# Is Investment Intention Affected by Financial Literacy, Financial Knowledge, Motivation, and Technological Developments?

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**Abstract**
*Investor intends to put some of one's money in the stock market with the hope of future profits. This study aims to examine the development of technology as an intervention variable for financial literacy, financial knowledge, and motivation on investment intention. This research method provides a quantitative with an associative approach. Data was collected using survey, then analysed using PLS-SEM with WarpPLS. The results show that financial literacy, financial knowledge, and motivation affect students investment intention. However, motivation does not affect investment intention influence technological developments.*

**Keywords***: Investment Intention; Financial Literacy; Financial Knowledge; Motivation; Technological Development.*

## 1. Introduction

One of the objectives of investing is to live financially independently with well-managed assets (Tri Cahya & Ayu Kusuma, 2019 ). The capital market is a guaranteed place that provides promising benefits for investing (Fauzie et al., 2020). The capital market is a meeting point between parties that have excess funds (investors) and those that need funds (companies) by trading securities (Fitriyani & Anwar, 2022). Potential investors set aside their money to obtain financial benefits in the future. The motivation for investing is prospective financial profit (Ikbal & Dikdik, 2019).

Recently, young people have tended to invest (Malik, 2017). Even though young people have the impression that they tend to be extravagant and do not care about the world around them, they are now starting to think about investing, especially economics students, who already understand finance. (Onasie & Widoatmodjo, 2020). Furthermore, several Islamic universities in Indonesia have collaborated with the Indonesia Stock Exchange to facilitate student learning and investment by developing the Sharia Investment Gallery. However, data show that Singapore has 16.2 percent of its population who are stock investors. While Malaysia has 8.7 percent, Thailand has 2 percent, and Vietnam has 2.6 percent, Indonesia is only slightly higher than the Philippines, at 1.1 percent, and

Indonesia itself has 1.5 percent. It is important to note that the proportion of investors in Indonesia is only 1.5 percent of the total population, which cannot be considered encouraging (Uly, 2022).

Previous studies examined several factors that directly influence investment intentions, including financial literacy (Sari et al., 2020; Yuningsih et al., 2020; Ladamay et al., 2021), financial knowledge (Taufiqoh et al., 2019; Slamet & Thara, 2020; Fitrianingsih et al., 2021), and motivation (Cahya & Kusuma, 2019; Ernitawati & Fitralisma, 2021). Another factor which also indirectly influences investment intention is financial literacy (Remund, 2010; Faidah, 2019), financial knowledge (Tsalitsa & Rachmansyah, 2016), motivation (Isticharoh & Kardoyo, 2020), and technological development (Isticharoh & Kardoyo, 2020; Remund, 2010). Previous research on investment intention has also focused on youth and university students, including financial literacy (Hikmah & Rustam, 2020; Wandi et al., 2021), financial knowledge (Hikmah & Rustam, 2020), motivation (Savanah & Takarini, 2021), and technological development (Isticharoh & Kardoyo, 2020 ; Sari et al., 2021). However, other studies have shown that financial literacy (Fitrianingsih et al., 2021), financial knowledge (Darmawan et al., 2019 ; Fariqi, 2020), and technology development (Tandio & Widanaputra, 2016) have no influence on investment intention.

This study examines how technological development mediates the effects of financial literacy, financial knowledge, and motivation on investment intention.

## 2. Literature Review

Investment intention is determined by financial literacy (Ozdemir et al., 2021; Yuningsih et al., 2020). Investors with high financial literacy can accurately predict the amount of money they spend on financial products using a credit evaluation system that avoids financial risk (Tsalitsa & Rachmansyah, 2016).

Financial knowledge also influences investment intentions (Nurmalila et al., 2021; Patma et al., 2021). Having in-depth knowledge of investments is important to avoid financial losses in the stock market (Wibowo & Purwohandoko, 2019). However, Sivaramakrishnan et al. (2017) show that financial knowledge does not influence investment intention.

