

# **The Influence Of Internet Usage, Financial Behaviour, And Financial Literacy On Investment Decisions**

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## **Abstract**

This research aims to analyze the influence of internet use, financial behavior and financial literacy on investment decisions among students at the Faculty of Economics, Jakarta State University. This research is based on the increasing use of the internet as a source of investment information and the importance of financial literacy in making investment decisions. Despite the increasing accessibility of financial information, the degree of financial literacy in Indonesia remains insufficient. This can lead to a range of financial issues, including an influx of inexperienced young investors who lack a comprehensive understanding of investment products and financial planning. The objective of this study is to analyse the impact of Internet usage, financial behaviour, and financial literacy on investment decision-making. The research results show that internet use, financial behavior and financial literacy have an influence on investment decisions. This research makes an important contribution in understanding the factors that influence investment decisions among students, as well as how the internet can be used as a tool to increase financial literacy and make better investment decisions. The recommendation from this research is to increase education regarding financial literacy and the use of the internet as a source of accurate investment information. Educational institutions and digital investment service providers need to work together to provide educational resources that can help students improve their skills and knowledge about investing.

**Keywords:** Internet Use; Financial Behaviour; Financial Literacy; Investment Decision Making; Young Investors.

## 1. Introduction

The digital era has brought major changes in various aspects of human life, especially in the development of science, technological advances, the growth of innovation, and a high level of competitiveness. (Puspitarini & Panjaitan, 2019). In people's lives in the digital era, social media and the internet have an increasingly important role. (Ahmad, 2023). Along with the increasing use of internet technology in Indonesia, the *fintech* industry in Indonesia is experiencing rapid development. (Hadad, 2023). The development of financial technology (*fintech*) facilitates accessibility to innovative financial services and products such as payments, investments, and loans through smartphones or digital platforms. (Moehadi et al., 2023). The ease of access and innovation provided by *fintech* on digital *platforms* provides many benefits to the community. People can manage their finances more efficiently and effectively. In addition, *fintech* also opens access to finance for those who previously did not have access to traditional financial services. Now, people can reach a variety of investment products through various *online platforms*, such as *online* mutual funds, *peer-to-peer lending*, securities with smartphone user-based applications. These products offer investment diversification and easy access to information.

In addition to providing easy access and innovation provided by investment-related *fintech*, it also has another impact, namely increasing public losses due to illegal investment, based on the Financial Services Authority (OJK) report, the total public losses due to illegal investment in Indonesia reached Rp120.79 trillion in 2022. During the January-October 2023 period, the Commodity Futures Trading Supervisory Agency (Bappebti) blocked 1,726 illicit investment websites claiming to be involved in commodity futures trading (PBK) (Muhamad, 2023). Based on Databoks data from Bappebti, the majority of the blacklisted companies are illegal futures brokers, namely 1,143 websites.

One of the causes of public losses due to illegal investments and the number of people caught in illegal investment sites is the increase in new investors from young people who still lack a thorough understanding of investment products and financial planning. The *Financial Fitness Index 2022* survey conducted by OCBC NISP in collaboration with NielsenIQ Indonesia revealed that the majority of young respondents, 78%, do not understand how investment products work and the associated risks. (OCBC NISP, 2022). The survey involved 1,335 respondents aged 25-35 from 5 regions in Indonesia.

**Table 1.1 *Financial Fitness Index* Score in 2021 and 2022**

Year	2021	2022
Financial Fitness Index Score	37,72	40,06

Source: OCBC NISP, (2022)

Based on table 1.1, the OCBC NISP *Financial Fitness Index 2022* shows that Financial Indonesia's score rose to 40.06 in 2022, when compared to the previous year's 37.72. There is an increase in score of 2.34 points compared to 2021. There are 12 main indicators and 10 additional indicators that contribute to the total score. The following table shows the main indicators of the *financial fitness index* in 2022:

**Table 1.2 OCBC NISP *Financial Fitness Index 2022* Key Indicators**

Key Indicators	Average score
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Financial Basic	74,01
Financial Safety	41,02
Financial Growth	24,83
Financial Freedom	7

Source: OCBC NISP, (2022)

Furthermore, there are additional indicators, namely 5 indicators of good habits, namely knowing the tax scheme (12%), ensuring that finances are taken care of in the event of death (20%), using money in accordance with the budget (8%), conducting financial checks every year (8%), and seeking advice from financial experts and doing independent research for investments (2%) and 5 indicators of bad habits, namely spending money to follow friends' lifestyles (76%), often paying the minimum bill for credit cards (58%), often borrowing money from friends/family (35%), spending more than income (7%), doing excessive speculation to get a quick profit (18%). These ten indicators contribute to the *financial fitness index* score as adders and subtractors. According to OCBC's financial fitness index, the financial fitness of young Indonesians in 2022 will be at 40.06, up from 37.72 in 2021. (OCBC NISP, 2022). According to the OCBC *financial fitness index*, this is well below the current financial fitness of Singaporean youth, which stands at 62.

