

## The Influence of Financial Literacy, Risk Tolerance and Trust on Cryptocurrency Investment Decision-Making on The Millennial Generation In Jabodetabek

Andhika Muhammad Fadil Trisno, Anna Fariyanti, Lukytawati Anggraeni

Institut Pertanian Bogor

Email: andhikamuhammadfadil@apps.ipb.ac.id, anfari@apps.ipb.ac.id,  
lukytawati@apps.ipb.ac.id

---

### KEYWORDS

Cryptocurrency investment, financial literacy, risk tolerance, trust, millennial investors, Theory of Planned Behavior, Jabodetabek

---

### ABSTRACT

This study examines the influence of financial literacy, risk tolerance, and trust on cryptocurrency investment decision-making among the millennial generation in Jabodetabek. Cryptocurrency adoption in Indonesia has surged, with millennials as the dominant investor group, despite the inherent risks such as price volatility and regulatory uncertainty. Using the Theory of Planned Behavior (TPB) as the theoretical framework, this research investigates how attitudes, subjective norms, and perceived behavioral control, alongside financial literacy, risk tolerance, and trust, affect millennials' decisions to invest in cryptocurrencies. A quantitative approach was employed, surveying 325 millennial investors across Jabodetabek. The findings indicate that attitudes, subjective norms, perceived behavioral control, risk tolerance, and trust significantly influence investment intentions and behavior. Contrarily, financial literacy showed no significant direct effect on investment intentions, suggesting that even investors with limited financial knowledge are inclined to invest due to positive attitudes and social influences. Risk tolerance and trust were found to play critical roles in shaping investment decisions, highlighting the importance of psychological factors in navigating cryptocurrency markets. These insights provide valuable implications for policymakers, financial educators, and cryptocurrency platform developers to foster more informed and responsible investment behaviors among young investors.

---

### INTRODUCTION

The development of cryptocurrency use is also reflected in the *Global Crypto Adoption Index* published by Chainalysis (2024), where crypto adoption in Indonesia continues to improve. The use of this virtual currency is seen as safer and more profitable, so it is loved by many Indonesians, especially young people. According to Chainalysis, Indonesia is one of the countries with the highest crypto adoption rate in the world. Indonesia's global crypto adaptation index reached 0.68, ranking third after India and Nigeria. The index with a score of 0-1. The closer it is to 1, the higher the country's ranking. One of the drivers of this increase is the emergence of *cryptocurrency peer-to-peer (P2P) platforms*. This technology makes it easier for people to transact using cryptocurrencies anywhere and anytime, so that the volume of cryptocurrency transactions is also increasing rapidly (Chainalysis 2024).

*Cryptocurrencies* open up many opportunities, such as fast, efficient, traceable, and secure transactions, but they also have drawbacks, such as technological difficulties, financial difficulties in using them, and uncertain social perceptions about their holdings (Arias *et al.*

2019). Another example of the weakness of *cryptocurrencies* has been used for tax evasion, money laundering, smuggling transactions, extortion, and theft of bitcoin itself (Bloomberg, 2017). Indonesia itself cryptocurrency has not been allowed as a legal tender or transaction due to the risk and lack of guarantees by *the cryptocurrency issuer* itself. Nevertheless, cryptocurrencies are allowed as an investment commodity. The Commodity Futures Trading Supervisory Agency (Bappebti) noted that there are 545 types of cryptocurrencies that are legal and recognized in Indonesia.

As for the data of Bappebti's annual report (2023), there was a surge in crypto asset transactions in Indonesia in 2021 which experienced a significant increase to IDR 859.4 trillion from IDR 64.9 trillion in the previous year. In 2023, there will be a significant decline in crypto asset transactions, but it is inversely proportional to the increase in the number of registered crypto asset customers in 2023. This phenomenon is caused by *a bearish* crypto market, especially *mother coins* such as *Bitcoin*, which experienced a period of decline in the four-year cycle. As shown in Figure 2.

The latest data on the value of digital currency transactions in Indonesia from January to August 2024 recorded a total of IDR 391.01 trillion, experiencing a growth of 360.03% compared to the same period the previous year which recorded a value of IDR 149.2 trillion. In addition to the transaction value, the number of crypto investors also continues to increase until August 2024 has reached 20.9 million (Bappebti 2024). This trend shows consistent adoption among the public, although the volatility of crypto assets remains a major concern. The opportunity for crypto assets can grow and reach more levels of society in Indonesia. Along with the increasing demand for digital assets, investors need to use cryptocurrency trading technology with a smooth, efficient, safe, reliable system and good risk management in every transaction and payment processing. The complexity and consequences of the blockchain revolution make it necessary to study its impacts and challenges.

A study revealed that non-users felt incapable of using bitcoin, had misconceptions about transaction privacy, and were unfamiliar with its functions (Gao *et al.* 2016). In addition, cryptocurrencies are a risk associated with price volatility. A study by *the International Netherlands Group* (ING) *International Survey Mobile Banking* found that, in bitcoin, 29% of European investors consider cryptocurrencies to be a risky investment (Exton & Doidge, 2018).

*Cryptocurrencies* have greater risk and price volatility compared to conventional or fiat currencies (Jariyapan *et al.* 2022). The uncertainty of cryptocurrencies leads to a very large psychological threshold (Pelegri n *et al.* 2015). High price volatility and undefined social awareness are the weaknesses of *cryptocurrencies* (Arias-Oliva *et al.* 2019). Cryptocurrencies are quite risky because they are highly volatile, changes in the value of cryptocurrencies are just momentary joy, lack of regulation, still leave legitimacy issues, and users are vulnerable to being targeted by fraud or cybercrime (Huda and Hambali, 2020).

In Indonesia, the rise of digital currencies in particular is particularly felt, with an increasing number of individuals, especially the millennial generation, actively participating in cryptocurrency trading (Yang *et al.*, 2022). The results of the Katadata Insight Center (KIC) survey show that the millennial generation is the largest crypto buyer, at 64%. Followed by Gen Z 23% and Gen X 12% (KIC 2022). The following is a comparison graph of the percentage of internet users who own cryptocurrencies by age and gender based on the Katadata Insight Center survey.

This data indicates the high interest of millennials in investing in crypto assets in Indonesia. The reason that makes millennials prefer investing in *cryptocurrencies* is because the majority of them do not trust traditional investment institutions. They prefer to rely on market research that they do themselves, rather than using research from traditional institutions, such as financial advisors. In addition, the reason that makes them interested is the existence of a crypto asset community that allows them to connect with each other among fellow

investors, both domestically and abroad (Sandria, 2021). The next reason is that there is no time limit in crypto asset buying and selling transactions. All crypto owners can make buying and selling transactions with each other, both domestically and abroad. In addition, crypto asset buying and selling activities can be carried out for 24 hours or there is no specific time limit, so the scope is wider. It is different when compared to stock buying and selling transactions in the capital market, where investors need to follow a certain time in carrying out buying and selling activities, so there is a certain time limit.

Then, another thing that also affects the many millennials who make crypto asset transactions is that many celebrities, artists, musicians, and community leaders share their crypto asset transaction activities through social media (Zuraya, 2022). Additionally, the decision to invest in cryptocurrencies is often influenced by a variety of factors, including an individual's level of financial literacy and their risk tolerance (Monrat *et al.*, 2019). *Cryptocurrencies* offer great potential for profits, but they also carry high risks, especially for investors who do not have a deep understanding of these instruments (Ilham *et al.* 2022). *The phenomenon of Fear of Missing Out (FOMO)* among millennials often leads to less rational investment decisions and the potential for large losses (Iacurci 2023 June).

Financial *literacy* is a key that must be considered when one's ability to make good investment decisions is questioned, and financial literacy will lead to better financial decisions (Ates, 2016). This also includes the millennial generation's decision to invest in crypto assets. As the millennial generation begins to understand financial literacy, especially those related to crypto asset investment, coupled with the increasingly intensive education on crypto asset investment that is obtained both for free and for a fee, which then further encourages the millennial generation to decide to invest in crypto assets.