Motivation also has a positive influence on investment intention (Nisa, 2017; Suryani et al., 2022). Mastura et al. (2020) show that motivation will be stronger if someone knows the many benefits that other people get who invest so that it raises the intention to invest.

Technology development also contributes to increased investment intentions (Yusuf, 2019; Hutosoit & Ginting, 2021). In line with the development of information technology and the Internet, current capital market transactions are favoured by millennial investors with existing online trading facilities provided by company securities or brokers.

Financial literacy positively influences technology development (Winantyo, 2017) and further will effect investment intention (Cahya & Kusuma, 2019). As technology continues to develop, investors do not need to go to the capital market office. Transactions can be conducted anywhere online. In addition, potential investors need financial literacy to analyse the stocks that will be used as investments and to understand all the information about the companies that issue shares. Furthermore, investors have free access to financial report stock market trends, news, and online trading systems, so they can easily calculate returns and risks (Piraga et al., 2021; Riska & Amri, 2021).

Motivation positively influences investment intention through technological development (Cahya & Kusuma, 2019). Investment invention is the desire to put an amount of money into the stock market with the hope of obtaining future profits (Yusuf, 2019). Someone who is highly motivated to invest will make all efforts to study investment as much as possible and then demonstrate the knowledge to practice to invest and reach a favourable investment (Denziana & Febriani, 2017). Motivation can direct an investor to invest and help determine the amount of money to be invested

and investment types. Financial knowledge can help reduce losses and maximise profits through its technological roles.

H1      : Financial literacy positively influences students' investment intention.
H2      : Financial knowledge positively influences students' investment intention.
H3      : Motivation positively influences students' investment intention.
H4      : Technological development positively influences students' investment intention.
H5      : Technological development positively moderates the influence of financial literacy on students' investment intention.
H6      : Technological development positively moderates the influence of financial knowledge on students' investment intention.
H7      : Technological development positively moderates the influence of motivation on students' investment intention.

## 3. Methodology

This study is explanatory research. This study examined the influence of the hypothesised variables (Sugiyono, 2019). A total of 821 study program students from Islamic Finance Management Sayyid Ali Rahmatullah Tulungagung State Islamic University (Profile of Islamic Finance Management Study Program IAIN Tulungagung, 2016) became the population in this study.

The sample size for Structural Equation Modeling analysis was 100-200 respondents (Subagiyo, 2017). Based on the number of questionnaire items (i.e. 18 items), the sample size was 90–180 respondents. Purposive sampling was used ( Sugiyono, 2018 ).

After all the data from the respondents were collected, data analysis was performed. In this study, model testing was performed using WarpPLS 10.0, to analyse the data. After data were collected, a path equation model was created for each latent variable and its indicators. Using WarpPLS 10.0, the outer and inner structural equation modelling (SEM) models were evaluated (Sholihin & Ratmono, 2021).

Data analysis was performed using the following procedure. First, an outer model was used to test the validity and reliability of the questionnaire. A PLS validity test was conducted using convergent and discriminant validity. Convergent validity is an indicator considered valid when its loading factor value is greater than 0.7, and the AVE value is greater than 0.5 (Jannah, 2016 ). Discriminant validity can be seen from the cross-loading value between the indicator and construct. The discriminant validity criteria considered fulfilled require the following: (1) the value of the loading factor of the latent construct which predicts indicators is greater than the other constructs; (2) AVE value, that is, diagonal and parenthetical columns have a higher correlation between latent variables than the correlation between latent variables in the same column; (3) composite reliability is used to determine the reliability construct. If the value of composite reliability and Cronbach's alpha is greater than 0.70, reliability is constructed (Sholihin & Ratmono, 2021).

Second, the Inner Model (Structural Model Evaluation) is a way to show the strength of the relationship between the latent and construct variables. The coefficient of determination ($R^2$) and goodness of fit (fit test) were used to evaluate the structural model. The coefficient of determination indicates how well the independent variables explain the dependent variable. R-Square numbers are: > 0.75 (very strong), 0.6-0.750 (strong), 0.450-0.599 (moderate), 0.2-0.449 (weak), and 0.200 (very weak).

