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The Impact of Competitiveness, Information Technology, Risk Perception, and Financial Literacy on The Intention to Invest in Cryptocurrency

Satriya Miko¹, Aditya Wahyu Tri Atmaja², Risna Mawardah³, Syifa Dwi Zulfa⁴,
Fernando Siboro⁵, Arif Marjuki⁶

Informatics Engineering^{1,2}, Computerized Accounting^{3,4}, Information Technology⁵,
Informatics Management⁶

University of Raharja

Modern, Jl. General Sudirman No. 40, Cikokol, Kec. Tangerang, Tangerang City, Banten
15117
Indonesia

e-mail: satriya.miko@raharja.info¹, aditya.atmaja@raharja.info², risna@raharja.info³,
syifa.dwi@raharja.info⁴, fernanda.siboro@raharja.info⁵, arif.marjuki@raharja.info⁶

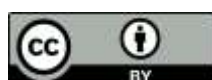
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Abstract

This study aims to analyze the impact of competence, information technology, risk perception, and financial literacy on interest in investing in cryptocurrency. The method used is quantitative, with data collected from 98 respondents through simple random sampling. The focus of this research is to reveal the relationship between factors that influence the interest of individuals who invest in cryptocurrencies. The results show that competency, information technology, risk perception, and financial literacy simultaneously or partially have a positive and significant effect on interest in cryptocurrency investment. These results suggest that the higher the competence of individuals in the field of financial knowledge and understanding of information technology, the greater their interest in investing in cryptocurrencies. In addition, the perception of low risk and high levels of financial literacy also contribute to increased interest in investing in cryptocurrencies. This research makes an important contribution in understanding the factors that influence the interest of individuals interested in cryptocurrencies. In the era of the rapidly developing digital economy, a deeper understanding of the impact of competency, information technology, risk perception and financial literacy has the potential to assist decision makers in developing more effective investment strategies and reducing risks. These findings also provide deeper insight into the dynamics of the cryptocurrency market and the consequences of growing investment in this sector. This research has actual relevance in the context of cryptocurrency investment, where the influence of factors such as competence, information technology, risk perception, and financial literacy on interest in investing is still not fully revealed. Through the help of the significant relationship between these factors and investment intentions, this research provides valuable insights for practitioners, academics, and decision makers to better understand and manage cryptocurrency investments more effectively. Thus, this research also makes an important contribution in developing knowledge and managing cryptocurrency investments in this increasingly digital era.

Keywords: Information Technology, Cryptocurrency Investment, Digital Economy, Financial Knowledge, Investment Strategies



1. Introduction

Cryptocurrency is a virtual currency that is used as an alternative currency where the currency is generated and traded through a cryptographic process [1]. Most of these Cryptocurrencies are decentralized in computer-based networks and are based on peer-to-peer technology and open source cryptography that do not depend on a central authority such as a central bank or other administrative institution [2]. The use of Cryptocurrency was first recorded in 2009, namely a currency known as Bitcoin [3],[4]. The currency was invented by a person or group using the pseudonym Satoshi Nakamoto in a publication entitled "Bitcoin: A Peer-to-Peer Electronic Cash System" [5]. At first, Bitcoin cost less than a dollar until February 2011 but then increased and reached an all-time high of \$1151/coin on December 4, 2013.

Investment has started to be in great demand and is being practiced among the public or students [6]. This is evidenced by the existence of several investments such as stocks, bonds, property and precious metals. But not a few of the people have no interest in investing, because there are some who think that investing is difficult and requires large capital [7]. It is known that Indonesia is one of the developing countries, however, the awareness and interest of the Indonesian people in investing is still relatively low. financially, the community is still short-term or in the savings society category. When compared to other developed countries, its orientation is more long-term or in the investing society category [8].

A number of things are thought to influence a person's interest in investing in the capital market, such as competency in understanding one's techniques for investing in the capital market [9]. Competence is an ability to carry out or carry out a job or task that is based on skills and knowledge and is supported by the work attitude demanded by the job. An investor should have learned and knows many things related to investment. This research was carried out so that readers, especially investors who wish to participate in Crypto Currency investments, can understand the aspects required before investing in Crypto Currency.