Lubis *et al.* (2022) states that a person with a high level of financial literacy understanding tends to be more aware of the benefits and risks in an investment product, so he or she will be more careful in making investment decisions. This will be the basis that good financial literacy will encourage a person to make more rational investment decisions, which will allow him to avoid mistakes and losses for the investment decisions he makes. Financial literacy, which includes understanding financial concepts, the ability to manage personal finances, and the confidence to make informed financial decisions, plays a crucial role in shaping investment behavior. Individuals with higher levels of financial literacy tend to make informed investment decisions, including those related to cryptocurrency investments (Rooij *et al.*, 2007). In contrast, those with low financial literacy may be more susceptible to impulse-driven investment decisions or lack of information, potentially leading to regret and financial losses.

In the context of *cryptocurrencies*, high price volatility and a lack of clear regulation add to the level of risk that investors should be aware of (Budiman *et al.* 2021). Research by Budiman *et al.* (2021) shows that good financial literacy can improve an individual's ability to make smarter and more informed investment decisions. However, the results of research by Firzatullah *et al.* (2024) also shows inconsistencies, where some studies show that financial literacy does not have a significant effect on investment decisions.

Investment decisions need to be considered because investment decisions have a long-term time dimension. In addition, investment activities are risky activities, meaning that investment activities do not always bring profits, and even investors can also experience losses, so investment decisions need to be paid more attention and scrutiny (Rosa & Mukhibad, 2022). Investment activities are inherently full of risks. Risk is the potential profit that is not as high as anticipated (Rong *et al.* 2023). Each investor has a different level of risk tolerance, which determines how much risk they are willing to take in investing (Khalik *et al.* 2024). Investors with a high risk tolerance may feel comfortable investing in *cryptocurrencies*, which are notoriously highly volatile, while investors with a low risk tolerance tend to avoid these kinds

of investments. Investors who are willing to take on high risks are likely and entitled to high *returns*, but investors who are not willing to take on high risks cannot expect high *returns* (Yusfiarto, 2020).

The relationship between financial literacy, risk tolerance, and cryptocurrency investment decisions is particularly relevant in the Indonesian context. Indonesia's rapidly growing economy and the growing popularity of digital currencies among the large millennial population have created a unique investment landscape (He *et al.* 2021). Understanding how financial literacy and risk tolerance affect cryptocurrency investment decisions in Indonesia can provide valuable insights for policymakers, educators, and financial institutions seeking to promote responsible and informed financial decision-making (Chu *et al.* 2017).

A comprehensive understanding of cryptocurrencies is essential in today's digital age (Uematsu and Tanaka, 2019). The rising popularity of cryptocurrencies is evident, especially since cryptocurrencies mark transformative changes in global money markets (Tandon *et al.* 2021). However, adoption still faces challenges. Although technology awareness can increase acceptance, issues such as limited technological knowledge and understanding of online commerce, legislative constraints, and security issues can be barriers (Albayati *et al.* 2020; Li *et al.* 2023; Rejeb *et al.* 2023). Additionally, although research shows that cryptocurrencies can promote financial inclusivity for underrepresented groups of society, there are still concerns regarding the unequal distribution of wealth among cryptocurrency holders (Abdul-Rahim *et al.* 2022; Allen *et al.* 2022). Recognizing the intricacies of cryptocurrencies is essential in today's digital age, ensuring individuals stay up-to-date with technological advancements (Yayla *et al.* 2023).

Research by Shazdad *et al.* (2024), argues that understanding the awareness, acceptance, and adoption of cryptocurrencies is critical in today's ever-evolving digital finance landscape. As cryptocurrencies position themselves at the forefront of financial innovation, understanding the factors that drive or hinder their adoption can provide two valuable insights into shaping future economic policies, strategies, and infrastructure. Awareness shows the extent of the knowledge and understanding that individuals have about cryptocurrencies; acceptance measures their openness to adopting it as part of their financial behavior; and adoption reflects the incorporation of cryptocurrencies into their monetary transactions. In addition, the role of trust as a moderator is very important. Trust, or lack thereof, can significantly affect a person's decision-making process regarding cryptocurrencies. In an environment where transactions are decentralized and there is often no traditional oversight, trust can be the main key that determines whether one will engage with or stay away from cryptocurrencies. With the role of trust, we can better understand the psychological factors that play an important role in the wider acceptance and use of *cryptocurrencies* in society.

The *research gap* of previous research is in financial behavior (*behavioral finance*) with biases that affect investor decision-making in investing, namely financial literacy, risk tolerance and trust. According to the research of Jayaripan *et al.* (2022), (Kusuma and Mesacahyani 2023) and Sa'adiyah *et al.* (2023), financial literacy has a positive and significant effect on investors' investment decisions. Research shows that financial literacy acts as a fundamental element that allows individuals to evaluate investment risks more rationally, adopt a more cautious approach to investment decisions, and develop resilience to such financial setbacks by learning from regrettable financial experiences. While this is contrary to research conducted by Firzatullah *et al.* (2024) Financial literacy is not the most important factor or can be said to have a negative influence on considering when making investment decisions. Because investors among millennials still do not have an understanding of financial literacy, this causes financial literacy to not be an indicator of cryptocurrency investment decision-making.

According to the research of Sa'adiyah *et al.* (2023) and Firzatullah *et al.* (2024) Risk

tolerance has a positive and significant effect on investment decisions. While this is contrary to research conducted by Sukumaran & Wasiuzzaman (2022), risk tolerance has a negative influence on cryptocurrency adoption among Malaysian investors. Then, the research of Miraz *et al.* (2022), Shahzad *et al.* (2024) and Hasan *et al.* (2024) Trust behavior has a positive and significant effect on investment decision-making in investors. While this is contrary to the research conducted by Abdullah *et al.* (2024) Trust behavior has a negative influence on investment results. As a result, a high level of confidence in the face of the fact that investments don't always work will discourage investors from making investment decisions.

This study will analyze how the *theory of planned behavior* (TPB) model can show that more and more individuals are involved in investment decision-making planning. This theory argues that attitudes toward attitudes, subjective norms, and perceived control of behavior contribute to the intention to engage in certain behaviors. By exploring the relationship between financial literacy, risk tolerance, trust and cryptocurrency investment decisions in Indonesia, especially in areas in Jabodetabek. This research was conducted on the millennial generation because of the nature of the millennial generation who are very adaptable and interested in trends or new things in technology so that it is interesting to explore which of course contributes to both millennial investors and the next generation to further open up insights and opportunities for developments in *the field of fintech*, one of which is *cryptocurrency* investment and the term increases awareness and readiness for its investment risk level before risking investment decisions such as *cryptocurrencies*. The purpose of this research is to provide a comprehensive understanding of the factors that shape the investment behavior of Indonesian investors, especially the Jabodetabek millennial generation in the digital currency market.

## 1.1 Problem Formulation

*Cryptocurrencies* are known for their high price volatility, unclear regulations especially in Indonesia, including potential fraud, loss of assets and money laundering venues. However, based on findings from the Ministry of Trade (2024), cryptocurrency enthusiasts in Indonesia are increasing every year. Indonesia is now ranked third in the world for cryptocurrency adoption which previously occupied the seventh position. The relationship between financial literacy, risk tolerance, and cryptocurrency investment decisions is particularly relevant in the Indonesian context. Indonesia's rapidly growing economy and the growing popularity of digital currencies among the large millennial population have created a unique investment landscape. This research is important to understand the advantages of applying blockchain technology in various disciplines, such as economics, information security, and data management. Therefore, it is important to understand the financial literacy of various products in digital investing. An understanding of risk tolerance is also very important, as it helps investors to choose digital investment instruments that suit their risk profile. Additionally, trust or lack thereof, can significantly affect a person's decision-making process regarding cryptocurrencies. In an environment where transactions are decentralized and there is often no traditional oversight, trust can be the key that determines whether someone will engage with or move away from cryptocurrencies. By examining the moderate role of trust, we can better understand the psychological factors that play an important role in the wider acceptance and use of cryptocurrencies in society. It is necessary to identify the factors of financial literacy, risk tolerance, and trust that influence cryptocurrency investment decision-making. Based on this, the problems in this study can be formulated as follows:

1. What are the characteristics of investor behavior among the millennial generation in Jabodetabek?
2. How do attitudes, subjective norms, and perceptions of behavioral control affect cryptocurrency investment decision-making in the millennial generation in Jabodetabek?
3. How does financial literacy affect cryptocurrency investment decision-making for the

millennial generation in Jabodetabek?

