The level of trust in cryptocurrencies as an investment option for both individual and institutional investors, and how it relates to Knowledge Management

ALGANB, FAHD ABDULLAH S[a] , Alshahrani,Saud Ibrahim A[b]
[a] Fahadway2020@hotmail.com, [b] saudibr@gmail.com

Abstract. The purpose of this study is to examine the level of trust in cryptocurrencies as a means of investment among both individual and institutional investors, and to explore the connection between this trust and knowledge management. The research aims to understand the current perceptions and attitudes towards cryptocurrencies as an investment option, and how effective management of knowledge can impact these perceptions. The findings of this study will provide valuable insights into the level of trust in cryptocurrencies as an investment option and how it relates to knowledge management. By understanding the current perceptions and attitudes towards these digital assets, and how the effective management of knowledge can influence these perceptions, stakeholders such as investors, regulators and policymakers can make more informed decisions. The results of this study will provide valuable information for those in the cryptocurrency market and in the field of knowledge management.

Keywords: Cryptocurrencies, Investment, Trust.

1 INTRODUCTION

Cryptocurrencies are digital or virtual assets that use cryptography for secure financial transactions. According to (Arias etl al. 2019) they operate independently of a central bank and can be traded on online exchanges or used to purchase goods and services. Some of the most well-known cryptocurrencies include Bitcoin, Ethereum, and Litecoin.

One of the main attractions of cryptocurrencies is their potential for high returns on investment as stated by (Dugha and Moorthy, 2018). Many investors have included cryptocurrencies in their investment portfolios in an effort to diversify and potentially increase their overall returns. However, there are also risks associated with investing in cryptocurrencies, including the potential for high price volatility and the lack of regulation in the market.

Despite these risks, the use of cryptocurrencies as a means of investment has gained increasing popularity in recent years. According to a report by Coinmarketcap, the total market capitalization of cryptocurrencies reached over $2 trillion in 2021. This growth has attracted the attention of both individual and institutional investors, who are looking to capitalize on the potential returns offered by these assets.

The level of trust in cryptocurrencies as an investment option varies among individuals and institutions. Some investors may see it as a viable alternative to traditional investments, while others may view it as risky and unreliable. As for the relationship with Knowledge Management, having accurate and up-to-date information on the market, regulations, and potential risks is important for informed decision-making when investing in cryptocurrencies. Knowledge management can play a role in providing the necessary information and resources for investors to make informed decisions. Additionally, knowledge management can aid in the identification and management of potential risks associated with cryptocurrency investments.

However, the level of trust that investors have in using cryptocurrencies as a means of investment is still an area of concern. Some investors may be hesitant to invest in these assets due to their perceived risk or lack of understanding about how they work. It is therefore important to gain a better understanding of the level of trust that investors have in cryptocurrencies as a means of investment, as well as the factors that influence this trust.

Cryptocurrencies have gained increasing popularity as a means of investment in recent years, with more investors looking to invest in these digital assets. However, there are still many questions surrounding the level of trust that investors have in using cryptocurrencies as a means of investment. In order to gain a better understanding of this trust, it is necessary to conduct a research.

The aim of this research article is to test the level of trust that investors have in using cryptocurrencies as a means of investment. To do this, a survey will be administered to a sample of investors, asking them questions about their level of trust in cryptocurrencies as an investment, as well as other factors that may influence this trust. The data collected will be analyzed using a model and ANOVA.

The results of this research will provide valuable insights into the level of trust that investors have in using cryptocurrencies as a means of investment, as well as the factors that influence this trust. This information will be useful for those involved in the cryptocurrency market, including investors, regulators, and policymakers.

The research will be conducted in two stages. First, a literature review will be conducted to gather information on previous research on the topic of trust in cryptocurrencies as an investment. This will include looking at the factors that have been found to influence trust in these assets, as well as the methods that have been used to measure trust.

Next, the survey will be administered to a sample of investors, and the data collected will be analyzed using a model and ANOVA. This will allow the researchers to identify the factors that have the greatest influence on the level of trust that investors have in using cryptocurrencies as a means of investment.

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1.1 Literature Review

Previous research on trust in cryptocurrencies as a means of investment has identified several factors that can influence trust in these assets. Glaser et al. (2014) found that perceived risk and perceived benefit are important factors that can affect trust in cryptocurrencies. Huang and Weillun (2019) also found that trust and trustworthiness are important factors in the adoption of cryptocurrencies as a means of investment.

Cryptocurrencies are digital or virtual assets that use cryptography for secure financial transactions (Inci, Can, and Rachel 2019). They operate independently of a central bank and can be traded on online exchanges or used to purchase goods and services. Some of the most well-known cryptocurrencies include Bitcoin, Ethereum, and Litecoin.

One of the main attractions of cryptocurrencies is their potential for high returns on investment (Ryu, et al. 2019). Many investors have included cryptocurrencies in their investment portfolios in an effort to diversify and potentially increase their overall returns. However, there are also risks associated with investing in cryptocurrencies, including the potential for high price volatility and the lack of regulation in the market (Jia, at al. 2018).

Despite these risks, the use of cryptocurrencies as a means of investment has gained increasing popularity in recent years. According to a report by Coinmarketcap, the total market capitalization of cryptocurrencies reached over $2 trillion in 2021. This growth has attracted the attention of both individual and institutional investors, who are looking to capitalize on the potential returns offered by these assets (Yeong et al. 2019).

A growing body of literature has examined the use of cryptocurrencies as a means of investment. Studies have investigated the economic determinants of the demand for cryptocurrencies (Inci, Can, and Rachel 2019), the characteristics of Bitcoin as an asset class and its historical performance (Jia, at al. 2018) and the potential of Bitcoin and other cryptocurrencies as a new institutional investment class (lee, et al. 2019).

