

# THE INFLUENCE OF RISK PERCEPTION, RETURN EXPECTATIONS, BEHAVIORAL MOTIVATION AND TECHNOLOGICAL PROGRESS ON INVESTMENT DECISIONS IN ISLAMIC PEER TO PEER FINTECH

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ARTICLEINFO	ABSTRACT
<i>Keywords</i> : Perceived Risk (X1), Expected Return (X2), Behavioral Motivation (X3), and Technological Progress (X4) Investment Decision (Y)	This study aims to determine the extent of the influence of Risk Perception (X1), Return Expectation (X2), Behavioral Motivation (X3), and Technological Progress (X4) on Investment Decisions (Y). This study uses a quantitative approach with sampling using the non-probability sampling method. The type of data used in this study is Primary Data obtained from questionnaires filled out by respondents directly. While secondary data comes from books, journals, research results, practical work reports and is related to the author's research object. In this study, the population to be taken is investors or lenders who invest in Islamic peer to peer fintech domiciled in North Sumatra in 2022 as many as 430 people with a sample selection using the slovin formula of 81 people. The analysis tool uses multiple linear regression analysis. The results showed that Risk Perception (X1), Return Expectation (X2), Behavioral Motivation (X3), and Technological Progress (X4) simultaneously influenced the Investment Decision (Y). The coefficient of determination is 0.741. This means that 74.1% of Investment Decisions (Y) are influenced by Risk Perception (X1), Return Expectation (X2), Behavioral Motivation (X3), and Technological Progress (X4) while the remaining 25.9% is influenced by other variables not examined in this study.
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#### 1. INTRODUCTION

According to Bank Indonesia, Financial Technology (Fintech) is the use of technology in the financial system that produces new products, services, technology and business models and can have an impact on monitoring stability, financial system stability and efficiency, smoothness, security and reliability of the payment system.[1]. As a result of its convenience and quickness, fintech has gained immense popularity among millennials and is expected to continue to grow. With this financial technology, it is anticipated that people will be able to access these fintech financial services from their internet-connected smartphones or laptops [2]. The availability of facilities and infrastructure or fintech financial service facilities further increases the public's desire to know more about it and even engage in direct activities in it.

Along with the development of the fintech industry in Indonesia, all sectors of the financial services industry, such as banking, capital markets, payments, industrial platforms are also very influential. The government projects that Indonesia will become the largest digital economy country in Southeast Asia in 2020 by targeting 1,000 technopreneurs, a business valuation of US\$ 100 billion, and a total e-commerce value of US\$ 130 billion.[3]. In fact, Bank Indonesia is also trying to get closer to the pace of innovation and the fintech industry by establishing the Bank Indonesia Financial Technology Office or BI Fintech Office. Along with increasingly high business competition and minimal use of e-commerce in MSME business development, an in-depth study of increasing MSME competitiveness is important.[4]. Various innovative fintech models have also begun to develop in Indonesia, such as e-money, payment gateways, crowdfunding, and peer to peer fintech.

In this study, the authors focus on P2P financial services. P2P fintech is the provision of financial services to bring together lenders (funders) and borrowers (borrowers) using sharia principles in their transactions[5]. P2P fintech, allows everyone to provide loans or apply for loans to one another to meet various interests[6]. Sharia fintech P2P is an investment alternative with an average service fee of 13%. Using the Short Term Debt system is a solution for people who want a Low Risk Investment but with a short



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term with tenors ranging from 30, 60 to 90 days. P2P fintech is also an inclusive investment where people can invest even with a small nominal. This is regulated in the DSN Fatwa No. 117 which promises transparency of funds for both Funders (Investors) and Beneficiaries (Borrowers)[7].

According to[8]'s research report, one of the reasons for the rapid expansion of peer-to-peer fintech is that the peer-to-peer system provides excellent access to credit. Since the global financial crisis, banks and traditional lenders have been hesitant to grant debtors credit. In addition, traditional lenders such as banks often find it too costly to extend credit to small enterprises due to the small size of the loans[8]. A fintech peer-to-peer platform only connects investors and borrowers in this system[9]. This will reduce operational costs, making peer-to-peer fintech cheaper than banking. This fintech peer-to-peer (P2P) scheme will make it simpler to access loan funds, thereby facilitating the expansion of financial inclusion in Indonesia. If Indonesia has a healthy investment climate, the lack of country-specific access restrictions to this service will also increase the number of investors.