Advances in technological growth are things that cannot be avoided in this life. Technological growth is not something new in the modern era as it is today. It cannot be denied that every day, month and even year, technology unknowingly continues to grow to be better. It is not wrong to say that technological growth provides many conveniences for users around the world. Information technology is a technology that is related to processing data into information and the process of channeling this data/information within the limits of space and time.

Generation z, is the generation that is able to explore the growth in the use of digital technology. Investment has begun to be in great demand and is being practiced among the public or students [10]. There is so much information about the types and ways of investing available, especially on the internet media. Since the opening of the Indonesian Stock Exchange (IDX), the general public has had easy access to investment in the capital market [11]. For this reason, the role of information technology is very important in interest in CryptoCurrency investment because there is still a lack of knowledge about this type of investment [12].

Interest in investing among the public is quite large, especially at the beginning of learning, but not a few from the community discourage when the theory learned is practiced in the real world, there are many factors that influence why this happens, including the limited remaining pocket money that can be used for investment, the lack of time to carry out and supervise transactions, investment learning that is still limited, and fear of the risks faced. Not a few of them have fallen into illegal investments that are not registered with the Financial Services Authority, with the promise of big profits and no risk, many of the students are interested.

Financial literacy has been of particular concern in various countries in recent years, this is because each country wishes to shape the way of thinking of its population so that it has a good financial mindset and quality in managing finances. Financial literacy includes concepts that start from awareness and understanding of financial products, financial institutions, and concepts regarding financial skills such as the ability to calculate compound interest payments as well as more general financial capabilities such as money management. and financial planning [13]. Thus, it is expected to be able to have a positive impact on the wheels of the country's economy itself. financial concepts and do not have the knowledge to manage and make financial decisions in the future.

With this special attention to financial literacy, it is hoped that the community will be more knowledgeable, capable and have skills in managing and making financial decisions

properly, so that they can contribute to financial system stability and can reduce vulnerability to the financial system. Based on this index number [14], it reflects that society in terms of financial literacy is still based on this index number, it reflects that people in terms of financial literacy are still low, and have not yet accessed financial products and services [15]. In this case, efforts need to be made to foster and increase people's financial literacy from an early age to maturity, one way that can be done is through financial education.

2. Research Method

The simple random sampling method, which is used as a sample selection technique, guarantees that every member of the population has an equal chance of being selected as the research sample. This process begins with the creation of a comprehensive list of the entire population of 129 individuals who are actively involved in the cryptocurrency ecosystem. Furthermore, by using a random approach, as many as 98 individuals were randomly selected from the list to be used as research samples.

The decision to adopt the simple random sampling method was based on our aim to produce a balanced and unbiased representation of the study population. By applying this method, we seek to reduce potential bias in sample selection and obtain more accurate results that reflect the overall characteristics of the population we are studying.

Thus, the simple random sampling method with a total sample of 98 individuals participating in the cryptocurrency ecosystem was selected and applied in this study. This method is expected to be able to provide relevant and necessary data to answer research questions and achieve the research objectives that we have set. Openness and transparency in this research method are key factors in maintaining the credibility and validity of the findings that we will present.

2.1 Literature Review

- **Competence Influence Theory on Investment Interest**

An individual will have beliefs or references regarding the approval or disapproval of a person or group that is important to an individual towards a behavior, which will affect the intention that shows the behavior to invest [16].

Includes knowledge of financial concepts, ability to communicate financial concepts, talent in managing individual finances, (expertise in making the right financial decisions, and confidence in planning effectively for interest in investing [17].

A person's self-efficacy can be influenced by several factors, namely culture, gender, the nature of the task at hand, and external incentives. Self-efficacy is significantly influenced by financial knowledge [18].