The goodness of fit (fit test) shows that the model is suitable for a real situation. If the model's matrix covariance is the same as the matrix covariance of the data, the model is a fit. The criteria For measuring the suitability of the model are listed in Tables 1 and 2.

Table 1. Criteria for Goodness of Fit

| Index | Criteria |
|---|---|
| Average Path Coefficient (APC) | P < 0.05 |
| Average R-Squared (ARS) | P < 0.05 |
| Average Adjusted R-Squared (AARS) | P < 0.05 |
| Average Variance Inflation Factor (AVIF) | acceptable if <= 5; ideally <= 3,3 |
| **Index** | **Fit Criteria** |
| Average Path Coefficient (APC) | P<0.5 |
| Average R-Squared (ARS) | P<0.5 |
| Average Variance Inflation Factor (AVIF) | Acceptable ≤ 5 Ideally ≤ 3.3 |

Source: (Sholihin & Ratmono, 2021)

The third hypothesis testing in this study consisted of testing direct and indirect effects. (a) The direct effect test is a structural model equation that has been tested with various assumptions of the previous requirements. The independent variable had a significant influence on the dependent variable if the p value was less than 0.05 (p value <0.05) (Solimun et al., 2017 ; Jogiyanto & Abdillah, 2015). (b) The indirect influence test evaluates the output of the WarpPLS results and then processed with Variance Accounted For (VAF) calculations. The VAF is a measure of how much influence the variables have in intervening with the direct influence of the model structure. The VAF calculation formula is as follows.

$$\text{VAF} = \frac{pq}{pq + r}$$

Description :
p:      the effect of x on z
q:      the effect of z on y
r:      the effect of x on y

Indirect influence on decision making based on VAF value. A VAF value >80% means full intervention, 20%-80% means partial mediation, and <20% means no mediation ( Sholihin & Ratmono, 2021 ).

## 4. Results And Discussion
### 4.1. Measurement Model (Outer Model)
Several factors, such as convergent validity, discriminant validity, and dependability, were used to evaluate the measurement models. If the loading factor is positive and greater than 0.5, the model is considered valid.

Table 2. Validity Test Results Convergent

| Variable | Indicator | Loading Factor | P Value |
|---|---|---|---|
| Financial literacy | X1.1 | 0.826 | <0.001 |
| | X1.2 | 0.669 | <0.001 |
| | X1.3 | 0.755 | <0.001 |
| | X1.4 | 0.907 | <0.001 |
| Financial knowledge | X2.1 | 0.889 | <0.001 |
| | X2.2 | 0.918 | <0.001 |
| | X2.3 | 0.897 | <0.001 |
| | X2.4 | 0.746 | <0.001 |
| | X2.5 | 0.662 | <0.001 |

| Motivation | X3.1 | 0.886 | <0.001 |
|---|---|---|---|
| | X3.2 | 0.886 | <0.001 |
| Technology development | Z1.1 | 0.798 | <0.001 |
| | Z1.2 | 0.885 | <0.001 |
| | Z1.3 | 0.798 | <0.001 |
| Investment Intention | Y1.1 | 0.872 | <0.001 |
| | Y1.2 | 0.851 | <0.001 |
| | Y1.3 | 0.767 | <0.001 |
| | Y1.4 | 0.738 | <0.001 |

Source: author's processed data, 2022

Table 3. Loading Factor Value

| Variable | Indicator | Loading Factor |
|---|---|---|
| Financial literacy | X1.1 | 0.826 |
| | X1.2 | 0.669 |
| | X1.3 | 0.755 |
| | X1.4 | 0.907 |
| Financial knowledge | X2.1 | 0.889 |
| | X2.2 | 0.918 |
| | X2.3 | 0.897 |
| | X2.4 | 0.746 |
| | X2.5 | 0.662 |
| Motivation | X3.1 | 0.886 |
| | X3.2 | 0.886 |
| Technology development | Z1.1 | 0.798 |
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| Investment Intention | Y1.1 | 0.872 |
| | Y1.2 | 0.851 |
| | Y1.3 | 0.767 |
| | Y1.4 | 0.738 |

Source: author's processed data, 2022

Tables 2 and 3 show that the *loading factor* value of each measure variable, that is, financial literacy, financial knowledge, motivation, technical development, and investment intention, was greater than 0.5. Therefore, these indicators are valid.

