ebessic Economics, Business, Entrepreneurship & Social Sciences International Conference 2022

THE INFLUENCE OF EASE OF USE, SECURITY, AND PRIVACY RISK TO INTENTION TO USE ONLINE INVESTMENT

Anisya S. Putri Riyadi , Amalia Diana Nehasari , Anastasia Ayu Widyandari , Fairus zabadi , Idam Wahyu
YKPN Business School

ABSTRACT
This research aims to examine the influence of ease of use, security, and privacy risk to the intention to use online investment. The purposive sampling method was utilized and the results in 101 participants obtained from the google form. Hypothesis testing was conducted using the SPSS program. This research has several results: First, ease of use has a positive influence on the intention to use online investment; second, security has positive influence to intention to use online investment; third, privacy risk has no influence to intention to use online investment.

Keywords: ease of use, security, and privacy risk

Introduction

According to the Financial Services Authority (OJK), the notion of investment is "investment, usually in the long term for the procurement of complete assets or the purchase of shares - shares and other securities to gain profit". According to Financial Accounting Standards (2007), PSAK No. 13 paragraph 3 describes investment, namely "an asset used by a company for accretion of wealth through the distribution of investment returns such as interest, royalties, dividends and rent, for appreciation of investment value or for other benefits to the investing company". (Jogiyanto, 2014) in his book entitled Portfolio Theory and Investment Analysis writes about the definition of investment, namely "delaying current consumption to be included in productive assets for a certain period of time." Based on the above understanding, it can be concluded that investment is an investment activity or business in a particular company or project. And have a clear goal of getting a profit with a different timeframe.

According to (Mardiyanto ., 2008) investment is divided into two forms, namely real investment (*real investment*) and financial investment (*financial investment).* Invest in real assets Is a form of investment made by buying assets (in the form of fixed assets) to produce a certain product through the production process (for example, setting up a factory, buying factory machinery). Investments that fall into the real category are gold property investments and other fixed assets. Financial investment is a form of investment made by buying and selling transactions in the form of securities or commercial papers. Investments that fall into the category of financial investments are investments in stocks, bonds, mutual funds, derivatives and other financial assets.

Looking at the forms of investment mentioned above, there are also types of investments made in an institution or company in the context of ownership of financial assets in 2 ways. Direct investment (*Direct Investing)* can be interpreted as an ownership of securities directly in a particular institution or company that has officially *gone public* with the aim of obtaining a level

of profit in the form of *dividends* and *capital gains. Indirect* investment (*Indirect Investing)* occurs when a securities owned are traded back by an investment company that functions as an intermediary. Ownership of assets is indirectly exercised through registered financial institutions, which act as intermediaries. In its role as an indirect investor, intermediary traders get *dividends* as in direct investment and *capital gains or portfolio trading results.*

Modern technological developments make investments now possible with an online system. Online investment is a form of investment activity to buy or sell securities (such as stocks, bonds, mutual funds) which can be done online using the internet. Compared to conventional investments or offline trading which used to be done through brokers or certain securities, the online investment system is easier and more flexible to do thanks to an application designed specifically for making investments. So that for investors, online investment applications can provide more attractive advantages and benefits and make it easier to process transactions.

Theory and Hypothesis Development

With the existence of an online investment application system, investors will be increasingly given the convenience of investing in stocks. Investors can carry out investment activities by buying and selling shares, viewing stock movements and various information and analysis related to various companies that will be targeted by investors directly through an internet connection anywhere and anytime. Researchers adopted the theory of the *Technology Acceptance Model (TAM)* created by Davis (1989) regarding interest in the use of technology and information which states that individual interest in using information systems and technology is influenced by two factors, one of which is *perceived ease of use* . According to Davis, convenience is the extent to which a person can use a system without experiencing certain constraints.

The increasing interest in the use of technology and information systems shows ease. (Susilowati & Kusuma, 2007) explains that the intensity of use and interaction between the user and the system can show ease. In this case the online investment application system is becoming better known, easy to operate and used by stock investors when making investments. In addition, investors are also given the convenience of using online investment applications. Investors no longer need to meet with brokers or contact by telephone or SMS which they feel is less effective and efficient. So the costs incurred by investors become cheaper.

However, this is not in accordance with previous research conducted by Lawrence and Bridwan (2013) which explained that convenience is not a factor that influences stock investors' interest in investing online, instead investors prioritize the usability and needs of online investment application facilities in investing in stocks. Lawrence and Bridwan's research is proven by the existence of a successful Indonesia Stock Exchange (IDX); created a computerized and automated stock trading system, namely the JATS system (*Jakarta Automated Trading System*) in 2009 which has been in operation for a long time, so that investors ignore convenience.
Data security is something that is rarely discussed in Indonesia. The lack of knowledge about data security in Indonesia is often ignored, as a result, there are many cases of misuse of data / information whose number is difficult to detect. The reasons for data security / security access are important, namely: Preventing potential material losses, Reducing the risk of misuse of data / information, Reducing opportunities for criminal acts .