- **Theory of Influence of Information Technology on Investment Interest**

Social media technology can affect investment intentions. Current technological advances have provided convenience, security, access that reaches all levels of society, as well as information and insights about investment in the capital market that can be widely disseminated which can affect a person's interest in investing, especially in the capital market. These results show that the availability of facilities and infrastructure that make it easy for students to invest has proven to have an impact on investment interest [19].

The growth in the percentage of investors that has increased well, including the capital market, is one of the reasons for the ease and convenience available for investors to invest. This is driven by the development of increasingly advanced capital market technology making it easier to make investments [20].

- **Theory of the Effect of Perceived Risk on Investment Interest**

The results of research conducted by [20] show that investment knowledge, expected return, and perceived risk have a positive effect on investment interest. In this study, perceived risk is measured by looking at how much investors feel the risk of their investment. The results of this study indicate that the higher the perceived risk, the lower the interest in investing.

According to (Kumala, 2023) in his research examined the effect of risk perception and the social environment on interest in investing in the capital market moderated by social media. The results of the study show that perceived risk and the social environment have a positive effect on investment intentions. However, this influence can be moderated by the use of social media. In this study, perceived risk is measured by looking at how much investors feel the risk of their investment.

Research conducted by (Limgestu, 2023) aims to determine the effect of anchoring and perceived risk on the investment decisions of Indonesian Islamic investors. The results showed that anchoring and perceived risk have a negative effect on investment decisions. In this study, perceived risk is measured by looking at how much investors feel the risk of their investment.

- **Theory of Influence of Financial Literacy Level on Investment Interest**

Research conducted by (Fedias Saputra, 2021) shows that financial literacy has a positive effect on interest in investing in the capital market. In this study, financial literacy is measured by looking at how much investors know about investment and the capital market. The results of this study indicate that the higher the level of financial literacy, the higher the interest in investing.

The results of research conducted by (Apriyanti, 2023) show that investment knowledge and financial literacy have a positive effect on investment interest for beginners in the capital market. In this study, financial literacy is measured by looking at how much investors know about investment and the capital market. The results of this study indicate that the higher the level of financial literacy and investment knowledge, the higher the interest in investing.

Financial literacy has an important role in increasing interest in investing in the capital market. This was confirmed by the Financial Services Authority (OJK) who stated that financial literacy has a long-term goal for all groups of people, namely increasing the literacy of someone who previously did not understand or did not understand finance at all. By increasing financial literacy, it is hoped that people can understand investment and the capital market so that they can increase interest in investing.

3. Results and Discussion

3.1 Descriptive Statistics

The minimum value of the Competency variable is 6 and the maximum is 30, the mean value is 19.04 and the standard deviation is 6.791. The minimum value of the information technology variable is 6 and the maximum is 30, the mean value is 20.71 and the standard deviation is 6.136. The minimum value of the risk perception variable is 6 and the maximum is 30, the mean value is 19.70 and the standard deviation is 6.514. The minimum value of the financial literacy level variable is 6 and the maximum is 30, the mean value is 16.94 and the standard deviation is 7.736. The minimum value of the investment interest level variable is 8 and the maximum is 40, the mean value is 26.07 and the standard deviation is 7.613.

3.2 Research Model

A constant of 5,776 states that if the variables of competency, information technology, risk perception and level of financial literacy do not exist or are constant, the interest in crypto currency investment variable will be 5,776 units. The regression coefficient of the competency variable is 0.261 and is positive, this means that if each increase in the competency variable is 1 unit, it will increase the interest in crypto currency investment variable by 0.261 units assuming other variables are constant.

Table 1. Multiple Linear Regression Analysis

Unstandardized			
Model	t	Significant	Coefficients
Financial Literacy Level	4.118	0	0.335
Perception of Risk	2.079	0.040	0.209
Information Technology	2.611	0.011	0.268
Competence	2.656	0.009	0.261
(Constant)	2.987	0.004	5.776

Source: Results of data processing, 2022

Adjusted R Square = 0.588 F = 35.627

A constant of 5,776 states that if the variables of competency, information technology, risk perception and level of financial literacy do not exist or are constant, the interest in crypto currency investment variable will be 5,776 units. The regression coefficient of the competency variable is 0.261 and is positive, this means that if each increase in the competency variable is 1 unit, it will increase the interest in crypto currency investment variable by 0.261 units assuming other variables are constant.