The results of the discriminant validity test of the research instrument are presented in Table 4. Table 4 shows the value of *cross-loading* and *square root of average* (AVE) to determine whether the questionnaire items are good for explaining or displaying latent variables.

Table 4. Cross Loading Value

| Variable | Indicator | Financial literacy | Financial knowledge | Motivation | Technology development | Investment Intention |
|---|---|---|---|---|---|---|
| Financial literacy | X1.1 | 0,826 | -0,183 | -0,025 | 0,018 | 0,024 |
| | X1.2 | 0,669 | -0,086 | -0,429 | -0,308 | 0,830 |
| | X1.3 | 0,755 | 0,222 | 0,529 | 0,231 | -0,791 |
| | X1.4 | 0,907 | 0,045 | -0,101 | 0,018 | 0,023 |
| Financial knowledge | X2.1 | -0,046 | 0,889 | -0,016 | -0,086 | -0,281 |
| | X2.2 | -0.095 | 0,918 | 0,106 | 0,026 | -0,271 |
| | X2.3 | -0,014 | 0,897 | -0,746 | -0,408 | 0,178 |
| | X2.4 | 0,026 | 0,746 | 0,165 | 0,173 | -0,198 |
| | X2.5 | 0,174 | 0,662 | 0,247 | 0,191 | 0,093 |
| Motivation | X3.1 | 0,202 | 0,273 | 0,886 | -0,173 | -0,306 |
| | X3.2 | -0,202 | -0,273 | 0,886 | 0,173 | 0,306 |
| Technology development | Z1.1 | 0,018 | -0,243 | -0,319 | 0,798 | 0,136 |
| | Z1.2 | 0,072 | 0,086 | -0,138 | 0,885 | 0,198 |
| | Z1.3 | -0,097 | 0,148 | 0,473 | 0,798 | -0,355 |
| Investment Intention | Y1.1 | -0,102 | -0,394 | 0,145 | 0,545 | 0,872 |
| | Y1.2 | 0,228 | -0,075 | 0,413 | -0,607 | 0,851 |
| | Y1.3 | -0,280 | 0,426 | -0,415 | -0,253 | 0,767 |
| | Y1.4 | 0,303 | 0,057 | -0,411 | -0,092 | 0,738 |

Source: Processed data, 2022

Table 4 shows the magnitude of the cross-loading for each indicator: financial literacy, financial knowledge, motivation, technology development, and investment intention. As with magnitude *cross-loading* from other latent variables, this shows that instrument study can be classified as a valid discriminant.

Discriminant validity tests can also be performed by comparing AVE numbers. If the AVE value is greater than 0.5, it can be said that the research measure has good discriminant validity.

Table 5. AVE values

| Variable | AVE | Criteria |
|---|---|---|
| Financial Literacy | 0.794 | 0.5 |
| Financial knowledge | 0.758 | 0.5 |
| Motivation | 0.886 | 0.5 |
| Technology Development | 0.828 | 0.5 |
| Investment Intention | 0.710 | 0.5 |

Source: Processed data, 2022

Table 5 shows that the AVE value of each variable (i.e. financial literacy, financial knowledge, motivation, technology development, and investment intention) is greater than 0.5. This implies that the variable was valid. Cronbach Alpha and Composite Reliability values are used to test reliability in PLS studies. If the Composite Reliability value is greater than 0.7, and the Cronbach's alpha value is greater than 0.6, it is considered reliable.

