamongan, East Java, as many as 54.3%. The majority of respondents are students, namely 63.9%. Most monthly income respondents are below or equal to 1 million by 56.2%, with expenditure range below or equal to 1 million by 63.8%.

#### Model Evaluation

Before conducting the hypothesis test, an evaluation of the research model was carried out (see at the attachment). The structural or inner models try to provide a causal connection between latent

variables. Through the process of bootstrapping, the parameters of the t-statistic test can be used to predict availability connection causality.

In PLS-SEM, validity test convergent can done with an evaluation mark from outer loading, commonly called loading factor, which shows the magnitude correlation between each measurement item, namely the indicator in the questionnaire and latent variables (constructs). The conditions used as inspection beginning the outer loading value is considered significant, namely, fulfil or must reach a higher level significant from 0.5. The result value from outer model testing in Table 4.2 above shows that four Indicators measuring customer interest intentions use Mobile Banking with outer loading values higher than 0.5. In this case, the data above each variable cannot be interpreted. Some indicators have marked outer loading below 0.5, which indicates that indicators used in the study are worthy and valid as gauging the variables in question and can used return For analysis more carry on.

Construct validity is mark validity that shows to what extent a test that measures the construct of the theory will become the base compilation test. Construct is said to be valid or suitable if the mark Average Variance Extracted (AVE) > 0.5 (Abdillah & Jogiyanto, 2016). Known that mark from every variable in the research analysis model This own mark construct validity more from AVE > 0.5, which indicates mark Good Construct Validity.

In the discriminant validity test, the comparison roots from the Average Variance Extracted (AVE) are used as a parameter. The construct owned must be more significant than the correlation between the latent variable, or it can also be done with the method see mark cross-loading (Abdillah & Jogiyanto, 2016). The data above show that if every indicator on a construct is more significant compared to other constructs and accumulates in one construct, the discriminant validity value marks more constructs than other constructs, and discriminant validity in this study is promising.

After validity test, next step is reliability test. If all existing constructs in the study have Cronbach's alpha value > 0.6 and composite reliability value > 0.7, then they can be interpreted as every reliable construct (Abdillah & Jogiyanto, 2016). This means that every construct in the research model has internal consistency in the reliability testing instrument.

Analysis coefficient determination is held to measure how much Far ability a utility model explains variation variable dependent (Ghozali, 2008). Based on the R-squared value (in the attachment) and multiplied by 100%, the obtained mark coefficient determination of Customer Interest Using Mobile Banking Variable is 73.4%. In this case, This means that the mark coefficient determination variable Trust, Security, Convenience, and Availability features influence the Interest variable. Customer use of mobile banking contributed to the study by 73%, while other variables outside the research model were explained by 27%.

### Evaluation Hypothesis

After finishing the testing above, continue with testing significance or bootstrapping, which provides mark significance from every indicator from the construct variable dependent. Outer models are often called measurement models that explain every part of the indicator related to the variable. Evaluation of measurement models can be done with three steps: the validity test convergent, validity test discriminant, and reliability test composite or combination.

**Table 1.** Path Coefficient

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard deviation n (STDEV)</i>	<i>T Statistics ( O/STDEV )</i>	<i>P Values</i>	<i>Results</i>
PKA → Customer Interest	0.389	0.385	0.134	2.902	0.004	Influential
PKM → Customer Interest	0.102	0.090	0.140	0.726	0.468	No effect

PKP → Customer Interest	-0.063	-0.059	0.144	0.440	0.660	No effect
PKT → Customer Interest	0.475	0.512	0.181	2,619	0.009	Influential

Measurement items used are considered significant if the statistic value exceeds 1.96 and when The p-value is less than 0.05 with a level significance of 5%. At the same time, parameter coefficients show direction influence variable independent to variable dependent (Ghozali, 2008). Based on the test (Table 1), the variable security perception (PKA) affects engaging customers (MN), the variable convenience perception (PKM) has no influence on engaging customers (MN), the variable influence trust (PKP) has no influence on interest customers (MN) and variables influence availability (PKT) affects intention interest customer (MN).

## Discussion

### Security (PKA) influences Customer Interest in Mobile Banking (MN)

Security variable is influential, positive, and significant to interest customers using mobile banking. This study's results align with the study (Sukmawati, 2020) that mobile banking security positively and significantly affects the satisfaction among customers of BRI Syariah Bank, Kediri Branch. This study compares backwards with the study of (Khotimah, 2018), which shows that the perception of security is influential and favourable to variable interest use of BNI bank mobile banking services. However, this research is compared backwards with the study (Mukhtisar, 2021), which states that security does not play a role in driving interest in mobile banking customers. This research also aligns with the study (Islamy, Maslichah, & Nandiroh, 2023), which concluded that the safety factor does not significantly influence engaging customers to use mobile banking services.