The regression coefficient of the information technology variable is 0.268 and has a positive value, this states that if every increase in the information technology variable by 1 unit will increase the interest in crypto currency investment variable by 0.268 units assuming other variables are constant. The regression coefficient of the risk perception variable is 0.209 and has a positive value, this states that if each increase in the risk perception variable by 1 unit will increase the interest in crypto currency investment variable by 0.209 units assuming other variables are constant.

The regression coefficient of the financial literacy level variable is 0.335 and is positive, this states that if every increase in the financial literacy level variable by 1 unit will increase the interest in crypto currency investment variable by 0.335 units assuming other variables are constant. The test results for the coefficient of determination can be seen from the Adjusted R Square value of 0.588 or 58.8%

Shows a variation in the variable interest in cryptocurrency investment which can be explained by variations in competence, information technology, risk perception and level of financial literacy while the remaining 41.2% (100% - 58.8%) is explained by other variables not examined in this study, such as education, experience, age of the respondent and so on.

The test results obtained calculated F_{value} (35.627) > F_{table} (2.47) and a significance probability of $0.000 < 0.05$, meaning that H_5 is accepted, namely competence, information technology, risk perception and financial literacy level have a positive and significant effect on interest crypto currency investment.

The results of partial hypothesis testing obtained $t_{\text{count}} > t_{\text{table}}$ or $2.656 > 1.986$ and significantly obtained $0.009 < 0.05$, meaning that H_1 is accepted, namely competence has a positive and significant effect on interest in crypto currency investment.

The results of partial hypothesis testing obtained $t_{\text{count}} > t_{\text{table}}$ or $2.611 > 1.986$ and significantly obtained $0.011 < 0.05$, meaning that H_2 is accepted, namely partially information technology has a positive and significant effect on interest in crypto currency investment.

The results of partial hypothesis testing obtained $t_{\text{count}} > t_{\text{table}}$ or $2.079 > 1.986$ and significantly obtained $0.040 < 0.05$, meaning that H_3 is accepted, namely partially perceived risk has a positive and significant effect on interest in crypto currency investment.

The results of partial hypothesis testing obtained $t_{\text{count}} > t_{\text{table}}$ or $4.118 > 1.986$ and

significantly obtained $0.000 < 0.05$, meaning that H4 is accepted, namely partially the level of financial literacy has a positive and significant effect on interest in crypto currency investment.

4. Conclusion

The conclusion drawn from this study encompasses three key aspects. Firstly, it is evident that individual competencies play a pivotal role in shaping a positive and significant inclination towards investing in cryptocurrency. Similarly, the influence of information technology is noteworthy, as it also demonstrates a substantial and constructive impact on the interest in cryptocurrency investment. Moreover, the findings underscore that perceived risk, when considered in isolation, exerts a favorable and significant influence on the interest in crypto investment. Additionally, the level of financial literacy contributes significantly to fostering an increased interest in cryptocurrency investment. Furthermore, when viewed collectively, the combined effects of competence, information technology, risk perception, and financial literacy amplify the positive and significant interest in investing within the realm of cryptocurrency.

Efforts geared towards enhancing competency, information technology proficiency, risk perception evaluation, and financial literacy have the potential to stimulate a heightened desire for cryptocurrency investment. This suggests that endeavors to bolster these attributes could substantially encourage more individuals to engage in cryptocurrency investment.

For future researchers, the scope of inquiry could be broadened by introducing supplementary variables beyond those explored in this study, such as educational background, experiential factors, and age demographics of the respondents. Such expansions in the range of variables considered would provide a more comprehensive understanding of the factors influencing interest in cryptocurrency investment and contribute to a more holistic comprehension of this dynamic field.

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