4. How risk tolerance affects investment decision-making *cryptocurrency* in the millennial generation in Jabodetabek?
5. Does trust play a role in investment decision-making *cryptocurrency* in the millennial generation in Jabodetabek?

## 1.2 Purpose

Based on the background and formulation of the problem that has been described, the objectives of this study are:

1. Identifying the characteristics of investor behavior among the millennial generation in Jabodetabek.
2. Analyzing the influence of attitudes, subjective norms, and perceptions of behavioral control on cryptocurrency investment decision-making in the millennial generation in Jabodetabek.
3. Analyzing the influence of financial literacy on cryptocurrency investment decision-making in the millennial generation in Jabodetabek.
4. Analyze the impact of risk tolerance on investment decisions *cryptocurrency* in the millennial generation in Jabodetabek.
5. Testing the influence of trust on cryptocurrency investment decisions in the millennial generation in the Jabodetabek area.

## 1.3 Benefit

This research is expected to provide benefits for stakeholders which can be seen from two things, namely:

### 1.4.1 Practical Aspects

This research expands insights into investment behavior, particularly related to financial literacy, risk tolerance, and trust in the context of *cryptocurrencies*. The results could enrich the literature on investment decision-making in volatile markets like *cryptocurrencies*, as well as provide new perspectives on how psychological factors and financial understanding influence investor decisions.

### 1.4.2 Theoretical Aspects

This research provides guidance for young investors, especially millennials, to make wiser investment decisions with a better understanding of investment risks and strategies. The results can also be used to develop more effective financial literacy education programs and help investors manage risk and confidence in investing.

## METHOD

### 3.1 Research Time and Place

This research will be carried out in the period from January to February 2025 in the Jabodetabek area (Jakarta, Bogor, Depok, Tangerang, and Bekasi). This region was chosen because it has a large millennial population as well as a high rate of Cryptocurrency adoption, making it relevant to the research objectives of understanding investment decision-making on *Cryptocurrencies* among millennials.

### 3.2 Population and Sample

The population used in this study is the millennial generation in Jabodetabek who have invested in *cryptocurrency*. Sample selection uses *non-probability sampling* techniques. The type of *purposive* sampling with *non-probability sampling* is a type of technique in taking data from a sample by considering that the sample must have criteria that can be used as a sample so that the researcher can obtain the data he wants to know (Sugiyono, 2019:133). The criteria for this study for sampling are:

1. The respondents are millennial (born in 1981-1996).
2. Respondents are running or have made *cryptocurrency* investments with Bitcoin (BTC), Ethereum (ETH), Dogecoin (DOGE), Tether (USDT).

3. The respondent is a resident of Jabodetabek.

The determination of the number of samples was carried out based on the theory of Hair *et al.*, (2021) which states that the number of samples in the *Structural Equation Modeling* (SEM) analysis must be at least 5-10 times the number of questionnaire statements. In this study, there are 65 indicators multiplied by 5, so the number of respondents in this research sample is 325 (5 x 65) respondents.

### 3.3 Data Collection Methods

#### 3.3.1 Data Type

In the data collection process, this study uses quantitative data where this quantitative data is non-qualitative data or so-called data presented in the form of numbers, such as profitability, debt, assets, stock prices and so on Sujarweni (2015:89).

#### 3.3.2 Data Source

1. Primary Data

The primary data source is the data collected by the researcher sourced from the results of an analysis of questionnaires, panels and focus groups by respondents as well as data by the source through a research interview result by Sujarweni (2015:89). Thus, the primary data source can be said to be a data that is still abstract or has not been grouped so that the primary data must be processed again because the form of the data is still raw data that has not been processed. This study uses primary data through *an online* questionnaire made using *a google form* that will be distributed to the sample through social media who are millennial generation residents in Jabodetabek.

2. Secondary Data

According to Sujarweni (2015:89), what is meant by secondary data is source data that comes from journals, books, notes, dissertations, theses, theses, articles, books as theory, magazines and journals in the form of financial statements for publication in a company, government reports, etc. This research uses secondary data sources sourced from a number of previous researches, news website articles, institutional or government websites, journals, books and various other sources that are related and relevant to the research where the source data that is secondary data does not need to be reprocessed.

## RESULTS AND DISCUSSION

Description of respondent characteristics is done to group data based on certain factors such as gender, domicile, age, last education, occupation and income level. Based on the results of the respondents' answers, a description of the research object is obtained based on the characteristics of the respondents in the form of gender, domicile, age, last education, occupation and income level as follows:

No	Characteristics	Description	Number of Respondents	Percentage (%)
1	Gender	Male	240	73,8
		Female	85	26,2
2	Domicile	Jakarta	130	40,0
		Bogor	45	13,8
		Depok	62	19,1
		Tangerang	56	17,2
		Bekasi	32	9,8
3	Age	28-32 Years	92	28,3
		33-37 Years	201	61,8
		38-43 Years	32	9,8
4	Last Education	Elementary School	2	0,6
		Junior High School	4	1,2

No	Characteristics	Description	Number of Respondents	Percentage (%)
5	Job	Senior High School Diploma	13	4,0
		Bachelor's Degree (S1)	90	27,7
		Master's Degree (S2)	171	52,6
		Doctorate Degree (S3)	31	9,5
		Freelance	14	4,3
		Private Employee	39	12,0
		Lecturer	86	26,5
		Self-Employed	25	7,7
		Civil Servant	60	18,5
		Teacher	48	14,8
		Doctor	21	6,5
		Police	17	5,2
			29	8,9
6	Income	Rp 1.500.000 - Rp 5.000.000	32	9,8
		Rp 5.000.001 - Rp 7.000.000	120	36,9
		Rp 7.000.001 - Rp 10.000.000	116	35,7
		Rp 10.000.001 - Rp 15.000.000	29	8,9
		Rp 15.000.001 - Rp 20.000.000	23	7,1
		> Rp 20.000.000	5	1,5

Source : primary data processed in 2025

The data shows that the majority of cryptocurrency investors are dominated by male respondents as many as 240 respondents (73.8%), while the remaining 85 respondents (26.2%) are female. The majority of respondents who invest in cryptocurrency are between 33-37 years old (61.8%) while the rest are between 28-32 years old (28.3%) and between 38-43 years old (9.8%). The last level of education of the majority of respondents is Bachelor (S1) (52.6%), diploma (27.7%), Master (S2) (9.5%). Most respondents work as private employees (26.5%). Freelance (12%), lecturers (7.7%). Most cryptocurrency investors have a monthly income level ranging from IDR 5,000,001 - IDR 7,000,000 (36.9%), IDR 7,000,001- 10,000,000 (35.7%).

The research on "the influence of financial literacy, risk tolerance and trust on cryptocurrency investment decision making among millennials in Jabodetabek" can provide insights for developers and consumer education. In this rapidly developing digital era, cryptocurrency and blockchain technology have become a major focus in various sectors.