In addition, investors who utilise digital investment platforms may face several obstacles during the investment process. This also adversely affects the sub-optimal investment activities for investors. The main obstacle for digital investors, as shown by the survey findings from the Centre for Economic and Legal Studies (CELIOS) and Pluang, is the lack of a reliable internet connection (Annur, 2022). The proportion is 26%. Another challenge arises from the time it takes to understand the mechanics of online investment, specifically at 21.1%. Furthermore, most respondents, specifically 17.4%, expressed difficulty in distinguishing between legitimate and illicit investments. In addition, a large proportion of respondents, at 15.2%, expressed uncertainty in choosing the app that best suits their needs. Furthermore, a large proportion of respondents, up to 9%, identified registration or enrolment procedures as a barrier, citing the amount of data and time required. In addition, 8.4% of participants stated that their smartphone's memory capacity was limited. Furthermore, only 1.5% of participants indicated that there were alternative barriers. In contrast, 1.4% of participants stated that they still require face-to-face transactions. The survey revealed several benefits of utilising digital platforms, as reported by the respondents. These include improved portfolio/asset monitoring (23%), comprehensive features (22%), cost savings (21%), better investment planning (20%), and increased profit opportunities (14%). The survey was conducted among a sample of 3,530 people randomly selected between June 20 and June 28, 2022. The majority of participants were from Java and Bali with an age range of 24-35 years. The main occupation among them was private work.

Despite easier access to information, the level of financial literacy in Indonesia is still low. The Financial Services Authority (OJK) noted that based on the results of the National Survey of Financial Literacy and Inclusion (SNLIK) in 2022, the financial literacy index of the Indonesian people was 49.68 per cent. SNLIK 2022 was conducted from July to September 2022 in 34 provinces covering 76 cities/districts with a total of 14,634 respondents aged

between 15 and 79 years. SNLIK 2022 uses methods, parameters and indicators, namely the financial literacy index which consists of knowledge, skills, beliefs, attitudes and behaviour parameters. (Ojk, 2022). It can be seen from the 2019 and 2022 financial literacy index comparison table below:

**Table 1.3 Comparison of Literacy Index in 2019 and 2022**

<b>Year</b>	<b>Financial Literacy Index (%)</b>
2019	38,03%
2022	49,68%

Source: Financial Services Authority (OJK), (2022)

Based on table 1.3 in 2022 the financial literacy index is still below 50 per cent, this means that there are still many people who have little adequate knowledge and skills to manage finances and invest. Based on SNLIK data in 2022, the financial literacy index in urban areas is higher than in rural areas.

Research conducted by (Siregar & Anggraeni, 2022). shows a positive and significant relationship between financial behaviour and investment decision making. This means that individuals with better financial behaviour tend to be more interested in making investment decisions. However, research conducted by Wahyuni et al., (2022) did not find evidence showing that financial behaviour has an influence on investment decisions. This means that good financial behaviour does not necessarily facilitate individuals in making investment decisions.

Internet usage plays a role in the relationship between financial literacy and financial inclusion through the utilisation of digital financial products (Shen et al., 2018). In other words, the internet has an indirect influence on financial inclusion by encouraging the adoption of digital financial products. Research conducted by (Sabri & Aw, 2019) provides evidence that using the internet for financial management can improve one's financial literacy. Although the internet is known for its barrier-free exchange of information, which could potentially result in the spread of false or misleading information, the positive impact of the internet seems to outweigh the negative impact. This phenomenon can be explained by the gradual shift of financial institutions, including banks, stockbrokers and financial media, to internet platforms in recent decades.

Financial literacy encompasses a person's understanding, ability, and confidence in making the most profitable financial decisions.(Otoritas Jasa Keuangan, 2017). Research by (Nuramelia & Rahayu, 2023) shows that financial literacy has a positive and significant influence on investment decisions made by individuals. This shows the impact that a person will experience if they have limited financial understanding. Under these conditions, there is a possibility of experiencing losses or inflation which can result in a decrease in individual economic conditions. Conversely, if individuals have a strong understanding, this will have an

impact on their thinking and lead to optimal investment decisions. This research is related to research conducted by (Kulintang & Putri, 2024). There is a positive correlation between a person's level of financial literacy and their likelihood to choose to invest in the capital market. This means that the higher a person's knowledge about finance, the more likely they are to make investment decisions.