This peer-to-peer (P2P) innovation in fintech has a multiplicative effect on inclusive development[10]. According to a study by Oxford Economics, for every 1 percent increase in mobile device penetration, the gross domestic product (GDP) will increase by USD 640 million in 2020 and 10,700 formal jobs will be created. According to research published by the World Bank, an increase of 1 percent in financial inclusion system facilities can increase per capita GDP growth by 0.03 percent. If the government and society of Indonesia expand to support digital penetration in financial services, it will not only increase the country's gross domestic product, but it will also boost economic development in Indonesia by creating new jobs[1].

Deputy Commissioner of the OJK Institute, said that the portfolio of channeling funds through fintech peer to peer (P2P) schemes as of December 2021 had reached IDR 2.5 trillion. This continued to increase, only 5 months to be precise, in May 2022 the loan amount increased significantly by Rp. 6.1 trillion. An increase in the number of loan transactions which is quite large indicates that there is a considerable demand for MSMEs, requests for funds in this online loan system and has the opportunity to continue to grow as information about this business increases.

Lenders are starting to be interested in investing their funds in fintech peer to peer (P2P) schemes, due to the continued increase in lenders. From OJK data in January 2022, lenders reached 115,939 thousand people and continued to increase until the latest data for May 2022 amounted to 199,539 thousand people. Meanwhile, in terms of borrowers, it increased significantly, recorded in January 2022 of 330,154 thousand people until in 2022 there were 1,850,682 million people, an increase of 430 percent.

The community has a great deal of interest in borrowing funds, but from. The presence of fintech peer-to-peer (P2P) services is unquestionably a solution to the problems frequently encountered by the general public when using conventional banking financial services, where the process is lengthy and quite complicated. Consequently, this fintech peer-to-peer (P2P) service enables simple and expedient transactions, particularly for lending and borrowing funds. A further benefit of this peer-to-peer lending service is that it offers loans with low interest rates and no collateral, which are very profitable for borrowers and have a relatively high return rate for investors. Obviously, this is a significant advantage of peer-to-peer (P2P) fintech over the financial industry. However, this does not inherently make fintech peer-to-peer (P2P) service enables the financial industry to reach unbankable individuals[5].

Like other investment instruments, placing funds or becoming an investor/lender in this fintech peer to peer (P2P) company also has various risks, including the risk of default.[8]. The risk of default has been experienced by one of the peer to peer lending companies in Indonesia, namely the Modalku Group. The peer to peer lending company Modalku Group had defaulted loans of a total of IDR 217.13 billion in the April 2020 period, out of a total funding of IDR 13.83 trillion. This certainly affects the assessment or perception of the public, especially investors or lenders in placing their funds in these companies. Apart from the risk of default, there is also a security risk that must be faced by investors, according to the Financial Services Authority. Many illegal fintech lending companies misuse customer data by spreading the customer's personal data to many people. This affects the stigma of legal fintech peer to peer (P2P) companies in the eyes of the public [8].

In addition to the risk factor that investors must consider, return should also be a fundamental investment consideration. Return is the amount of profit that investors anticipate from the placement of their funds. This fintech peer-to-peer (P2P) enterprise is a high-yielding investment instrument[7]. However, this rate of return has decreased, and the rate of default or default has increased. According to data on fintech lending published by the OJK in May 2023, the 90-day TKB (Success Level) rate reached 94.90 percent, and the TWP (Wan Achievement Level) reached 5.10 percent.



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In light of the element of uncertainty present in the investment world, investors should pay close attention to the overall profile of the company in which they intend to invest. By examining a company's financial statements, investors can readily evaluate the performance of the investment firm of their choice. Because the financial statements contain valid and accurate numbers. However, psychological factors (behavioral motivation) of investors also play a role in influencing investment decisions. Undoubtedly, investors have limited cognitive abilities when it comes to interpreting the information they receive[7].

Consequently, investors behave irrationally based on judgments that deviate significantly from the rationality assumptions[7]. In addition to these psychological factors, investment decisions are also influenced by the outcomes of social interactions with the environment, relatives, etc., so the sociocultural environment has the potential to influence investment decisions[1]. Current technological developments and advancements unquestionably contribute to the economic growth of a country, including the financial sector. Consequently, this financial technology arose. The general public can readily access these fintech financial services through their internet-connected smartphones and laptops. This also applies to financial services involving peer-to-peer lending. The availability of facilities, infrastructure, or fintech financial service facilities should increase the public's desire to learn more about fintech and even engage in it directly[7].