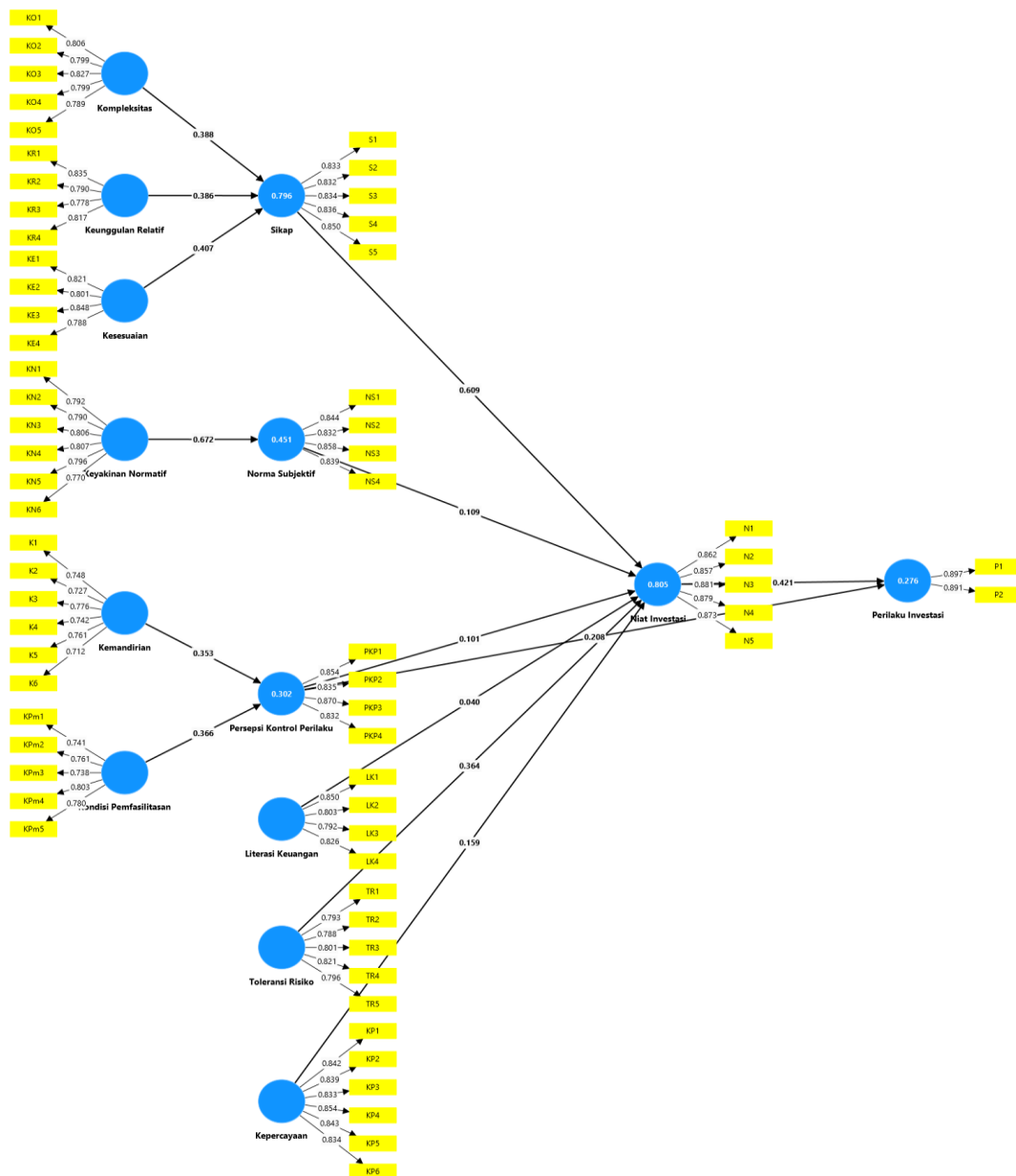


Figure 1.  
Display of SEM PLS Algorithm Results

Validity testing is typically divided into two main categories, “convergent validity and discriminant validity. Convergent validity is assessed based on the loading factor values of each indicator.” The “loading factor value should be greater than or equal to 0.7. If all variables have loading factor values greater than 0.7, then all indicators are considered valid.” Convergent validity can also be assessed by examining the values of the Average Variance Extracted (AVE), which should be greater than or equal to 0.5. The AVE values for each variable are displayed in the table 2. Based on the table, it can be observed that the AVE values for all variables are greater than 0.5. This indicates that all variables meet the criterion for convergent validity.

Discriminant validity is tested using the Fornell Larcker Criterion Methods. The Fornell-Larcker Criterion is one of the methods used to evaluate discriminant validity in factor analysis or structural models. Its purpose is to assess the extent to which constructs in the model can be distinguished from each other or have good discriminant validity. If “constructs have good

discriminant validity, the correlation matrix will show that the correlation between those constructs is lower than the correlation between constructs and the same indicators. The discriminant validity values can be seen in Table 1. Based on the table, it is evident that the square root of the AVE for Behavioral Intention (BI), compared to BI itself, is 0.917, which is the highest value compared to the Fornell-Larcker criterion values using other variables. This indicates that this construct can be used to demonstrate that the model has good discriminant validity.

Table 1  
Discriminant Validity With Fornell Larcker Criterion Methods

	K	KP	KE	KR	KN	KO	KPm	LK	N	NS	P	PKP	S	TR
K	0.745													
KP	0.404	0.841												
KE	-0.047	0.260	0.815											
KR	-0.048	-0.154	0.333	0.805										
KN	0.478	0.685	0.334	-0.154	0.794									
KO	0.003	0.282	0.351	0.384	0.394	0.804								
KPm	0.169	0.504	0.060	0.032	-0.014	0.036	0.765							
LK	-0.026	0.713	0.352	-0.093	0.360	0.378	0.564	0.818						
N	0.356	0.666	0.465	0.459	0.473	0.540	0.430	0.525	0.871					
NS	0.425	0.534	0.627	0.228	0.672	0.253	0.045	0.255	0.634	0.843				
P	0.221	0.363	0.224	0.261	0.262	0.245	0.240	0.296	0.487	0.334	0.894			
PKP	0.415	0.506	-0.206	-0.169	0.201	-0.137	0.425	0.291	0.318	0.112	0.341	0.848		
S	-0.012	0.185	0.672	0.671	0.264	0.679	0.030	0.269	0.641	0.522	0.331	-0.203	0.837	
TR	0.476	0.705	-0.127	-0.154	0.345	-0.076	0.510	0.413	0.513	0.275	0.268	0.650	-0.124	0.800

Source : primary data processed in 2025

Reliability Test: The purpose of reliability testing is to determine whether a research instrument exhibits consistency, stability, accuracy, and precision in measuring a structure (Hair et al. 2014). Reliability testing is conducted by considering the values of composite reliability and Cronbach's alpha for each latent variable. These values should be greater than 0.7. The results of the testing can be seen in Table 2.

Table 2  
Cronbach's Alpha Value, Composite Reliability, and AVE

Variabel	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Complexity	0.863	0.865	0.647
Relative Advantage	0.819	0.820	0.649
Compatibility	0.831	0.832	0.664
Attitude	0.893	0.893	0.701
Normative Beliefs	0.882	0.883	0.630
Subjective Norms	0.865	0.866	0.711
Self Sufficiency	0.839	0.843	0.554
Facilitating Conditions	0.823	0.828	0.585
Perceived Behavioral Control	0.870	0.872	0.719
Financial Literacy	0.835	0.839	0.669
Risk Tolerance	0.859	0.862	0.640
Trust	0.917	0.917	0.707
Intentions	0.920	0.920	0.758
Actual Behavior	0.748	0.749	0.799

Source : primary data processed in 2025

The composite reliability of all variables has values "greater than 0.7, and the Cronbach's alpha values for all variables are also greater than 0.7. Therefore, it can be concluded that all variables are considered reliable.

Hypothesis Testing Results: The testing aimed to assess the significance of the relationships between constructs by analyzing the p-value and t-statistic using the bootstrap procedure in the SmartPLS application. The bootstrap technique involves randomly recalculating sample data and conducting path coefficient tests to obtain t-statistic and p-value. The path coefficient test is used to calculate the direction of influence between latent variables. Path coefficients are used to measure the magnitude of the impact or influence of one construct on another within the measurement model or structural model. The results of hypothesis testing can be seen in Table 3.