## **2. Literature Review**

### **2.1 Attribution Theory**

Attribution theory, originally formulated by Fritz Heider in 1958 and later expanded by Harold Kelley between 1972 and 1973, explores the process of assigning causality to human behaviour. This theory explains how individuals form conclusions about the underlying factors that drive them to engage in actions or make decisions and perform tasks in certain ways. (Robbins & Judge, 2017). This theory has similarities with utility theory, as it states that individuals can mitigate risk when making investment decisions (Mahastanti, 2011). Attribution theory states that individuals, when witnessing someone's actions, engage in the process of distinguishing whether the behaviour is influenced by internal or external factors. (Robbins & Judge, 2017). Attribution theory provides a useful framework for understanding how investors analyse and rationalise their actions in the context of investment decision-making. By understanding this theory, researchers and practitioners can develop more effective interventions to improve financial literacy and investment decision-making.

### **2.2 Theory of Planned Behaviour**

This theory is an extension of the *Reasoned Action Theory* proposed by Ajzen in (1991). The theory of planned behaviour is expanded by including the idea of perceived behavioural control. This theory argues that attitudes are determined by individual assessments of the positive and negative aspects of an action, subjective norms are influenced by social factors that influence behaviour, and perceived behavioural control is related to individuals' evaluation of their ability to regulate their behaviour. (Ajzen, 2020).

The theory of planned behaviour is based on the premise that humans are rational beings who use information methodically (Luky, 2016). Thoughtful individuals strategise their actions before making decisions regarding whether or not to engage in certain behaviours. If a person has a good view of investing in stocks, gets encouragement from his social environment, and considers the process easy because there are no barriers, then his tendency to invest in stocks will increase. (Seni & Ratnadi, 2017). Internet use, *financial behaviour*, and *financial literacy* are interrelated and have an influence on individual intentions and decisions to invest through strengthening positive attitudes, increasing subjective norms, and reducing perceived barriers. The TPB provides a comprehensive framework for understanding how these factors interact and influence investment behaviour.

### **2.3 Use of Internet**

The internet is currently the main source for individuals to gain knowledge on various issues (Fisher et al., 2015). According to (Carlsson et al., 2017), the increasing activity of the internet brings significant and rapid changes in consumers' financial management practices. The internet is often regarded as a complete and constantly updated information centre, making

it an ideal source for financial information (Chan & Fang, 2007). Compared to traditional media, the internet leads the way in terms of acquiring financial information and expertise. This is not only because of the sheer number of media available, but also because of its ability to facilitate two-way communication. Online learning has proven to be a successful tool for improving financial literacy (Wolla, 2017).

## **2.4 Financial Behaviour**

Financial behaviour refers to an individual's capacity to effectively handle several aspects of daily financial resource management, such as planning, budgeting, auditing, managing, organising, searching, and saving. (Arianti, 2020). As stated by (Romadhani & Handini, 2023). Financial behaviour refers to the actions and decisions made by a person with respect to how they handle and utilise financial resources to support the investment decision-making process. A person's financial behaviour is evident in their approach to financial planning, which includes setting financial goals, budgeting, and making appropriate financial decisions by utilising the offerings of financial services companies (Yuliani, 2019).

## **2.5 Financial Literacy**

Financial literacy relates to the capacity of individuals to analyse and handle their personal finances effectively. (Yusnita et al., 2022). Financial literacy refers to the capacity to make informed and effective decisions about money or financial resources, and it determines whether individuals manage their money in an appropriate manner (Seraj et al., 2022). Financial literacy has been widely studied by researchers from various perspectives, and many studies have been conducted to analyse the financial literacy of investors. Financial literacy includes an individual's understanding of concepts and their ability to use those concepts successfully when making investment decisions. Investing money entails a certain degree of uncertainty, and having financial literacy allows individuals to make safe investment decisions. Having a solid understanding of financial concepts and principles can help individuals avoid significant financial losses in volatile and unpredictable markets, and provide solutions to various financial challenges. Improved financial literacy increases the propensity of individuals to manage their resources effectively.