Table 6. Reliability Test Results

| Variable | Composite Reliability | Cronbach Alpha | Information |
|---|---|---|---|
| Financial literacy | 0.871 | 0.799 | Reliable |
| Financial knowledge | 0.866 | 0.801 | Reliable |
| Motivation | 0.880 | 0.727 | Reliable |
| Technology Development | 0.867 | 0.769 | Reliable |
| Investment Intention | 0.790 | 0.641 | Reliable |

Source: Processed data, 2022

Table 6 shows that the composite reliability of financial literacy is 0.871, financial knowledge is 0.866, motivation is 0.880, technology development is 0.867, and investment intention is 0.790. Cronbach alphas for financial literacy is 0.799, for financial knowledge is 0.801, for motivation is 0.727, for technology development is 0.769, and for investment intention is 0.64. These results show that the variable study is sufficiently reliable for further analysis, similar to the measure of the inner model.

After the outer model was tested to meet the requirements, the inner model was tested. Before acquiring the results of the hypothesis testing, the inner model was tested. Evaluating the goodness of fit model and the R-square value of the research model is part of testing the inner model. The results of the Goodness of Fit using WarpPLS are shown by the Average Path Coefficient (APC), Average R-Squared (ARS), and Average Variance Inflation Factor (AVIF).

Table 7. Average Path Coefficient Test Results, Average R-Squared (ARS), Average Adjusted R-Squared (AARS), and Average Variance Inflation Factor (AVIF)

| Parameters | Coefficient |
|---|---|
| Average Path Coefficient (APC) | 0,282; p<0,001 |
| Average R-Squared (ARS) | 0,752; p<0,001 |
| Average Adjusted R-Squared (AARS) | 0,745; p<0,001 |
| Average Variance Inflation Factor (AVIF) | 2,151; acceptable if <= 5; ideally <= 3,3 |

Source: Processed data, 2022

Table 8. Goodness of Fit Test Results

| Parameters | Coefficient |
|---|---|
| Average Path Coefficient (APC) | 0,282; p<0,001 |
| Average R-Squared (ARS) | 0,752; p<0,001 |
| Average Variance Inflation Factor (AVIF) | 2,151 |

Source: Processed data, 2022

Table 7 shows that the P-value for the Average Path Coefficient (APC) is 0.001 (0.05), which means that the direction of the path coefficient is different. ARS and AARS have a significance value of 0.001 (0.05), which means that the input of one latent variable is important in changing other latent variables. The AVIF is 2.151 (3.3) which indicates that the model is free from the multicollinearity symptom test. The results of the goodness-of-fit test on the equation model structure are presented in Table 8.

The R-squared values are listed in Table 9. The R-squared value shows the contribution between the independent and dependent variables, as shown in Table 9.

Table 9. R-Square Value

| Variable | R-Squared |
|---|---|
| Technology development | 0.662 |
| Investment Intention | 0.841 |

Source: Processed data, 2022

Table 9 shows that the R-squared value for the variable representing the development of technology was 0.662. This shows that financial literacy, financial knowledge, and motivation account for 66.2% of the technological development factors, while other variables that contribute 33.8% are outside the scope of this study. Because the R-Square value for investment intention is 0.841, it can be concluded that financial literacy, financial knowledge, motivation, and technological development contribute 84.1% of the variance in this variable, while the remaining 15.9. % caused by other factors. this investigation

**4.2. Hypothesis Test Results**
Hypothesis testing in this study used WarpPLS which includes direct and indirect significance testing.
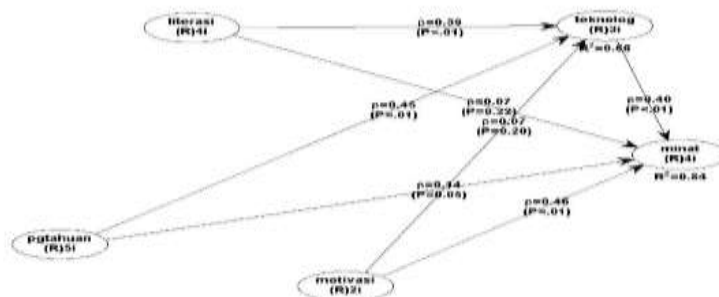
**Figure 1: Path Coefficient Diagram**



Figure 1 shows the coefficient diagram path presented in Table 10.