Table 3  
Path Coefficient Value and Hypothesis Testing

Variabel	Original sample	T Statistics	P Values	Supported (√) Not Supported (×)
Complexity → Attitude	0.388	9.985	0.000	(√)
Relative Advantage → Attitude	0.386	10.622	0.000	(√)
Compatibility → Attitude	0.407	10.748	0.000	(√)
Attitude → Investment Intention	0.609	11.225	0.000	(√)
Normative Beliefs → Subjective Norms	0.672	13.326	0.000	(√)
Subjective Norms → Intention	0.109	2.345	0.019	(√)
Self Sufficiency → Perceived Behavioral Control	0.353	4.497	0.000	(√)
Facilitating Conditions → Perceived Behavioral Control	0.366	4.414	0.000	(√)
Perceived Behavioral Control → Intention	0.101	2.69	0.007	(√)
Financial Literacy → Intention	0.04	0.954	0.34	(×)
Risk Tolerance → Intention	0.364	8.428	0.000	(√)
Trust → Intention	0.159	2.998	0.003	(√)
Perceived Behavioral Control → Actual Behavior	0.208	3.378	0.001	(√)
Intention → Actual Behavior	0.421	8.819	0.000	(√)

Source : primary data processed in 2025

Based on Table 3, it is observed that the path coefficients of the 13 variables have a positive direction of influence. These variables are CL → AT; RA → AT; CP → AT; AT → I; NB → I; SN → I; SS → PBC; FC → PBC; PBC → I; FL → I; RT → I; T → I; PBC → AB; I → AB. This suggests that the influence of exogenous variables on endogenous variables is positive. Meanwhile, the coefficient value of the LK → N path is positive and not significant, meaning that financial literacy does not have a significant influence on intention, so hypothesis 10 cannot be accepted.

### **The influence of attitude on intention in crypto asset investment behavior among the Jabodetabek millennial generation**

Attitude has a significant influence on intention in crypto asset investment behavior among the Jabodetabek millennial generation and is the most influential variable because it has the highest t-statistics value (3.678) and path coefficient (0.609) than the other six variables. The higher the respondent's attitude, the greater the intention towards crypto asset investment behavior among the Jabodetabek millennial generation. Individual attitudes consist of three dimensions, namely complexity, relative advantage and suitability. Several indicators in the

final model of the attitude variable are liking the idea of buying crypto assets, being wise to buy crypto assets, a good idea to buy crypto assets, being useful to buy crypto assets, and crypto assets worth buying. The results of this hypothesis test are in line with previous studies conducted by Namahoot & Rattanawiboonsom (2022), and Chen et al. (2022). Given the high influence of attitude on intention, it is recommended that companies that produce crypto assets or act as intermediaries in buying and selling should focus on activities that will increase their positive attitudes towards investors. To this end, in addition to ease of transactions, speed, 24/7 trading and transfer opportunities, giving importance to innovative technological activities will increase positive attitudes towards crypto assets.

### **The influence of subjective norms on intentions in crypto asset investment behavior among the Jabodetabek millennial generation**

Subjective norms have a significant influence on intentions in crypto asset investment behavior among the Jabodetabek millennial generation (t-statistics value of 2.345). The attitude variable shows a path coefficient of 0.109, which means it has a positive relationship with intentions, the higher the value of the respondent's subjective norms, the greater the intention towards crypto asset investment behavior among the Jabodetabek millennial generation. Subjective norms consist of one dimension, namely normative beliefs. In this study, it is explained with several indicators of subjective norm variables, namely people who influence respondents' decisions believe that they should buy crypto assets, people who influence respondents' decisions believe that they should invest in crypto assets because they can provide prestige, people recommend buying crypto assets, people recommend investing in crypto assets to give prestige. The results of this hypothesis test are in line with previous studies conducted by Ayedh et al. 2021 and Schaupp et al. 2022 which stated that subjective norms have a positive effect on investment intentions for crypto assets.

### **The influence of perceived behavioral control on intentions in crypto asset investment behavior among the Jabodetabek millennial generation**

Perception of control shows positive and significant results, as evidenced by the results of the hypothesis test of the t-statistics value of 2.69 ( $> 1.96$ ) with a path coefficient value of 0.101. The results of this study provide an explanation that the higher the behavioral control to invest in crypto assets, the higher the intention to invest in crypto assets. The behavioral control variable is measured by the ease with which users understand cryptocurrencies, the ease of their application, and the ease with which they get used to using cryptocurrencies. The more indicators are felt, the better the user's perception of the usefulness or ability of the crypto system to meet user needs. This study is in line with research conducted by Mazambani and Mutambara (2019) and Anser et al. (2021) that perceived behavioral control has a positive effect on investment intentions in the adoption of crypto and bitcoin.

### **The influence of financial literacy on intentions in crypto asset investment behavior in the Jabodetabek millennial generation**

Financial literacy has a path coefficient value of 0.04. With a t-statistic of 0.954. And a p-value of 0.34. This shows that the financial literacy variable does not have a significant effect on the investment intention variable at the significance level of  $\alpha = 0.05$ . This means that if the user has a lack of financial knowledge in terms of financial literacy, there is no significant change in behavioral intentions in crypto investment. The results of this study are supported by previous research by Firzatullah et al. (2024) financial literacy is not the most important factor

or can be said to have no influence in considering when making investment decisions. Because investors among millennials still do not have an understanding of financial literacy, this causes financial literacy not to be an indicator of cryptocurrency investment decision making. Although financial literacy is not significant, it may be because adopting cryptocurrency requires adjustments to transaction methods and money management that are different from traditional ones. And it is still important to continue to monitor and evaluate user behavior patterns. Changes in financial literacy may still affect adoption intentions in the long term.

### **The effect of risk tolerance on intention to invest in crypto assets in the Jabodetabek millennial generation**

Risk tolerance shows positive and significant results, as evidenced by the results of the hypothesis test with a t-statistic value of 8.428 ( $> 1.96$ ) with a path coefficient value of 0.364. The results of this study provide an explanation that the higher the risk tolerance, the higher the intention to invest in crypto assets in the Jabodetabek millennial generation. The risk tolerance variable measures user perceptions of the risks of using cryptocurrencies, including the risk of misuse of information, concerns about the risk of decreasing the value of their digital currency holdings, and the risk of overall loss. When users perceive this risk as high, they tend to have a negative attitude towards cryptocurrencies and are less likely to adopt them. Users can feel safer and more confident about cryptocurrencies when they receive transparent and clear information about the risks and benefits of using cryptocurrencies, as well as security measures from service providers. In this case, it is important for developers to provide accurate and precise information about the risks and benefits of use. The results of this hypothesis test are in line with previous research conducted by Sa'adiyah et al. (2023) and Firzatullah et al. (2024) risk tolerance has a positive and significant effect on investment decisions.

### **The influence of trust on intention in crypto asset investment behavior in the Jabodetabek millennial generation**

Trust shows positive and significant results, as evidenced by the results of the hypothesis test with a t-test value of 2.998 ( $> 1.96$ ) with a path coefficient value of 0.196. The results of this study provide an explanation that the higher the trust, the greater the intention towards crypto asset investment behavior in the Jabodetabek millennial generation. The trust variable explains that the benefits felt from using technology will be greater when the value is higher and the perceived monetary costs are lower. If respondents believe that the costs incurred are still reasonable, they will continue to buy and sell cryptocurrencies. This is in accordance with the research findings of Miraz et al. (2022), Shahzad et al. (2024) and Hasan et al. (2024) trust behavior has a positive and significant effect on investment decision making in investors.