## **2.6 Investment Decision**

Investment decision-making is concerned with the skillful management of difficult circumstances encountered during the investment process (Seraj et al., 2022). During this cognitive process, individuals select the most appropriate option from a range of possible circumstances. Therefore, an important aspect of making investment choices involves carefully selecting the most appropriate form of investment. When making investment choices, it is important to consider factors such as rate of return, risk tolerance, and different market conditions. Behavioural finance explains how investors react to different types of market information. Not all investors exhibit rational decision-making, and at times, they exhibit biased tendencies in their financial choices. The significance of investor behaviour in financial markets is shown by its correlation with several market anomalies (Yusnita et al., 2022).

## **3. Materials and Method**

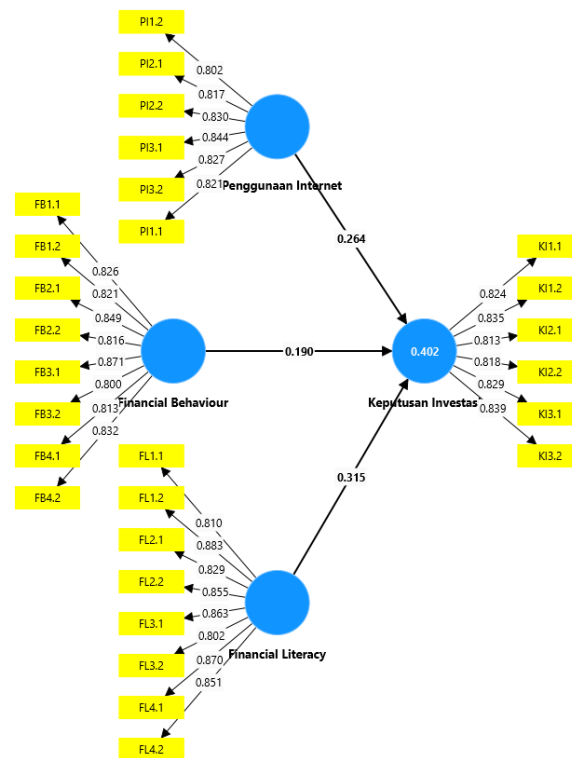
This research was conducted in May-June 2024 and aims to examine "The Effect of Internet Use, Financial Behaviour, and Financial Literacy on Investment Decision Making". This research data is obtained from questionnaire answers collected directly from respondents who are primary data. The object of this research is investment decision which consists of three aspects, namely internet usage, financial behaviour and financial literacy. The subjects of this study were students of the Faculty of Economics, State University of Jakarta, users of digital investment service providers and products such as seeds, ajaib, pluang, and so on with an age range of 20 - 35 years.

### **3.1 Design Study**

This research uses a quantitative approach with a type of survey research using a questionnaire. The quantitative approach is the measurement of objective quantitative and statistical data through scientific calculations derived from a sample of people or residents who are asked to answer a number of questions on a survey to determine the frequency and percentage of their responses. (Creswell, 2010). The quantitative approach upholds objectivity in every step. The data collected and analysed are free from researcher bias, resulting in accurate and consistent findings. The research results obtained are expected to be applied to a wider population, not only limited to the sample studied. Thus, this research provides a comprehensive and in-depth understanding of the phenomenon under study, beyond the limits of the study conducted. The quantitative approach is a research strategy based on the collection and analysis of numerical data. The goal is to obtain objective research results that can be generalised to a wider population.

### **3.2 Data Analysis**

This research utilises a quantitative approach to reveal the cause-and-effect relationship between variables, utilising data in the form of numbers. The data was processed and analysed with SmartPLS software using the Partial Least Squares (PLS) method. Testing was carried out using the SEM-PLS method, following the steps described by Musyaffi et al. Two important model analyses were carried out, namely the Outer Model and Inner Model.



**Figure 1. Research Model**

## 4. Result

As part of the Outer Model analysis, tests are conducted to ensure continuity between latent variables and the observed variables that compose them. (Musyaffi et al., 2022) stated that in testing the Inner Model, his research mainly examines the relationship between the latent variables of the model. In addition, this research is useful for observing the effect of exogenous variables on endogenous variables.

### 4.1 Measurement Model Test (*Outer Model*)

According to (Musyaffi et al., 2022) *Outer Model* testing aims to verify the relationship between latent variables and the observed variables that form them. This is important to ensure that the model built has a valid and coherent structure. The analysis that needs to be done in *Outer Model* Testing includes:

#### 4.1.1 Convergent Validity Test

As stated by Musyaffi et al., the indicators used in this study can only be considered valid if they meet the standardised loading criteria of more than 0.7. However, when the items used are new, the loading value can be maintained at least 0.5. The *convergent validity* analysis in this study was conducted using the PLS SEM model.