Table 10. Direct Influence Test Results

| No | Influence between Variable | β | P Value | Information |
|----|---------------------------|------|---------|-------------|
| 1 | Financial Literacy → Investment Intention | 0.068 | 0.218 | Not Significant |
| 2 | Financial knowledge → Investment Intention | 0.140 | 0.054 | Not Significant |
| 3 | Motivation → Investment Intention | 0.460 | <0.01 | Significant |
| 4 | Technological Developments → Investment Intention | 0.400 | <0.01 | Significant |

Source: author's processed data, 2022

Table 10 shows the magnitude of the influence of the variables and their levels of significance. The basis for decision making for each hypothesis is as follows. Financial literacy has no significant effect on investment intention because the p-values are 0.218 and > 0.001, respectively. Financial knowledge had no significant effect on investment intention, because the p-values were 0.054 and >0.001, respectively. Motivation has a significant influence on investment intention, with a p-value of <0.001. Technological development has a significant effect on investment intention, with a p-value of <0.01.

Subsequent evaluation of the WarpPLS results allowed us to understand these indirect effects. VAR (Variability After Adjustment) calculations can be used to obtain an average image. The explanatory factor of variance (VAF) measures the magnitude of a variable's impact by removing systematic bias from the structural assumptions of the model. A VAF score of 80% or higher indicates full intervention, a score of 20% to 80% indicates partial intervention, and a score of 20% or lower indicates that no intervention is required. VAF values were calculated using the following equation.

$$VAF = \frac{pq}{pq + r}$$

Description :
p: the effect of x on z
q: the effect of z on y
r: the effect of x on y

Table 11. Indirect Influence Test Results

| No | Track | VAF | Information |
|----|-------|------|-------------|
| 5 | Financial Literacy → Technological developments → Investment Intention | 69.3% | Partial |
| 6 | Financial knowledge → Technological Developments → Investment Intention | 56.4% | Partial |
| 7 | Motivation → Technological Developments → Investment Intention | 17.6% | None |

Source: Processed data (2022)

Technological development partially mediates the effect of financial literacy on investment motivation. Calculations using structural models show that the development of technology affects financial literacy and its impact on investment intention by 69.3 percent. Technological development partially mediates the effect of financial knowledge on investment intentions. The VAF calculation result was 56.4%. Technological development does not mediate the effect of motivation on investment intention, because the VAF value is 17.6%.

### 4.3. Discussion
*The Effect of Financial Literacy on Investment Intention*
The findings show that financial literacy has no significant effect on investment intention. This is because the knowledge and perspectives of the respondents about stocks have not been fully formed, so they require training and outreach. Additionally, financial literacy is not the only factor considered when someone wants to invest. This is because financial literacy affects all long-term financial decisions, from management to how they spend their money. Previous research shows that a higher level of financial literacy leads to better investment intention (Winantyo, 2017 ; Baker et al., 2019). However, this research is not in line with other findings which show that financial literacy has a positive and significant effect on investment intention (Sivaramakrishnan et al., 2017 ; Berliana et al., 2022)

*The Influence of Financial knowledge toward Investment Intention*
The findings show that financial knowledge has no significant influence on investment intentions. This shows that student investment intentions have not increased, although they have gained more knowledge. This may be because they have limited funding. This study supports previous research showing that students' financial knowledge has no significant influence on investment intention (Wibowo & Purwohandoko, 2019). However findings This contrary with (Wibowo & Purwohandoko , 2019), which reveal that financial knowledge significant positive effect in a manner significant to student intention in invest in galleries investment college high (Manik & Usman, 2021; Anfas et al., 2022)

*The Influence of Motivation toward Investment Intention*
Motivation significantly influences students' investment intentions. In general, individuals tend to engage in behaviour when they are attracted to something, which naturally motivates them to pursue it. In the business world, there are many possible factors that motivate individuals to become involved in activities, one of which is the advantage offered. In addition to returns and profits, another important aspect that needs to be considered in business and investment activities is the inhibiting factor for potential problems and risks that may arise in the future. Risk factors are important considerations for potential investors when determining whether to invest in the capital market.