## **4.1 Managerial Implications**

Research on "The influence of financial literacy, risk tolerance and trust on cryptocurrency investment decision-making on the millennial generation in Jabodetabek" can provide insights for developers and also consumer education. The study builds a comprehensive model that expands on the *Planned Theory of Behavior* (TPB) integrating financial literacy, risk tolerance and trust that was found to influence intentions for cryptocurrency investment behavior. The test results found that the variables of complexity, relative superiority, suitability, attitude, normative beliefs, subjective norms, independence, facilitation conditions, perception of behavioral control, risk tolerance, trust and investment intention play an important role in influencing the behavior of crypto users. User acceptance is essential for the further development of any new technology. In addition, acceptance has been

seen as a function of user involvement in system development (Taherdoost, 2017). Lai (2017), noted that the level of development of the payment system is highly dependent on rapid technological changes and barriers to the acceptance of new products or services.

### **Complexity**

The level of difficulty felt by the end consumer in recognizing advances and utilizing technology. The indicator with the highest value is KO3, which refers to investing in crypto assets as simple. *Cryptocurrencies* are known for their extreme price volatility, which can lead to significant losses for unprepared investors. Seeing this, it is important for crypto trading platform application developers to educate investors about these risks and provide mitigation strategies, such as portfolio diversification and the use of hedging instruments to mitigate the impact of price fluctuations. Increasing financial literacy among investors is key to addressing the complexity of *cryptocurrency* investments. App developers should provide clear and easy-to-understand educational resources to help investors understand blockchain technology, the risks, and benefits of investing. However, the complexity of blockchain technology can be a barrier for some potential investors. App developers need to ensure that their investment platform is *user-friendly* and provides adequate technical support to help new users adapt to the system. By improving those features, app developers can provide users with better opportunities to invest effectively.

### **Relative Advantages**

*Cryptocurrencies* offer higher transaction speeds compared to traditional investment instruments. Another relative advantage is lower transaction fees. *Cryptocurrencies* often have lower transaction fees compared to traditional payment methods. Providing information about these cost savings can attract more investors. *Cryptocurrencies* are accessible 24 hours a day, allowing investors to make transactions at any time. App developers should promote this flexibility as one of the main advantages to attract investors who want more control over their investments. Many investors are attracted to *cryptocurrencies* because of their high yield potential. The emphasis on greater profit opportunities compared to traditional investments can increase investment interest among potential investors. Educating investors about blockchain technology and the innovations behind *cryptocurrencies* can improve their perception of their relative profitability. Increased understanding of these technologies can drive more positive investment decisions

The results of the hypothesis test found a relative advantage with an *original sample* value of 0.386. The indicator (KR1) has the highest *loading factor* value of 0.835. These results show that users consider investing in cryptocurrencies to be more confident than other investment instruments. Therefore, app developers need to pay attention to the psychological effects that consumers feel when using apps.

By adding gamification elements through the application of game design such as points and levels, users can earn XP (*experience points*) every time they make a transaction, complete a tutorial, or participate in other activities in the app. Accumulating points allows users to level up and get additional benefits, such as lower transaction fees. In addition, users can earn rewards for certain achievements, such as completing the first transaction or achieving a certain trading volume. Furthermore, by providing weekly or monthly missions to encourage users to perform certain activities, such as trading a certain amount. Users who successfully reach certain targets of these missions will get rewards, such as reduced transaction fees or exclusive access. By integrating these elements, platform developers can make *cryptocurrency* trading more interesting and enjoyable for their users, as well as increase user engagement and loyalty.

### **Compatibility**

Improving understanding of how blockchain works and its benefits can improve suitability in the eyes of investors. Compliance with applicable regulations is very important in the world of *cryptocurrencies*. App developers need to ensure that all operational aspects

comply with existing regulations, so that investors feel safe and secure. Involvement in the *cryptocurrency* community can increase suitability for investors. Managers should create or participate in discussion forums, social media groups, or community events to build strong relationships with investors.

The results of the hypothesis test found that the suitability had the *fourth highest original sample* value after the conditions of facilitation, attitude and intention. The most influential indicator is compatibility (KE3) which refers to buying crypto assets can provide consumers with additional benefits. Compliance includes buying crypto assets providing consumers with additional benefits. Conformity refers to the degree to which innovation is judged rational and consistent based on previous consumer experience, the existence of value, or product needs.

### **Attitude**

Attitude is one of the main drivers of investment decisions in *cryptocurrencies*. This shows that how individuals view *cryptocurrencies* greatly influences whether they will invest or not. Positive attitudes arise because there is an expectation of profit, such as achieving financial goals or increasing living standards quickly. App developers can emphasize these potential advantages in marketing strategies. App developers need to provide clear and easy-to-understand information about *cryptocurrencies* to form a positive attitude. This includes explaining blockchain technology, potential risks, and investment benefits.

In the context of crypto investment behavior proposed in this study, attitudes can influence users' decisions to invest or use crypto. The results of hypothesis testing found that attitudes have the second highest original sample value after normative beliefs. The statistical result of the highest *loading factor* value in the attitude variable is the indicator (S5) referring to crypto assets worth buying.

Digital currencies always have different types and variable price values because their price value is influenced by market demand, cryptocurrency competition and supply. So that the role of the application developer can provide clear information about the costs and benefits of using the application, as well as ensure that the price of the service is competitive. App developers can also provide transparent portfolio performance reports on the performance of their crypto assets, so users can better assess their investments. To attract new users and retain existing users, app developers may offer promotions, discounts, or loyalty programs.

### **Normative Beliefs**

Normative beliefs reflect the social pressures felt by individuals from their group or community. App developers need to understand that social norms can drive or hinder investment decisions. Facilitating discussion and information sharing in the community can increase investment interest. Recommendations from friends, family, or influencers on social media can influence investment decisions. The results of the hypothesis test found that the attitude had the highest original sample value first. Investors tend to follow behaviors that are considered normal in their communities. Therefore, app developers must create an environment that supports the adoption of *cryptocurrencies*, with an emphasis on the benefits and success of investing in the community. The existence of clear regulations can reinforce the normative belief that investing in *cryptocurrencies* is a legitimate and safe step. App developers must collaborate with authorities to ensure that regulations support the growth of the *cryptocurrency* market without sacrificing consumer protection.

The results of the descriptive analysis found that the normative belief variable of crypto investors agreed to adopt crypto if the technology was easy to use and learn. Users observe the adoption of *cryptocurrencies* as a technology that has a significant impact on daily life with many benefits (convenience, time savings, efficiency, etc.). When users find cryptocurrency investing easy, their expectations of the desired performance increase.

App developers need to create an easy-to-use and intuitive app interface, so that users can quickly understand and operate the existing features. Additionally, app developers can provide tutorial programs that guide users in understanding how to invest in crypto for beginners. By considering these implications, the company can provide satisfactory services to crypto investors so that it will have an impact on increasing application users.

### **Subjective Norms**

Subjective norms reflect an individual's perception of social pressure to make or not to invest in *cryptocurrencies*. Managers need to understand that these norms can come from family, friends, or online communities. Online communities play an important role in shaping subjective norms. App developers can interact with this community, provide support, and answer questions to build trust and reduce doubt. Working with influencers who have relevant followers can help increase the visibility of *cryptocurrencies* and positively influence subjective norms.

Subjective norms reflect the social pressures that individuals feel. Another factor that can influence a person's behavioral intention to adopt technology is social influence. Based on the survey results, the majority of respondents adopted crypto because they were influenced by friends and influencers. It was found that *the highest loading factor* value among the social influence variables was on the subjective norm indicator (NS3), which reflects the people I care about thinking I should buy crypto assets.

The managerial implications that crypto trading app developers need to consider is that it is necessary to educate the public about the benefits and risks of investing in *cryptocurrencies*. By increasing their understanding of *cryptocurrencies* through seminars, workshops, or information campaigns, they can change subjective norms in society. As more people understand and accept *cryptocurrencies* as a valid investment tool, this can increase market participation in social influence. This can be achieved by increasing investment interest, app developers should design a marketing strategy that takes subjective norms into account. This includes using testimonials from respected investors or influencers in the *cryptocurrency* community to build trust and legitimacy. This way, managers can leverage social influence to attract more investors.