However, current technological developments and advancements are not accompanied by increased financial literacy or knowledge among the Indonesian population. In 2022, according to the third National Financial Literacy Survey (SNLIK) conducted by the Financial Services Authority (OJK), the financial literacy index reached only 38.03 percent. According to the data released by the 2017 SUPAS (Inter-Census Population Survey) regarding the projected population in Indonesia in 2022, which is approximately 267 million people, only approximately 101 million people have financial knowledge or literacy, according to a study conducted by the Central Bureau of Statistics Indonesia in 2021.

As of May 2022, the total number of fintech peer to peer (P2P) companies that are registered and licensed at the Financial Services Authority is 161 companies with an accumulated number of lender or investor accounts reaching more than 654 thousand entities, only an increase of 36.22 percent from May. last year there were only 480 thousand more entities. Meanwhile, the accumulated number of borrower or borrower accounts reached a fantastic figure, namely 25.1 million more accounts, an increase of 187.87 percent compared to May last year which only reached 8.7 million accounts (OJK, 2022).

This then raises the question, why does the number of lenders or investors in fintech lending companies still tend to be very small when compared to the number of borrowers or borrowers. In fact, investors are subjects who play a role in economic development in Indonesia. The research results of the Institute for Development of Economics and Finance (INDEF) and the Indonesian Funding Fintech Association (AFPI) conducted at the end of 2022 state that fintech lending has a positive impact on economic growth of 0.45% and contributes to a Gross Domestic Product of more than IDR 60 trillion. In terms of workforce absorption, fintech lending was able to add employment to 362 thousand people, both directly and indirectly. The existence of this fintech lending also has an impact on reducing the poverty rate by 177 thousand people and reducing inequality (gin ratio) by 0.01 (INDEF and the Indonesian Fintech Association, 2022). Based on the description of the background, the authors are interested in conducting further research, regarding "The Influence of Perceived Risk, Expected Return, Behavioral Motivation and Technological Advances on Investment Decisions in Peer To Peer Fintech Syariah".

# 2. LITERATURE REVIEW

#### Investation decision

Investment decisions are interpreted as a planned policy for allocating funds to investment products, which aims to obtain returns for a specified period of time.[3] Indicators for measuring investment decision variables include considering the rate of return, considering the rate of risk, and considering the relationship between returns and the consequences of the risks encountered. According to[8], investment decision is a policy or decision taken to invest in one or more assets to gain future profits or the problem of how one should allocate funds into forms of investment that will be able to generate profits in the future. Investment decision is a decision based on certain considerations or policies that are influenced by several consideration factors as indicators, namely (1) Rate of return consideration, namely considering the existence of compensation for opportunity costs, consideration of the risk of decreased purchasing power due to inflation, and consideration of the specified time period produces returns, (2) Consideration of the rate of risk,[11]



# **Perception of Risk**

Risk is the result that deviates from expectations. Because the benefits obtained from each security are different, depending on the amount of risk borne by investors, what investors can do is minimize the risk by paying attention to the magnitude of the influence of each factor.[12]. According to[13]Perceived risk is a sacrifice that must be made by consumers to obtain these benefits. Sacrifice here means how far the consumer is willing to spend money from his wallet (related to the price offered), the perceived risk if the performance of the product/service does not match what was promised (cheated/cheated), too long to wait, lost opportunities, social and psychological risks (feeling of embarrassment when buying the product). Meanwhile according to[14]Perceived risk is an event related to uncertainty that creates negative thoughts in the minds of consumers that are detrimental. There are two elements that are always attached to investment, namely yield (return) and risk (risk), these two elements have a unidirectional relationship, the higher the investment risk, the greater the chance of return and vice versa.