This study is in line with previous research showing that motivation affects students' investment intention (Fariqi, 2020; Suprihati & Pradanawati, 2020). Further, it has been confirmed that motivating investors about profit and stability finances have a significant impact on their investment intentions (Situmorang et al., 2014). Investment intention shows the probability that the individual will take action that can reach the desire for investment, such as following training and seminars investment, receiving bid investment positively, and finally investing. An individual who invests must have intrinsic motivation which is reflected in individual actions and attitudes.

*The Influence of Technological Developments on Investment Intention*
Technological development has a significant impact on investment intentions. This aligns with the finding that technology development in the field of accessibility information can increase investment intention of potential investors (Jaiyeoba & Haron, 2016 ). Besides that is , technology

developmenthas make it easy deep investor transactions invest so that increase decision investment (Muklis, 2016; Abni & Trisnawati, 2022)

Current technological advances have made it easier for potential investors to obtain information on market development and facilitate transactions in the capital market through the availability of online trading features. This makes it easier for investors to transact and attract potential investors.

Through the use of Internet technology (*online trading*), communication media between investors and brokers is facilitated. Every order can be executed in seconds or minutes. Execution speed is very important because of the fast movement of stocks.

*The Effect of Financial Literacy on Investment Intention through Technological Developments*

**Figure 2: The Effect of Financial Literacy on Investment Intention through Technological Development**
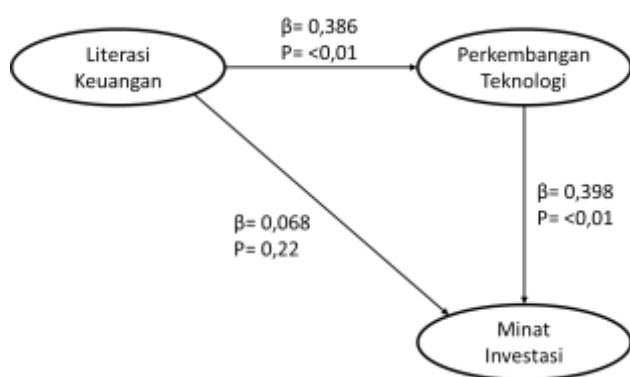


Financial literacy has a significant impact on investment intention through technological developments. The findings of this study indicate that as financial literacy increases with advances in technology, an increasing number of college students are eager to invest on their own.

Students with a strong understanding of financial management are more inclined to invest, whereas those with basic financial literacy are less likely to do so. The role of higher education institutions, especially lecturers, is important in instilling financial literacy among students. This must be done so that students have an accurate understanding of financial literacy, and the need to start early to build wealth.

Students' financial literacy obtained at the time of their lectures paved the way for better investment management in the future. Increasing financial literacy can increase students' intention to invest because of the ease of obtaining financially literate information.

The findings of this study support (Winantyo's, 2017) results that students' intention to invest intervened from technology development to financial literacy. Investment intention among students is strongly influenced by modern technological development (Jaiyeoba & Haron, 2016). With advances in information technology and the Internet, retail investors have become more interested in trading in financial markets because of the availability of online trading platforms (Tandio & Widanaputra, 2016).

*The Influence of Financial Knowledge toward Investment Intention through Technology Development*

**Figure 3: The Effect of Financial knowledge on Investment Intention Through Technological Development**
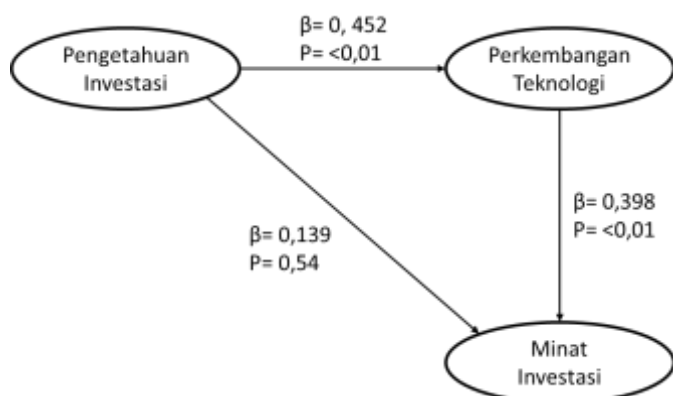