### **Self Sufficiency**

To support investor self sufficiency, app developers must ensure that cryptocurrency investment platforms are easy to use. The intuitive interface and good technical support will allow investors to make transactions with confidence without relying on third parties. Providing educational and training programs on *cryptocurrencies* can help investors become more independent in understanding the market and the associated risks. This will improve their ability to critically evaluate investment opportunities. Building a community where investors can share experiences and knowledge is also important. Independence can be enhanced through interaction with fellow investors who have a better understanding of *cryptocurrencies*.

Another factor that can affect a person's behavioral intention to adopt technology is self sufficiency. Based on the survey results, the majority of respondents adopted crypto because they were influenced by friends and influencers. It was found that *the highest loading factor* value among the independence variables was in the indicator (K5), which reflects that consumers can buy crypto assets without anyone's help.

The results of the descriptive analysis showed that the mean mean value for the independence variable ranked second after the facilitation condition. This indicates that in addition to feeling happy with crypto investments, millennial users in Jabodetabek also hope to increase interaction with fellow investors who have a better understanding of *cryptocurrency* investments.



## **Facilitation Conditions**

Cryptocurrency trading app developers are expected to continue to develop technologies that can increase user interest. A smooth, efficient, secure, and reliable system, as well as good risk management in every transaction and payment processing, is essential. Investors need to have access to relevant information and adequate support to make informed investment decisions. This includes market analysis, the latest news, and investment guides. Clear regulations that support innovation can provide legal certainty and protect investors. The government needs to create strict regulations involving cryptocurrency innovation infrastructure and build a virtual currency system infrastructure with rules focused on stablecoins.

The availability of adequate resources and support to make investments also affects intentions. This includes access to the investment platform and the information needed to make decisions. The results of the analysis show that the condition of facilitation is the third important factor in the acceptance of crypto technology. The most influential indicator is the facilitation condition (KPM4) which reflects that consumers have the opportunity to buy and sell crypto assets 24/7, bringing respondents to invest in crypto asset money. Facilitation conditions include external resources, such as knowledge, instruction, or assistance from a mentor that is considered available to a person in using the system.

In addition to presenting robo-advisors to provide investment advice to users, crypto trading platform application managers also need to provide mentor services that can be contacted directly through the application for online consultation. In addition, developers need to organize online classes specifically for beginner investors. A supportive infrastructure is also needed to increase the platform's users. Then developers also need to create apps that are easily accessible on various devices including phones, tablets, and desktops, both Android and iOS. App developers also need to visualize real-time market analysis by presenting price fluctuations, trading activity and transaction volume directly to help users monitor changes in crypto value continuously.

## **Perception of Behavioral Control**

The perception of behavioral control reflects an individual's beliefs about their ability to make investments. App developers need to make sure investors feel they have enough resources, knowledge, and skills. In *the Theory of Planned Behavior* (TPB), the perception of behavioral control is an important factor that influences intentions and behavior. This suggests that investors who feel they have control over their investments are more likely to participate. Perception of behavioral control refers to a person's beliefs about their ability to perform a behavior. The results of the analysis show that the perception of behavioral control is the third important factor in crypto investment decisions. The most influential indicator is the perception of behavioral control (PKP3) which refers to consumers believing that they can easily invest in crypto assets. Perception of behavioral control includes external resources, such as knowledge, instruction, or assistance from a mentor that is considered available to a person in using the system.

## **Financial Literacy**

An individual's level of understanding of finance and investing influences their decisions. The findings in this study show that financial literacy does not have a real and significant impact on their decision to engage in crypto activities. This is supported by several studies showing that financial literacy does not always have a significant effect, a good understanding of the risks and benefits is still important. The most influential indicator is financial literacy (LK1) which refers to consumers wanting to invest in cryptocurrencies because they have a good level of financial knowledge (such as: understanding of financial products, budget management, ability to use financial technology). To improve financial literacy among potential *cryptocurrency investors*, it is important for educational institutions and related

organizations to develop educational programs that focus on financial management and digital investments. The program should include teaching about the risks and benefits of investing in *cryptocurrencies*. Governments and financial institutions also have an important role to play in creating an environment that supports the improvement of financial literacy. This includes providing access to relevant information and resources to help individuals understand *the cryptocurrency market*.

### **Risk Tolerance**

Risk perception associated with fluctuations in the value of *cryptocurrencies* can hinder investment intentions. Individuals who feel that the risk is too high tend to be reluctant to invest. The findings in this study show that the risks perceived by users have a real and significant impact on their decision to engage in crypto activities. The calculation results found that the highest *loading factor* value was at (TR4), which refers to the potential for hacks and security breaches to make investing in cryptocurrencies risky. Therefore, managers or related parties in the crypto industry may need to pay attention to and manage risk perceptions to increase user intent and participation in the crypto ecosystem.

App developers need to prioritize the security of user data by implementing strong encryption, for example, two-factor authentication, which is a security method that requires two forms of identity verification before access is granted. Examples of two-factor authentication processes such as passwords and OTP (*one time password*) codes. Implement education and training programs for users on how to manage risks in crypto transactions and provide transparency regarding the security measures taken to reduce losses. By paying attention to these aspects, developers can build greater trust from users, which in turn will drive the overall growth of the market.

### **Trust**

The findings in this study show that users' trust has a real and significant impact on their decision to engage in crypto investment behavior. The calculation results found that the highest *loading factor* value is trust (KP4), which refers to consumers believing that cryptocurrencies can be trusted. High trust in *cryptocurrency* platforms can increase investment intention. App developers need to ensure that the platform they develop or manage has strong security features and transparency in its operations, so that it can build trust among users.

Trust are also influenced by social norms and recommendations from the community. App developers should consider how to build a supportive community and provide accurate information to potential investors, so that trust in *cryptocurrencies* increases. High trust can reduce the perception of risk associated with *cryptocurrency* investments. Therefore, managers need to focus on clear communication regarding risks and mitigation strategies, to help investors feel more secure in investing. The adoption of new technologies such as blockchain must be accompanied by efforts to build trust. App developers need to show how the technology works and its benefits, to overcome skepticism among investors.

A managerial implication that crypto trading app developers need to consider is user trust in social influence. This can be achieved by supporting *the cryptocurrency* community, for example by integrating the app with discussion forums, Telegram groups, Discord, and other social media. App developers can also implement referral programs by incentivizing users who successfully invite others to use the platform to invest in cryptocurrencies. Additionally, use testimonials from users who have successfully reaped economic benefits from using crypto to build credibility and increase the trust of potential users. Developers can also offer social features such as a reward delivery feature to make it easier for users to interact with other *cryptocurrency* users.

## Intention

The findings in this study show that users' investment intentions have a real and significant impact on their decision to engage in crypto investment behavior. The results of the calculation found that the highest *loading factor* value was in investment intention (N3), which refers to consumers trying to buy crypto assets. Intention is the main predictor of investment behavior. App developers need to understand that the stronger a person's intention to invest in *cryptocurrency*, the more likely they are to do so. Therefore, strategies that encourage positive intentions should be the main focus. Providing accurate and educational information about *cryptocurrencies* can increase investment intent. App developers should provide resources that help investors understand the risks and benefits, as well as how to invest wisely. Building a community around *cryptocurrencies* can increase investment intent. Discussions and interactions in communities can strengthen an individual's confidence to invest.

## CONCLUSION

Based on the results of the study, it was found that the characteristics of most cryptocurrency investment users are for long-term investment or pension funds (44.9%), with the majority of investors dominated by male respondents (73.8%). Most are between 33-37 years old (61.8%), with a bachelor's degree (S1) (52.6%). The income level ranges from IDR 5,000,001 - IDR 7,000,001 (36.9%), the source of investment funds is dominated by salary (70.2%). Other test results analyzed using SEM PLS showed that variables based on the Theory of Planned Behavior (TPB) construct, attitudes, norms, subjective, and perceived behavioral control contributed significantly positively because they had a T statistic value > 1.96 with a p value < 0.05. This means that these variables are important factors in influencing a person's behavioral intentions for making cryptocurrency investment decisions among the millennial generation in Jabodetabek. Unlike other variables, financial literacy has no significant effect, which means that if users have a lack of financial knowledge in terms of financial literacy, users will have a positive attitude towards cryptocurrencies and are more likely to continue adopting them in the future.