To measure a person's perception of risk, below are indicators in measuring risk perception according to[5], that is:

- 1) Performance risk, which reflects uncertainty about whether the product or service will perform as expected.
- 2) Financial risk, namely the uncertainty that occurs in the state of the financial statements.
- 3) Riskphysical/safety risk, namely the potential hazard of a product or service that may pose a risk to the safety of others.
- 4) Social risk, namely the uncertainty caused to the social environment arising from purchase, use and disposal.
- 5) Psychological risk, which reflects consumer concern about the extent to which a product or service is in accordance with the way they are.
- 6) Time risk, namely uncertainty about the length of time that must be invested in buying, using, or disposing of products and services

#### **Return Expectations**

Expected Return is interpreted as the level of yield that has not been realized and the results are expected to be realized and felt by an investor in the future [15]. Expected return is the expected return expected by an investor to be realized, where the expected return is influenced by several factors including (1) The rate of return generated, related to how much there is a certain rate of return and the ratio of the expected return to the realized return, (2) Potential expectations related to positive returns as a result of profitable investments and changes in prices or percentages from time to time (3) Risk-appropriate and competitive profits related to the compatibility between profits and risks borne and the expected rate of return expected to cover risks in a investment instrument [14]. Indicators as a measure of the expected return variable include the rate of return generated, potential attractive profits, and risk-appropriate and competitive profits. Return is also interpreted as the profit obtained from companies, individuals and institutions from the investment policies made[3] According to[1], returns are divided into two, namely expected returns and actual returns. Expected return is the rate of return that investors anticipate in the future. Actual return (actual return) is the rate of return that has been obtained by investors in the past. From the above understanding, Expected return is the rate of return or profit that buyers expect to get in the future. This is, of course, in line with the main goal of investing, which is to put money into a useful investment tool so that the money can make money in the future. According to [12], indicators that can be used to measure the return variable are interest in the resulting returns, attractive and competitive benefits, profit based on risk, investment profit, investment decisions, and risks and returns.

#### **Behavioral Motivation**

Behavioral motivation is interpreted as a perspective that underlies the attitude of an investor in making investment decisions based on psychological aspects that are believed by the investor [1]. In order to make sound investment decisions, investors require information that serves as a crucial factor. Where is the investor mentality that seeks to maximize wealth by averting risks (economic factors) and making investment decisions based on investor psychology (behavioral motivations). Behavioral motivation is the act of basing investment decisions on investor psychology or trusted objects. Behavioral Motivation is formed from psychological influences believed by individuals, which are formed from several factors including (1) Self-Image/Firm-Image Coincidence related to the perspective of beliefs regarding information related to the image/reputation of an investment instrument or issuer, its position in an sector and its products and services,[11].



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# Technology advances

According to [1], the word technology means scientific methods to achieve practical goals, applied science or the overall means to provide goods necessary for the survival and comfort of human life. Etymologically, technology comes from the word technologia (Greek), "techno", which means skill and "logia", meaning knowledge. While in general, the definition of technology is the application of scientific knowledge for practical purposes in human life or in the change and manipulation of the human environment. Meanwhile, according to [16] Technology is a form of process that increases added value.

Processes that are running can use or produce certain products, where products are not separate from other existing products. While communication technology is everything related to the use of tools to process and transfer data from one device to another[17]. In this study, researchers used one of the IT acceptance factors, namely convenience as an operational dimension and added the dimension of perceived enjoyment or convenience adopted from Al-Gahtani's research.[18]that isdimensions that predict the level of comfort felt by users while using information technology systems.

### 3. METHODS

In this study, the authors use a type of research that is quantitative. Quantitative research is a research approach that primarily uses the positivism paradigm in developing knowledge such as thinking about cause and effect, reduction to variables, hypotheses and specific questions, using research strategies such as experiments and surveys that require statistical data.[16]. The use of the quantitative method is based on research objectives, through primary data sources in the form of questionnaires to analyze and identify facts, as well as answer research questions regarding the causal relationship between Perceived Risk (X1), Expected Return (X2), Behavioral Motivation (X3) and technological advances (X4) as the independent variable with Investment Decision (Y) as the dependent variable. The type of data used in this study is primary data obtained from questionnaires filled out by respondents directly. Primary data in this study will be obtained from the answers to the list of statements regarding each variable, namely perceived risk, expected return, behavioral motivation, technological progress and investment decisions which will be described in the questionnaire. While secondary data comes from books, journals, research results, practical work reports and related to the author's research object. In this study, the population that will be taken is investors or lenders who invest in peer to peer Islamic fintech domiciled in North Sumatra in 2022 as many as 430 people (https://www.ojk.go.id/id/kanal/iknb/data-dan Statistik/fintech/default.aspx). For this reason, samples taken from the population must be truly representative, so the authors used this research using the slovin formula, namely:

$$n = \frac{N}{1 + N.e^2}$$

With the following calculations:

n=  $\frac{430}{1+430.10\%2}$ n=  $\frac{430}{1+430.(0.01)}$ n=  $\frac{430}{5.3}$ n= 81.1 (rounded up to 81 people)

Based on the formula above, the sample from this study was determined as many as 81 respondents who were investors who had provided financing on a sharia peer to peer fintech platform domiciled in North Sumatra. The author's data analysis technique uses Validity and Reliability tests, as well as multiple classical assumption tests such as normality, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests.