Financial knowledge influences technological development and investment intention. Technological development partially mediates financial knowledge and intention. Investor intention is often fuelled by technology development, which, in turn, requires more financial knowledge.

This strengthens the finding of (Piraga et al. 2021) that student investment intention is influenced by knowledge and motivation. On the other hand, (Tandio and Widanaputra , 2016) disclose that although technology development does not have a significant effect on the intention to invest, it can reduce the impact on investors' knowledge of investment intention. This is related to the convenience of individual investors in obtaining financial market data so that they can accurately set more expectations and associated risks and benefits.

Rapid progress in modern technology is significant to the national growth economy, making the business world the most efficient and effective in chasing the biggest profit. Stock and bond markets are important economic indicators in any country where thousands of companies trade shares on the secondary market (also known as a stock exchange or stock exchange). Investors, brokers, traders, and institutions related to fast market transaction lightning can analyse data and retrieve decisions quickly.

Knowledge is power, which is very important when starting anything, including investing. Before making any investment, one should have as much knowledge about the subject as possible. Knowledgeable investors are better able to profit from their businesses and avoid potential losses that may be encountered. When students acquire more financial knowledge, their investment intentions grow naturally. Students' intention to invest appears along with the ease with which they obtain information about the stock market as a result of technological progress.

*The Influence of Motivation toward Investment intention through Technology Development*

**Figure 4: Influence Motivation To Investment intention Through Technology development**
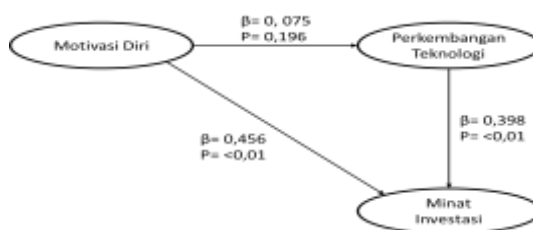
Motivation has no effect on technological development. This shows that technology development does not directly influence investors' motivation to invest.

Investors with and without knowledge of technology development will continue to be interested in making investments because everyone has the encouragement to do so already embedded in themselves.

This study strengthens the finding that technology development has no significant effect on investment intention (Tandio & Widanaputra, 2016). In addition, technology development does not moderate the effect of motivation on investment intentions. This is because investors make investment decisions based on internal factors. Even if potential investors are aware of the technological advances that can be used in their investments, they will not do so if they do not have the necessary intention or drive (Lestari, 2018).

If someone has a strong desire to invest, they demonstrate it through concrete actions with enthusiasm. The intention to invest comes entirely from an internal perspective. Even though you are aware of the technological advances used today, without adequate motivation, it is impossible to invest. In contrast to those who have investment motivation but do not know the underlying technology, they will continue to invest and study technological developments.

## 5. Conclusion

Directly, motivation and technological development affect investment intention. However, financial literacy and knowledge do not directly affect investment intentions. Financial literacy and knowledge indirectly affect investment intentions, with technological development as a mediating variable. However, motivation has no effect on investment interest through technological developments. If someone has a strong desire to invest, they act and express enthusiasm for the venture. Further research can include the effect of social media content on students' investment intentions.

## Author Contribution Statement

Rokhmat Subagiyo: Conceptualization, writing, methodology, original draf preparation, Editing.
Ahmad Budiman: Writing, data curation, visualitation
Putri Domastuti: original draf preparation, software, validation.
Jusuf Bachtiar: Translator, Reviewing
Ahmad Ajib Ridlwan: Reviewing, supervision.

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