Risk tolerance has a significant positive effect on cryptocurrency investment decision-making in the millennial generation in Jabodetabek. The greater the investor's ability to bear losses or volatility, the greater the risk tolerance. In contrast, investors who tend to avoid market uncertainty and fluctuations have a lower risk tolerance. Risk tolerance is also not something that can change as economic, social, and personal financial conditions change in an investor. It is also known that trust has a positive and significant effect on cryptocurrency investment decision-making in the millennial generation in Jabodetabek. Trust plays a decisive role in influencing users' perceptions of how easy and useful a technology is. Therefore, trust has emerged as the key that shapes user behavior, especially regarding the ease of use and usability of technology. Influencing cryptocurrency investments, such as *reward sensitivity*, *habit*, *market trends*, *regulatory environments*, *perceived traceability*, *perceived anonymity*, and other variables so as to obtain comprehensive and in-depth results related to factors that affect investment behavior.

## REFERENCE

- Abbasi, G. A., Tiew, L. Y., Tang, J., Goh, Y. N., & Thurasamy, R. (2021). The adoption of cryptocurrency as a disruptive force: Deep learning-based dual stage structural equation modelling and artificial neural network analysis. *Plos one*, 16(3), e0247582.
- Abdullah, N. S. N., Basarud-Din, S. K., & Abdullah, N. K. (2024). Investigating Factors Affecting the Investors' Intention to Accept Cryptocurrency Investment in Malaysia. *International Journal of Economics and Management*, 18(1), 1-19.
- Abdul-Rahim R, Bohari SA, Aman A, Awang Z (2022) Benefit–risk perceptions of f intech

- adoption for sustainability from bank consumers' perspective: the moderating role of fear of COVID-19. *Sustainability* (Switzerland), 14(14). <https://doi.org/10.3390/su14148357>
- Ahmad, M. and Shah, S. Z. A., 2022. Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Sciences*, 38(1), pp. 60-90.
- Ainia, N. S. N., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business, & Accountancy Ventura*, 21(3), 401-413.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Akther T, Nur T (2022) A model of factors influencing COVID-19 vaccine acceptance: a synthesis of the theory of reasoned action, conspiracy theory belief, awareness, perceived usefulness, and perceived ease of use. *PLoS ONE* 17(Jan):1–20. <https://doi.org/10.1371/journal.pone.0261869>
- Akinbode, M., Adegbuyi, O., Kehinde, O., Agboola, M. G., & Olokundun, A. M. (2010). Percieved value dimensions on online shopping intention: The role of trust and culture. *Academy of Strategic Management Journal*, 18(1).
- Albayati H, Kim SK, Rho JJ (2020) Accepting financial transactions using blockchain technology and cryptocurrency: a customer perspective approach. *Technol Soc* 62:101320. <https://doi.org/10.1016/j.techsoc.2020.101320>
- Allen F, Gu X, Jagtiani J (2022) Fintech, cryptocurrencies, and CBDC: financial structural transformation in China. *J Int Money Financ* 124:102625. <https://doi.org/10.1016/j.jimonfin.2022.102625>
- Alleyne, P., & Broome, T. (2011). Using the Theory of Planned Behaviour and Risk Propensity to Measure Investment Intentions among Future Investors. *Journal of Eastern Caribbean Studies*, 36(1), 1–20.
- Alomari, A. S. A., & Abdullah, N. L. (2023). Factors influencing the behavioral intention Cryptocurrency to use among Saudi Arabian public university students: Moderating role of financial literacy. *International Journal of Information Management*, 67.
- Anser, M. K., Zaigham, G. H. K., Imran Rasheed, M., Pitafi, A. H., Iqbal, J., & Luqman, A. (2020). Social media usage and individuals' intentions toward adopting Bitcoin: The role of the theory of planned behavior and perceived risk. *International journal of communication systems*, 33(17), e4590.
- Arias, O. M., Pelegrin, B. J., & Matias, C. G. (2019). Variables Influencing Cryptocurrency Use: A Technology Acceptance Model in Spain. *Frontiers in Psychology*, 10(475). [doi.org/10.3389/fpsyg.2019.00475](https://doi.org/10.3389/fpsyg.2019.00475).
- Ashidiqi, C., & Arundina, T. (2017). Indonesia Students's intention to invest in Sukuk : Theory of planned behaviour approach. *International Journal of Economic Research*, 14(15), 395–407.
- Ates, Cinema; Coskun, Ali; Sahin M. Abdullah & Demircan, M.Levent. (2016). Impact of Financial Literacy on the Behavioral Biases of Individual Stock Investors: Evidence from Borsa Istanbul. *Business and Economic Research Journal*, 7(3), 1-19
- Ayedh, A., Echchabi, A., Battour, M., & Omar, M. (2021). Malaysian muslim investors' behaviour towards the blockchain-based Bitcoin cryptocurrency market. *Journal of Islamic Marketing*, 12(4), 690–704. <https://doi.org/10.1108/JIMA-04-2019-0081>
- Bappebti. 2023. Bappebti Performance Report 2023.
- Bappebti. (2024, October 09). Indonesia's Crypto Industry Soars: Transactions Reach IDR 391.01 Trillion by August 2024. Retrieved from [https://bappebti.go.id/pojok\\_media/detail/15493](https://bappebti.go.id/pojok_media/detail/15493)

- Bloomberg, J. (2017, December 28). Using Bitcoin or Other Cryptocurrency to Commit Crimes? Law Enforcement Is To You. Retrieved from <https://www.forbes.com/sites/jasonbloomberg/2017/12/28/using-bitcoin-or-other-cryptocurrency-to-commit-crimes-law-enforcement-is-onto-you/>
- Briere, M., Oosterlinck, K., & Szafarz, A. (2015). Virtual currency, tangible return: Portfolio diversification with bitcoin. *Journal of Asset Management*, 16, 365- 373.
- Budiman, I., Maulana, Z., & Kamal, S. (2021). The Influence of Financial Literacy, Experienced Regret, and Overconfidence on Investment Decision Making in the Capital Market. *Journal of Management Strategy and Business Applications*, 4(2), 321-330.
- Çalışkan, K., & Turan, A. H. (2025). Factors influencing blockchain-based cryptocurrency adoption: empirical evidence from an emerging economy. *The Bottom Line*.
- Chainalysis (2024). Global Adoption Index 2024: Central & South Asia and Oceania (CSAO) Region Leads the World in Global Cryptocurrency Adoption. Retrieved from <https://www.chainalysis.com/blog/2024-global-crypto-adoption-index/>
- Chan, R., Troshani, I., Hill, S. R. and Hoffmann, A., 2022. Towards an understanding of consumers' FinTech adoption: The case of Open Banking. *International Journal of Bank Marketing*, 40, pp. 886–917
- Cheah, E. T., & Fry, J. (2015). Speculative bubbles in Bitcoin markets? An empirical investigation into the fundamental value of Bitcoin. *Economics Letters*, 130, 32–36. <https://doi.org/10.1016/j.econlet.2015.02.029>
- Chen, X., Zhang, X., & Wei, X. (2021). Does trust in cryptocurrencies matter? The impact of institutional trust on cryptocurrency investment intention. *International Journal of Information Management*, 58, 102327.
- Chen, X., Miraz, M. H., Gazi, M. A. I., Rahaman, M. A., Habib, M. M., & Hossain, A. I. (2022). Factors affecting cryptocurrency adoption in digital business transactions: The mediating role of customer satisfaction. *Technology in Society*, 70, 102059.