#### 4. RESULTS AND DISCUSSION

#### a. Normality test

The purpose of doing this test is to see whether the residual values are normally distributed or not. After the authors carried out the normality test using the Kolmogorov Smirnov test, the following results were obtained:



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Table 1. Normality Test Results			
		Unstandardized	
		Residuals	
Ν		81	
Normal Parameters, b	Means	20,52	
	std. Deviation	2,935	
Most Extreme Differences	absolute	,126	
	Positive	,126	
	Negative	-,112	
Test Statistics		,126	
asymp. Sig. (2-tailed)		,200c,d	

Test distribution is Normal.

Source: Processing Results of SPSS 23.0

The results of the normality test in the tableabove using the Kolmogrov Smirnov (KS) test which shows the Asymp value. Sig (2-tailed) above > 0.05 which means the data in this study are normally distributed.

# b. Multicollinearity Test

The multicollinearity test aims to see whether or not there is a correlation between the independent variables in a multiple linear regression model. The results of the Multicollinearity test are as follows:

Table 2. Multicollinearity Test Results						
Q Sig. Collinearity Statisti						
Model			tolerance	VIF		
1 (Constant)	3,513	,020				
Perception of Risk	3,449	,010	,919	1,180		
Return Expectations	2,163	.040	,509	1,964		
Behavioral Motivation	2,489	,020	,480	2,083		
Technology advances	3,675	,010	,853	1.173		

Dependent Variables:Investment Decision (Y)

The test results in the table above show that the VIF is not more than 10 and the tolerance value is not less than 0.1. This means that there are no symptoms of multicollinearity or there is no correlation between the independent variables.

#### c. **Heteroscedasticity Test**

The heteroscedasticity test was carried out with the aim of seeing whether there is an unequal variance from the residuals of one observation to another in a regression model. The test method used is the Glejser method. This method is carried out by regressing the independent variables with their residual absolute value (e) where if the significance probability value is <0.05, there is a symptom of heteroscedasticity, and if the significance probability value is > 0.05, then there are no symptoms of heteroscedasticity. The results of the heteroscedasticity test that the researchers obtained were as follows:

	Table 3. Heteroscedasticity Test Results						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	Model B std. Error Betas						
1	(Constant)	7,023	1,999		3,513	,020	
	Perception of Risk	,218	,022	,379	3,449	,010	
	Return Expectations	,158	,073	,309	2,163	.040	
	BehavioralMotivation	,238	.096	,366	2,489	,020	
	Technology advances	,373	,102	,405	3,675	,010	

Dependent Variables:abs\_RES(2023)



Based on the results of the heteroscedasticity test in Table 3, it shows that all variables have a significant value greater than 0.05. Thus it can be said that all variables do not occur heteroscedasticity.

#### **Multiple Linear Regression Analysis**

Multiple linear regression analysis aims to determine the extent to which the magnitude of the influence between the independent variable (dependent) and the dependent variable (independent). The multiple linear regression equation in this study is stated in the following table:

	Table 4. Results of Multiple Linear Regression Analysis						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	Model	B std. Error Betas					
1	(Constant)	7,023	1,999	1	3,513	,020	
	Perception of Risk	,218	,022	,379	3,449	,010	
	Return Expectations	,158	,073	,309	2,163	.040	
	BehavioralMotivation	,238	.096	,366	2,489	,020	
	Technology advances	,373	,102	,405	3,675	,010	

Dependent Variables:abs\_RES(2023)

$$Y = \alpha + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e.$$

The interpretation of the multiple linear regression equation is:

- 1) If everything in the independent variables is considered zero (0) then the value of the Investment Decision (Y) decreases by 7.023%.
- 2) If there is an increasePerception of Risk(X1)by 1%, means that ifPerception of Riskthe better assuming other variables are fixed, the Investment Decision variable (Y) will increase by 0.218%.
- 3) If there is an increaseReturn Expectations(X2)by 1%, means that ifReturn Expectations the better assuming other variables are fixed, the Investment Decision variable (Y) will increase by 0.158%.
- 4) If there is an increaseBehavioral Motivation(X3)by 1%, means that ifBehavioral Motivationfurther improved with the assumption that other variables are constant, the Investment Decision (Y) will increase by 0.238%.
- 5) If there is an increase Technology advances (X4) by 1%, means that if Technology advances increased with the assumption that other variables are constant, the Investment Decision (Y) will increase by 0.373%.

# Simultaneous Significance Test (F Test)

The simultaneous test or f test basically aims to see whether there is an influence or notPerception of Risk(X1),Return Expectations(X2),Behavioral Motivation(X3), And Technological Advancement (X4)to Investment Decisions (Y) simultaneously or together. The results of the F test are as follows:

Table 5. F test results				
Model F			Sig.	
1	Regression residual Total	23,786	,000b	

Dependent Variable:

Investment Decision (Y)

Predictors: (Constant), Perceived Risk, Expected Return, Behavioral Motivation(X3), And Technological Advancement (X4)

Based on the table above, it can be seen that Fcount is 23.786 while Ftable is 1.32 which can be seen at  $\alpha = 0.05$  (F table obtained by the formula, df1 = number of variables – 1 and df2 = number of samples - number of variables. So, df1 =4-1=3 and df2=81- 4=77). Because the value of F count > F table (23.786 > 1.32) and the magnitude of significance < 0.10 (0.000 < 0.10), it can be concluded that Ho is rejected and Ha is accepted). This shows that in this studyPerception of Risk(X1),Return Expectations(X2),Behavioral Motivation(X3), and Technological Advancement (X4)simultaneously has a significant effect on investment decisions (Y). In addition, based on the table above, it is known that the significant probability is much



smaller than 0.05, namely 0.000 <0.05, so the regression model can be said that in this studyPerception of Risk(X1),Return Expectations(X2),Behavioral Motivation(X3), and Technological Advancement (X4)simultaneously has a significant effect on investment decisions (Y).

# Partial Significance Test (t test)

To test influencePerception of Risk(X1),Return Expectations(X2),Behavioral Motivation(X3), and Technological Advancement (X4) on Investment Decisions (Y) partially and can be seen from the results of testing each variable in table 6 below.

Table 6. T test results					
Model	Standardized Coefficients	Q	Sig.		
	Betas		-		
1 (Constant)		3,513	,020		
Perception of Risk	,379	3,449	,010		
Return Expectations	,309	2,163	.040		
BehavioralMotivation	,366	2,489	,020,		
Technology advances	,405	3,675	,010		

dependent Variable: Investment Decision (Y)

Predictors: (Constant), Perceived Risk, Expected Return, Behavioral Motivation(X3), And Technological Advancement (X4)

Based on the table above it can be seen that:

1) InfluencePerception of Risk(X1)on Investment Decisions (Y). Significant testing with decision-making criteria:

Ha accepted and Ho is rejected, if tcount > ttable or Sig. t <  $\alpha$ 

Ha rejected and Ho accepted, if tcount < ttable or Sig. t >  $\alpha$ 

This study uses a significance of 90% with  $\dot{\alpha} = 0.05$  and the formula nk (number of respondents - number of variables, 81-4 = 77) because this study uses a two-way hypothesis, the significance level used is 0.05. So, the value of the t table is 1.708. tcount is 3.449 while ttable is 1.708 and significant is 0.010, so tcount is 3.449 > ttable 1.708 and significant is 0.010 < 0.05, then Ha is accepted and Ho is rejected, which states partiallyPerception of Risk(X1)significant effect on investment decisions (Y).

2) Influence Return Expectations(X2)on Investment Decisions (Y). Significant testing with decisionmaking criteria:

Ha accepted and Ho is rejected, if tcount > ttable or Sig. t <  $\alpha$ 

Ha rejected and Ho accepted, if tcount < ttable or Sig. t >  $\alpha$ 

This study uses a significance of 90% with  $\dot{\alpha}$  = 0.05 and the formula nk (number of respondents - number of variables, 81-4 = 77) because this study uses a two-way hypothesis, the significance level used is 0.05. So, the value of the t table is 1.708. tcount is 2.163 while ttable is 1.708 and significant is 0.040, so tcount is 2.163 > ttable 1.708 and significant is 0.040 < 0.05, then Ha is accepted and Ho is rejected, which states partially Return Expectations(X2)significant effect on investment decisions (Y).