To ascertain the amount of variance that can be explained by the indicator on the latent variable it forms, it is important to read the Average Variance Extracted (AVE) value. of the Internet Usage (X1), Financial Behaviour (X2), Financial Literacy (X3), and Investment Decision (Y) variables show a value of more than 0.7. The following are the results of outer loading:



**Table 1.** *Outer loading* results after calculation

<b>Indicators</b>	<b><i>Financial Behaviour (X2)</i></b>	<b><i>Financial Literacy (X3)</i></b>	<b>Investment Decision (Y)</b>	<b>Internet Usage (X1)</b>
<b>FB1.1</b>	0.826			
<b>FB1.2</b>	0.821			
<b>FB2.1</b>	0.849			
<b>FB2.2</b>	0.816			
<b>FB3.1</b>	0.871			
<b>FB3.2</b>	0.800			
<b>FB4.1</b>	0.813			
<b>FB4.2</b>	0.832			
<b>FL1.1</b>		0.810		
<b>FL1.2</b>		0.883		
<b>FL2.1</b>		0.829		
<b>FL2.2</b>		0.855		
<b>FL3.1</b>		0.863		
<b>FL3.2</b>		0.802		
<b>FL4.1</b>		0.870		
<b>FL4.2</b>		0.851		
<b>KI1.1</b>			0.824	
<b>KI1.2</b>			0.835	
<b>KI2.1</b>			0.813	
<b>KI2.2</b>			0.818	
<b>KI3.1</b>			0.829	
<b>KI3.2</b>			0.839	
<b>PI1.2</b>				0.802
<b>PI2.1</b>				0.817
<b>PI2.2</b>				0.830

Indicators	<i>Financial Behaviour (X2)</i>	<i>Financial Literacy (X3)</i>	Investment Decision (Y)	Internet Usage (X1)
PI3.1				0.844
PI3.2				0.827
PI1.1				0.821

Source: Data Processed by Researchers, (2024)

Based on table 1, it shows the outer loading results for all indicators. Furthermore, researchers also calculated the Average Variance Extracted (AVE) value which is shown in table 2 below:

**Table 2.** *Outer loading* results after calculation

Variables	<i>Average variance extracted (AVE)</i>
Investment Decision (Y)	0.683
Internet usage (X1)	0.678
<i>Financial Behaviour (X2)</i>	0.687
<i>Financial Literacy (X3)</i>	0.716

Source: Data Processed by Researchers, (2024)

Table 2 above is the *Average Variance Extracted (AVE)* result which shows a value of more than 0.5. From the results of *outer loading* and *Average Variance Extracted (AVE)* it can be concluded that the convergent validity in this study as a whole has been fulfilled and is considered valid.

#### 4.1.2 Discriminant Validity Test

By using the Cross Loading table, discriminant validity can be found to determine the research indicators. According to (Musyaffi et al., 2022), an indicator is said to be discriminantly valid when the largest loading value is shown on the latent variable of interest compared to other latent variables in the research model. To ascertain the amount of variance that can be explained by the indicator on the latent variable it forms, it is important to read the Average Variance Extracted (AVE) value. An AVE value greater than 0.5 indicates that all indicators that make up the latent variable are better able to explain the value in the latent variable than the error. The following are the results of discriminant validity cross loadings:

**Table 3.** Discriminant Validity Results Cross Loadings

Indicators	<i>Financial Behaviour (X2)</i>	<i>Financial Literacy (X3)</i>	Investment Decision (Y)	Internet Usage (X1)
FB1.1	0.826	0.377	0.381	0.396
FB1.2	0.821	0.435	0.457	0.415
FB2.1	0.849	0.399	0.445	0.452
FB2.2	0.816	0.428	0.406	0.454