Privacy risk is a consequence that can occur as a result of a security guarantee process for users of online investment applications. What must be done to reduce the risk of privacy being

spread includes: Pay attention to our personal information data, such as telephone numbers, addresses, dates, etc.; Limit access, once you know which parties can read your data/information, remove access for parties you don't know; Choose the right partner. Do not let your important data / information fall into the wrong hands. Especially company data / information.

The effect of trust on interest in using online investment applications.

(Doney & Cannon, 1997) , trust is also important for investors because trust in the online investment process makes investors have to make decisions with the intention to invest. (Ganesan, 1994) explained that online applications or e-brokerages can build long-term relationships with investors and these relationships are based on trust. Of course, investor confidence will pose a risk that will occur if you decide to invest online.

Lawrence and Baridwan (2013) conducted research on the determinants of individual behavioral attitudes and interests using *internet stock trading* among investors who invest in stocks on the Indonesia Stock Exchange. The results of the study stated that trust has a positive effect on the interest in using *internet stock trading.*

Thus the first hypothesis is formulated as follows:

H1: trust has an effect on interest in using online investment applications.

The effect of security on interest in using online investment applications.

According to Lukas (2016) in his theory entitled *Theory of Safety and Security* explains security, which is an important indicator for reducing and preventing the negative impacts of various threats and vulnerabilities that occur in a system. If a problem occurs in a system, then the security factor must be increased.

(Pavlou & Chellappa , 2001) researching about security has a positive influence on a person's intention or interest in carrying out the desired activity. (Yang & Fang, 2004) conducted research on the safety factor contained in online investment applications that this security positively influences investors' desire to invest online.

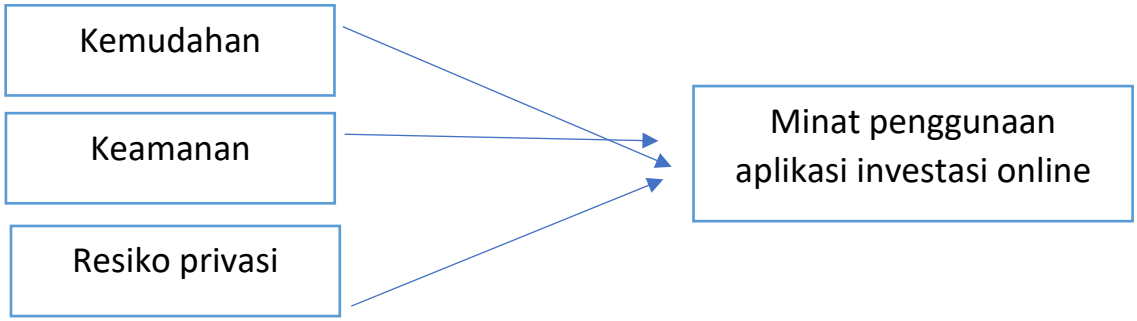
H2: security affects interest in using online investment applications.

Effect of privacy protection on interest in using online investment applications.

According to the Big Indonesian Dictionary, the right to privacy is personal freedom or freedom. The right to privacy is a claim of an individual, group or institution to determine for themselves when, how and to what extent information about them is communicated to others without having to be known by the public.

Meanwhile according to (Westin, 1967) , the right to privacy as a claim from individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.

H3: privacy protection affects interest in using online investment applications.



RESEARCH RESULTS AND DISCUSSION

Respondents came from the general public who had used online investment applications or those who had never. The data collection that we collected through the Google form questionnaire got 101 respondents.

The data that has been collected is tested for validity, reliability and hypothesis testing using SPSS 25. The results of research data testing are as follows:

Respondent Demographic Data

Demographic data provides general information about the condition of the respondents which can be analyzed qualitatively based on age and occupation. Table 1 and Table 2 below show the demographic characteristics of the respondents in this study.

Table 1 Respondents based on age

Age	Frequency	Percentage
< 20 years	16	15,8
< 20 years, 20 - 29 years	1	1.0
> 50 years	1	1.0
20 - 29 years	78	77,2
30 - 39 years	4	4.0
Total	101	100.0

Table 2 Respondents by occupation

Work	Frequency	Percentage
Private sector employee	7	6,9
Etc	4	4.0
Government employees	1	1.0
Student / Student	83	82,2

Entrepreneur / Entrepreneur	5	5.0
Total	101	100.0

VALIDITY TEST

Validity is the extent to which the accuracy and accuracy of a measuring instrument in carrying out its measuring function. (Azwar , 1986) . By correlating between each question with a score of results obtained from 101 questionnaire respondents.