- 3) InfluenceBehavioral Motivation(X3)on Investment Decisions (Y). Significant testing with decisionmaking criteria:
  - Ha accepted and Ho is rejected, if tcount > ttable or Sig. t <  $\alpha$

Ha rejected and Ho accepted, if tcount < ttable or Sig. t >  $\alpha$ 

This study uses a significance of 90% with  $\dot{\alpha} = 0.05$  and the formula nk (number of respondents - number of variables, 81-4 = 77) because this study uses a two-way hypothesis, the significance level used is 0.05. So, the value of the t table is 1.708. tcount as big2,489while ttable is 1.708 and significant is 0.010, so tcount2,489> ttable 1.708 and significant 0.020 <0.05, then Ha is accepted and Ho is rejected, which states partially Behavioral Motivation(X3)significant effect on investment decisions (Y).

- 4) Effect of Technological Progress (X4) on Investment Decisions (Y). Significant testing with decisionmaking criteria:
  - Ha accepted and Ho is rejected, if tcount > ttable or Sig. t <  $\alpha$

Ha rejected and Ho accepted, if tcount < ttable or Sig. t >  $\alpha$ 



This study uses a significance of 90% with  $\dot{\alpha} = 0.10$  and the formula nk (number of respondents - number of variables, 81-4=77) because this study uses a two-way hypothesis, the significance level used is 0.05. So, the value of the t table is 1.708. tcount as big3,675 while ttable is 1.708 and significant is 0.010, so tcount3,675> ttable 1.708 and significant 0.010 <0.05, then Ha is accepted and Ho is rejected, which partially states that Technological Advancement (X4) has a significant effect on Investment Decisions (Y).

# **Coefficient of Determination (R2)**

The coefficient of determination states the percentage contribution of the independent variable to the dependent variable. If the value of the coefficient of determination gets closer to 1 then the percentage of contribution is considered to be stronger. The following are the results of testing the coefficient of determination as follows:

Table 7. Results of the Coefficient of Determination Test						
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson	
1	, 861a	,741	,709	,807	2.205	
Dependent Veriable, Investment Decision (V)						

Dependent Variable: Investment Decision (Y) Predictors: (Constant), Perceived Risk, Expected Return,Behavioral Motivation(X3), And Technological

Advancement (X4)

Based on the results of the determination coefficient test, the Adjusted R Square number indicates the coefficient of determination or the role of variance (independent variable in relation to the dependent variable) with an Adjusted R Square number of 0.741 indicating that 74.1% of the Investment Decision variable (Y) can be explained by the variable independent. The remaining 25.9% is explained by other factors.

# 5. CONCLUSION

The conclusions of the research are (1)Perception of Risk(X1)positive and significant effect on investment decisions (Y). This is shown from the t-test results of 3.449 with a significance of 0.010. The results of this study are in line with the research[12]which states that,Perception of Risk(X1)effect on investment decisions (Y). (2)Return Expectations(X2)positive and significant effect on investment decisions (Y). This is shown from the t-test results of 2.613 with a significance of 0.040. The results of this study are in line with the research[3]which states that, Return Expectations(X2)effect on investment decisions (Y). (3)Behavioral Motivation(X3)positive and significant effect on investment decisions (Y). This is shown from the t-test results of 2.489 with a significance of 0.020. The results of this study are supported by research [15] which states that there is a significant influence of variables Behavioral Motivation (X3) to Investment Decision (Y). (4)Technology advances(X4)positive and significant effect on investment decisions (Y). This is shown from the results of the t-test of 3.675 with a significance of 0.10. The results of this study are supported by [1] which states that there is a significant influence of variables Technology advances(X4)to Investment Decision (Y). (5) From the research results it is also known that the coefficient of determination is 0.741. This means that 74.1% Investment Decision (Y) is influenced byPerception of Risk(X1),Return Expectations(X2),Behavioral Motivation(X3), And Technological Advancement (X4)while the remaining 25.9% is influenced by other variables not examined in this study.

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