Indicators	<i>Financial Behaviour (X2)</i>	<i>Financial Literacy (X3)</i>	<i>Investment Decision (Y)</i>	<i>Internet Usage (X1)</i>
<b>FB3.1</b>	0.871	0.496	0.392	0.487
<b>FB3.2</b>	0.800	0.475	0.347	0.434
<b>FB4.1</b>	0.813	0.443	0.393	0.468
<b>FB4.2</b>	0.832	0.339	0.402	0.368
<b>FL1.1</b>	0.428	0.810	0.401	0.335
<b>FL1.2</b>	0.438	0.883	0.513	0.402
<b>FL2.1</b>	0.463	0.829	0.461	0.442
<b>FL2.2</b>	0.463	0.855	0.471	0.429
<b>FL3.1</b>	0.361	0.863	0.380	0.307
<b>FL3.2</b>	0.380	0.802	0.479	0.524
<b>FL4.1</b>	0.375	0.870	0.407	0.419
<b>FL4.2</b>	0.514	0.851	0.527	0.501
<b>KI1.1</b>	0.440	0.441	0.824	0.455
<b>KI1.2</b>	0.392	0.507	0.835	0.459
<b>KI2.1</b>	0.313	0.438	0.813	0.465
<b>KI2.2</b>	0.473	0.435	0.818	0.446
<b>KI3.1</b>	0.387	0.367	0.829	0.335
<b>KI3.2</b>	0.412	0.495	0.839	0.410
<b>PI1.2</b>	0.445	0.438	0.441	0.802
<b>PI2.1</b>	0.410	0.394	0.413	0.817
<b>PI2.2</b>	0.423	0.366	0.383	0.830
<b>PI3.1</b>	0.409	0.492	0.461	0.844
<b>PI3.2</b>	0.416	0.481	0.447	0.827
<b>PI1.1</b>	0.485	0.298	0.423	0.821

Source: Data Processed by Researchers, (2024)

Based on table 3, it can be seen that the correlation value of the indicator to its own latent variable is higher than the correlation to other latent variables. This indicates that the discriminant validity in this study as a whole has been met.

#### 4.1.3 Reliability Test

In this study, the reliability test aims to determine how consistent the respondents' answers to each question are over time, because a reliable questionnaire will provide reliable and accurate information. Composite reliability and Cronbach's Alpha each have a minimum standard of 0.6 for both. So that the data generated can also be considered reliable, latent variables that are able to meet this value are considered to have good reliability. *Composite Reliability* values for all variables are also above 0.7, indicating that the measured constructs have high reliability. The AVE value is used to provide an indication of reliability, the results show that for all variables it is greater than 0.5 which indicates that the indicators

in the construct make a significant and reliable contribution to the construct. The following are the results of *construct reliability and validity*:

**Table 4.** Construct Reliability and Validity

Variables	<i>Cronbach's alpha</i>	<i>Composite reliability</i>	<i>Average variance extracted (AVE)</i>
Investment Decision (Y)	0.907	0.928	0.683
Internet usage (X1)	0.905	0.927	0.678
Financial Behaviour (X2)	0.935	0.946	0.687
Financial Literacy (X3)	0.943	0.953	0.716

Source: Data Processed by Researchers, (2024)

Based on table 4, *the* test results show that the Internet Usage (X1), Financial Behaviour (X2), Financial Literacy (X3), and Investment Decision (Y) variables have *Cronbach's alpha* and *composite reliability* values  $\geq 0.7$ , and AVE values  $\geq 0.5$ . Therefore, it can be concluded that all variables fulfil the reliability requirements.

#### 4.1.4 Variance Inflation Factor (VIF) Test

To detect the presence of multicollinearity in the model, multicollinearity occurs when the independent variables (predictors) in the model are highly correlated. A high VIF value ( $\geq 10$ ) indicates multicollinearity that needs to be addressed. Conversely, a VIF value of  $< 5$  indicates no significant multicollinearity. The following are the results of the *Variance Inflation Factor (VIF)* test :

**Table 5.** Variance Inflation Factor (VIF)

X2	VIF	X3	VIF	Y	VIF	X1	VIF
FB1.1	2.580	FL1.1	2.699	KI1.1	2.338	PI1.1	2.371
FB1.2	2.527	FL1.2	3.884	KI1.2	2.586	PI1.2	2.130
FB2.1	3.093	FL2.1	2.673	KI2.1	2.770	PI2.1	2.304
FB2.2	2.793	FL2.2	3.295	KI2.2	2.435	PI2.2	2.360
FB3.1	3.980	FL3.1	3.485	KI3.1	2.785	PI3.1	2.382
FB3.2	2.595	FL3.2	2.361	KI3.2	2.462	PI3.2	2.297
FB4.1	2.710	FL4.1	3.639				
FB4.2	3.314	FL4.2	2.829				

Source: Data Processed by Researchers, (2024)

Based on the data in table 5. shows that each indicator, namely *Internet Usage (X1)*, *Financial Behaviour (X2)*, *Financial Literacy (X3)*, and *Investment Decision (Y)*, has a VIF value that is less than 10.00. Therefore, it can be concluded that there is no multicollinearity problem in this study.