Table 4 Validity Test Results

Code	***convenience***	Components	validity
KM1	I feel that the process of using the online investment application system is **easy to understand and follow**	,881	VALID
KM2	I feel that the online investment application system makes **it faster** for me to complete securities buying and selling transactions	,892	VALID
KM3	I believe that online stock trading systems **are practical to use**	,887	VALID
KM4	Online investment application provides real-time services	,858	VALID
KM5	Using an online investment application system can **improve** my performance in making investments	,892	VALID
	Security		
KA1	I feel that with clear legality, I have more trust in online investment applications	,717	VALID
KA2	I feel confident that the online investment application system has sufficient security measures in place **to protect my personal and financial data.**	,855	VALID
KA3	I am not worried about incidents of fraud and hacker attacks when using online investment applications	,646	VALID
KA4	I feel that when I send data to the online investment application system, I believe that the data will **not be taken** by other unauthorized parties	,874	VALID
	Privacy		
P1	I am concerned about unauthorized third party (*hacker) access* to personal information	,915	VALID
P2	I am worried that my personal data may be misused by others	,928	VALID
P3	I feel uncomfortable if I have to provide personal information through an online investment application	,773	VALID
	Interest in Use		

MP1	I will use an online investment application system if I am going to make an investment	,863	VALID
MP2	I will not doubt the online investment application system if I am going to make an investment	,886	VALID
MP3	I will gladly recommend the online investment application system to my friends if they are going to invest	,910	VALID
MP4	If I have extra money for investment, I will use an online investment application system	,907	VALID

Source: Primary data processed with SPSS

Based on the table above, it can be seen that the Ease of Use variable has 5 statements, the Security variable has 4 statements, the Privacy variable has 3 statements, and Interest in Use has 4 statements.
The results of the validity test on all questions for the variable are stated to be valid because loading factor above 0.5. So that the research questionnaire used in this study can accurately measure the variables to be measured.

Reliability Test

The reliability test is a series of measurements or a series of measuring instruments that have consistency if the measurements made with the measuring device are carried out repeatedly (Sugiono, 2005) . The reliability of each variable can be seen through the *Cronchbach's alpha value.*

Table 5 Reliability Test

Variable	Cronbach Alpha	Information
convenience	0.928	Reliable
Security	0.773	Reliable
Privacy	0.838	Reliable
Interest in Use	0.914	Reliable

The reliability test shows that all the variables tested have a *Cronbach Alpha* above 0.6 so that all variables are reliable variables and can consistently measure each variable.

Table 6 hypothesis

Summary models

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.837 [a]	,701	,691	,38372

Predictors: (Constant), P, KA, KM

ANOVA

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	33,100	3	11.033	74,933	.000 [b]
	residual	14.135	96	, 147		
	Total	47,235	99			

Based on table 6 it can be explained by the analysis of the coefficient of determination R that the Adjusted R Square value is 0.701 (70%). This shows that the variable effect of convenience and security influences the interest in using online investment applications by 70% while the remaining 30% is influenced by the variable privacy protection.

In the F test, if F count > F table, the hypothesis will be accepted, otherwise if F count < F table, the hypothesis is rejected. Based on the output table, F count is 74.933. F count 74.933 > F table 2.70, so the hypothesis is accepted, Ease (KM), Security (KA), and Privacy (P) simultaneously affect User Interest (MP).

Table 7
Coefficient

Tabel 5

Koefisien

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,142	,217		,655	,514
	KM	,275	,098	,262	2,818	,006
	KA	,691	,093	,627	7,470	,000
	P	-,009	,069	-,008	-,126	,900

a. Dependent Variable: MP

In testing the hypothesis of this study if the Significance value (Sig). <probability 0.05 then there is an influence of the independent variable on the dependent variable or the hypothesis is accepted. If the value is Significance (Sig). > probability 0.05, so there is no effect of the independent variable on the dependent variable or the hypothesis is rejected.
The hypothesis test on the Ease of Use (KM) variable was obtained by Sig. 0.006 is below 0.05 so that the hypothesis is accepted, meaning that ease affects interest in use (MP). The Safety Variable (KA) was found to be Sig. of 0.000 below 0.05 so that the hypothesis is accepted, so that Security (KM) has an effect on Interest in Use (MP). The Privacy Variable (P) has Sig. 0.900 is far above 0.05, so the hypothesis is rejected, meaning that Privacy (P) has no effect on Interest in Use (MP).

CONCLUSION

research was made to see the effect of convenience, security, and privacy risk on interest in using online investment applications. 101 respondents of various ages and occupations participated in this study. It can be concluded that convenience and security affect user interest in online investment applications. Meanwhile, privacy protection has no effect on interest in using online investment applications.

BIBLIOGRAPHY

Azwar , S. (1986). *Validity and Reliability* . Rineka Create .

Doney , PM, & Cannon, JP (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of Marketing, 61(2), 35–51.*

Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships. *The Journal of Marketing, 58, 1-19.*

Jogiyanto , H. (2014). *Business Research Methods* (6th ed.). Gadjah Mada University .

Mardiyanto ., H. (2008). *Digest of Financial Management* . Grasindo .

Pavlou , PA, & Chellappa , R. (2001). *The role of perceived privacy and perceived security in the development of trust in electronic commerce* .

Susilowati , & Kusuma. (2007). Determination adoption Perspective Internet Banking Services Consumer DIY banking . *Journal of Accounting and Auditing. Vol. 11, no. 2.*

Westin, AF (1967). *Privacy and Freedom* . Atheneum.

Yang, Z., & Fang, X. (2004). Online Service Quality Dimensions and Their Relationships with Satisfaction: A Content Analysis of Customer Reviews of Securities Brokerage Service. *International Journal of Service Industry Management* .