Based on results from the respondent, this study shows that variable influences customers' interest in incomers who use mobile banking. This research believed that customers respondents will be personal data security customers who are in Bank Syariah Indonesia's mobile banking. Security is the primary and most crucial factor in convincing customers to use mobile banking; if customers are sure of the security of mobile banking, they will be interested in using it. There are several indicators. A security that can support this statement states that the Bank will ensure a security system by maintaining the confidentiality of personal data customers, preventing and detecting the existence of fraud through security double like using PIN code and password, retina scan, or fingerprint finger (Rahardjo, 2017). Customers who use mobile banking applications believe that the Bank will maintain the security of their data. Customers who use mobile banking applications via security double use PIN code, password, and retina scan or fingerprint of each customer's finger. This will increase the sense of trust and security in the Bank Syariah Indonesia mobile banking application.

### Convenience (PKM) does not influence Customer Interest using Mobile Banking (MN)

Convenience is influential and damaging and has no significant effect on customers' interest in mobile banking. This study's results align with the study (Atieq & Nurpiani, 2022) that variable Convenience has no positive or significant effect on customers' interest in mobile banking. This research also aligns with a study (Eli Safitri, 2022) that states that variable convenience access has no significant effect on customers' interest in using mobile banking services. However, this is in comparison backwards with a study (Amalia & Hastriana, 2022) that states that variable convenience mobile banking positively and significantly influences customers' satisfaction in transactions at Bank Syariah Indonesia KCP Sumenep. Also compared backwards with the study, Nazir (Nazir, 2014) states that the perception of convenience use is influential and significant to interest use of mobile banking.

The results of the research that has been conducted show that variable Convenience does not affect interest. Customers use mobile banking. Lack of choice features, limited or impossible transactions accessed for 24 hours, and fewer complete various need transactions result in customers feeling unsure about making transactions using the mobile banking application because they are afraid. There was a problem while making the transaction using the mobile banking application.



**Trust (PKP) does not influence Customer Interest using Mobile Banking (MN)**

Trust is influential, harmful, and ineffective, which is significant in the interest of mobile banking customers. The results of this study agree with the study of (LEDESMAN, 2018), which shows that Trust has no factor against customers' interest in using mobile banking services. The results of this study are also in line with the study (margono setiawan, 2022), which found that variable Trust has no positive and insignificant influence on customers' interest in using mobile banking in the middle of the Covid-19 pandemic. However, this research is compared backwards with the study (Fernos & Alfadino, 2021), which stated that trust influence is positive and there is a significant interest in customers using service mobile banking at PT. Bank Pembangunan Daerah Sumatera Barat Branch Kota Baru. This study also compares backwards with the study of (utama, 2023), which states that Trust is influential, positive, and significant interest. Customers use mobile banking services.

Trust is based on the desire of customers to use mobile banking. However, in this study, the variables Trust do not affect interest customers in using mobile banking; customers feel that information provided by the Bank in mobile banking has yet to be, according to. Customers feel that the application mobile banking needs more answers for its customers; besides the lack of customers trusting the application mobile banking for transactions, the facilities provided still need to resolve transaction issues and finance customers.

**Availability of Mobile Banking Features (PKT) influences Customer Interest using Mobile Banking (MN)**

Availability of mobile banking features is influential, positive, and significant in engaging customers to use mobile banking. This study's results align with research by (Nazirah, Ashal, & Riza, 2022), which states that the availability of mobile banking applications is influential in attracting customers to use mobile banking for customers of Bank Syariah Indonesia KCP Ulee Kareng. This research is also in line with the study (devi, 2022), which shows that variable availability feature service influences customer user mobile banking. However, This research is compared backwards with research by (Khairunnisa & Damayanti, 2023), which states that the availability feature does not affect engaging customers in BSI mobile banking. This study also compares backwards with the study (Damayanti, 2021), which states that availability features do not significantly affect customers' interest in using sustainable mobile banking. With the existing development and renewal, the mobile banking application has various exciting features, information or news, and valuable promos, which can increase customers' interest in mobile banking.

**D. Conclusion**

Based on the results of the research, it can be concluded that customer's interest in using mobile banking of Bank Syariah Indonesia after cyber threats is determined by security and the availability of mobile banking features. While trust and convenience do not influence the customer's interest in using mobile banking of Bank Syariah Indonesia.

**Recommendation**

Based on the results, author suggest a recommendation for Bank Syariah Indonesia to be able to guard personal data security customers against various threats, as well as can give the availability of various features for fulfilling the needs of customers with an easy application. BSI can increase their trust as well as ask for customers in using Bank Syariah Indonesia mobile banking application.

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