## 4.2 Structural Model (Inner Model)

### 4.2.1 Coefficient of determination (R Square)

The coefficient of determination can be obtained by testing the R Square of exogenous variables. The R Square value ranges from 0 to 1. The R Square value indicates the extent to which endogenous variables are able to explain fluctuations in exogenous variables. Several criteria can be used, such as a threshold of 0.67 or higher to indicate a significant effect, 0.33 or higher to indicate a moderate effect, and 0.19 to indicate a weak effect.

**Table 6. R-Square Calculation Results**

Variables	R-square	Adjusted R-square
Investment Decision (Y)	0.402	0.383

Source: Data Processed by Researchers, (2024)

Table 6 shows that the coefficient of determination (*R Square*) is 0.402, which is included in the medium criteria. This indicates that there is an influence of *Internet Usage (X1)*, *Financial Behaviour (X2)*, *Financial Literacy (X3)*, and *Investment Decision (Y)* of 40.2%. Meanwhile, 60.8% of the variation has been influenced by other variables not examined in this study.

#### 4.2.2. Effect Size (F Square)

This approach is used to determine changes in the R Square value and assess the influence of each exogenous variable on endogenous variables. The higher the value displayed, the more significant the presence of external variables in influencing endogenous variables. A score equal to or greater than 0.35 indicates a significant influence, a score equal to or greater than 0.15 indicates a moderate influence, and a score equal to or greater than 0.02 indicates a weak influence.

**Table 7. Effect Size Results**

Variables	$f^2$	Description
Investment Decision (Y)		
Internet usage (X1)	0.039	Small Effect
Financial Behaviour (X2)	0.110	Small Effect
Financial Literacy (X3)	0.076	Small Effect

Source: Data Processed by Researchers, (2024)

Based on table 7, it shows that the *Effect Size* value is below 0.15, which means it has a weak influence. This indicates that all variables have a *small effect* in this study .

#### 4.2.3. Hypothesis Test

Hypothesis testing is the last set of inner model tests. In this context, the theories and previous research that have been formulated as hypotheses are examined by algorithmic computational methods. The *Bootstrap* method is used in hypothesis testing to perform *resampling* techniques. If the inner model findings are statistically significant, then this indicates a significant influence between variables. On the other hand, if the results of the *outer model* are statistically significant, this indicates that the indicators used are valid. The t-test statistic is used to assess the significance of the p-

value output, which is less than 0.10, indicating a significant impact (assuming a 10% significance level).

**Table 8. Results of Path Coefficients**

	Hypothesis	P-value	Description
<b>H1</b>	<b>X1 -&gt; Y</b>	0.003	Accepted
<b>H2</b>	<b>X2 -&gt; Y</b>	0.030	Accepted
<b>H3</b>	<b>X3 -&gt; Y</b>	0.002	Accepted

Source: Data Processed by Researchers, (2024)

Based on the calculations in table 8, the results of the research hypothesis test are organised by looking at the *t-statistics* value ( $\geq 1.66$ ) and the significance value ( $\leq 0.10$ ) as follows:

- The Internet Usage* (X1) variable with *Investment Decision* (Y) has a *p-value* of 0.003, meaning that **H1 is accepted**.
- The Financial Behaviour* (X2) variable with *Investment Decision* (Y) has a *p-value* of 0.030, meaning that **H2 is accepted**.
- In the *Financial Literacy* variable (X3) with *Investment Decision* (Y) the *p-value* is 0.002, meaning that **H3 is accepted**.

## 5. Discussion

### 5.1 The effect of internet usage on investment decisions

Internet usage has a significant influence on investment decisions, as evidenced by the research that has been conducted. Based on the results of hypothesis testing, the internet usage variable (X1) on investment decisions (Y) shows a *p-value* of 0.003, which means that hypothesis H1 is accepted. This shows that there is a significant influence between internet usage and investment decisions.

In this study, several indicators have been used to measure internet usage, including online duration that affects investment decisions, convenience of investing with unlimited internet access, preference to invest online, and the importance of the internet in investment activities. The descriptive analysis results show that the majority of respondents agree that their online duration affects their investment decisions, with a mean score of 3.99 for indicator PI1.1. Extensive internet access allows investors to access a wide range of financial information, analytical tools and investment platforms in real-time. This enhances their ability to make more informed and quicker investment decisions. In addition, the internet also provides convenience in investing through various digital platforms that offer a variety of investment products, ranging from stocks, bonds, to mutual funds.

However, not all aspects of internet usage have the same influence. For example, while unlimited internet access is considered important, the convenience of investing is not entirely dependent on it. Respondents in this study also considered other factors such as financial knowledge, investment experience, and support from other resources in making investment decisions.

## **5.2 The effect of financial behaviour on investment decisions**

Based on the results of the research that has been done, the effect of Financial Behaviour (X2) on Investment Decisions (Y) has a p value of 0.030, which means that hypothesis H2 is accepted. This shows that there is a significant influence between financial behaviour and investment decisions. The results show that good and planned financial behaviour has a significant influence on investment decisions made by individuals. Respondents who regularly update their financial plans are more likely to make wise investment decisions. This is supported by the data that indicator FB1.2 "I regularly update my financial plan" has the highest score.

Wise investment decisions require sound financial planning and management. With an organised financial plan, individuals can allocate their financial resources more effectively to achieve long-term financial goals. In addition, the habit of saving consistently also improves individuals' ability to invest, as they have sufficient funds to allocate to various investment instruments.

## **5.3 The effect of financial literacy on investment decisions**

Based on the research results, the effect of Financial Literacy (X3) on Investment Decisions (Y) has a p value of 0.002, which means that hypothesis H3 is accepted. This shows that there is a significant influence between financial literacy and investment decisions. The results showed that good financial literacy has a significant influence on investment decisions made by individuals. Respondents who have a good understanding of the importance of planning savings and realising the risks and consequences of borrowing money. This is supported by data from Indicator FL2.1 (I have a savings plan to achieve short-term and long-term financial goals) and Indicator FL2.2 (I understand the risks and consequences of borrowing money.) have the highest average score of 3.87.

Wise investment decisions require a deep understanding of various financial products and concepts. With good financial literacy, individuals can evaluate the risks and potential returns of different investment options more accurately. In addition, an understanding of diversification helps individuals to reduce risk by spreading their investments across different financial instruments.

## **6. Conclusion and Implication**

Based on research conducted on 100 student respondents from the Faculty of Economics, State University of Jakarta and have invested in the last 1 month with an age range of 20 - 35 years and using digital investment products. Researchers used the Structural Equation Modeling Partial Least Squares (SEM-PLS) method with the help of SmartPLS 4 software to analyse the data. After going through the stages of analysis and testing the relationship between variables, it shows that the majority of respondents (88%) have a monthly income below 5 million. the majority of them are students of the Faculty of Economics, State University of Jakarta, aged between 20 to 25 years (65%). Most of the respondents are female (57%). In terms of length of investment experience, most respondents have less than 3 years of investment experience (49%). This research resulted in several conclusions, namely:

1. The first hypothesis (H1) is accepted, this study shows that internet usage significantly influences investment decisions with a p-value of 0.003. Overall, the use of the internet as an investment tool has become a key factor influencing investment decisions in the digital era. Fast access to information, ease of making transactions, as well as a variety of investment options available online allow investors to make better and informed decisions. This research shows that the use of the internet remains an important component that cannot be ignored in the modern investment context, especially for young investors with limited experience and income.
2. The second hypothesis (H2) is accepted, this study shows that financial behaviour significantly affects investment decisions with a p-value of 0.030. Overall, this study confirms that good financial behaviour, including financial planning, budgeting, and saving habits, plays a significant role in investment decision making. Good financial behaviour is essential for them to manage their finances wisely even with limited income. Digital investment products that offer low initial capital are well suited to their financial needs, allowing them to keep investing even with limited funds.
3. The third hypothesis (H3) is accepted, this study shows that financial literacy significantly affects investment decisions with a p-value of 0.002. Overall, this study confirms that good financial literacy, including knowledge of financial products, the ability to calculate interest, and an understanding of diversification and risk, is instrumental in investment decision-making. This is especially important for the low-income student group who need appropriate financial strategies to maximise their investment potential. Adequate knowledge allows them to make safer and more profitable investment decisions.

This study confirms that internet usage, financial behaviour, and financial literacy have a significant effect on investment decisions. Internet use facilitates quick access to investment information and online transactions, while good financial behaviours, such as financial planning and saving habits, help in making wise investment decisions. Good financial literacy, including an understanding of investment risk and diversification, also plays an important role in maximising investment returns. The practical implication is the importance of better education and training in financial literacy, especially among university students and individuals with limited income, to improve their ability to manage investments effectively and optimise potential long-term returns.

The validation of SEM-PLS methodology in this study demonstrates its reliability and validity in testing complex theoretical models, providing methodological guidelines that can be applied in future research. The findings of this study can also be used for the development of practical policies and strategies, making contributions that are not only theoretical but also practical.



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