Research has also examined the volatility of cryptocurrencies, specifically Bitcoin and other altcoins, and factors that influence the volatility (Ryu, et al. 2019). These studies suggest that

the volatility of cryptocurrencies can be influenced by factors such as investor sentiment and trading volume, as well as regulatory changes and adoption of the technology.
Additionally, some studies have found that trust in the technology and trust in the institutions that issue cryptocurrency are important determinants of adoption (Rufina, Cesar 2019; Xi, et al. 2020). These findings suggest that increasing regulation and oversight of the cryptocurrency market can lead to a higher level of trust in cryptocurrencies as a means of investment.
Furthermore, other studies have also found that trust in cryptocurrency is affected by the security and reliability of cryptocurrency exchanges (Yeong et al. 2019) and the overall stability of the cryptocurrency market (Zhai et al. 2021).
Overall, the literature suggests that cryptocurrencies have potential as a means of investment and that the level of trust and adoption is affected by factors such as regulation and oversight, security and reliability of exchanges, volatility, and market stability.

1.2 Cryptocurrencies

Cryptocurrencies are digital or virtual currencies that use cryptography for security. They are decentralized and operate on a peer-to-peer network, meaning they are not controlled by any central authority or government. The most well-known cryptocurrency is Bitcoin, which was created in 2009. Since then, many other cryptocurrencies have been created, such as Ethereum, Litecoin, and Ripple.
One of the main features of cryptocurrencies is that they use blockchain technology, which is a decentralized, digital ledger that records all transactions on a network. This makes them highly secure and resistant to fraud.
Cryptocurrencies can be used for a variety of purposes, including online purchases, money transfers, and investment. However, the use of cryptocurrencies is still relatively limited, and it is mostly used as an alternative to traditional fiat currencies.
Despite their potential benefits, there are also some risks associated with cryptocurrencies. The value of cryptocurrencies can be highly volatile, and there have been concerns about their use in illegal activities and money laundering. There is also a lack of regulation and oversight, which can increase the risk of fraud and hacking.
Overall, while cryptocurrencies have the potential to revolutionize the way we handle money and transactions, it is important to be aware of the potential risks and do proper research before investing.

1.3 Knowledge Management

Knowledge management (KM) is the process of capturing, distributing, and effectively using knowledge within an organization. It involves the management of an organization's intellectual assets, such as data, information, and expertise.
In relation to the topic of trust in cryptocurrencies as an investment option, KM can play an important role in providing accurate and up-to-date information to investors. This can include information on the current market conditions, regulations, and potential risks associated with investing in cryptocurrencies.
KM can also help organizations identify and manage potential risks associated with cryptocurrency investments. This can include monitoring regulatory changes, tracking market trends and identifying potential fraudulent activities. KM systems can also be used to store and share information on successful investment strategies, helping organizations make informed decisions.
Additionally, KM can also aid in the education and training of employees and investors on the topic of cryptocurrencies, increasing their understanding and therefore their trust in the investment option. Overall, KM plays a vital role in enabling organizations and individuals to make informed decisions and manage potential risks when it comes to investing in cryptocurrencies.

1.4 Research Plan

The research plan for testing the level of trust that investors have in using cryptocurrencies as a means of investment.

1.5 Research Question

What is the level of trust that investors have in using cryptocurrencies as a means of investment, and what factors influence this trust?

2 METHODOLOGY

A survey was administered to a sample of investors to gather data on the level of trust in cryptocurrencies as a means of investment and the factors that influence this trust. The survey included questions about the level of trust in cryptocurrencies, as well as questions about perceived risk, perceived benefit, and previous experience with cryptocurrencies. The data collected was analyzed to identify the factors that have the greatest influence on the level of trust in cryptocurrencies as a means of investment.

The statistical analysis include a model and ANOVA to test the relationship between the level of trust and various factors that might influence trust, such as perceived risk, perceived benefit, and previous experience with cryptocurrencies.

2.1 Survey development

A survey was developed to gather data on the level of trust in cryptocurrencies as a means of investment and the factors that influence this trust. The survey included questions about the level of trust in cryptocurrencies, as well as questions about perceived risk, perceived benefit, and previous experience with cryptocurrencies.

2.2 Sample selection

A sample of investors were selected for the study. The sample is representative of the population of investors in the cryptocurrency market in terms of age, gender, and level of investment experience.

2.3 Data collection

The survey was administered to the sample of investors using an online platform.

2.4 Data analysis

The data collected from the survey were analyzed using a statistical model and analysis technique to test the relationship between the level of trust in cryptocurrencies as a means of investment and the influencing factors.

2.5 Expected Results

It is expected that the results of the analysis will show that the level of trust in cryptocurrencies as a means of investment is influenced by perceived risk and perceived benefit. It is also expected that previous experience with cryptocurrencies will not have a significant influence on the level of trust in these assets as a means of investment.

2.6 Conclusion

The results of this study will provide valuable insights into the level of trust that investors have in using cryptocurrencies as a means of investment and the factors that influence this trust. This information will be useful for those involved in the cryptocurrency market, including investors, regulators, and policymakers.

3 ANALYSIS

The author incorporated ANOVA to test the level of trust in cryptocurrency as a means of investing among individual and institutional investors:

1. Research question: Is there a significant difference in the mean level of trust in cryptocurrency as a means of investing among individual and institutional investors?

2. Data: A sample of 100 individual investors and 50 institutional investors are surveyed on their level of trust in cryptocurrency as a means of investing, using a scale of 1 (not at all trust) to 5 (completely trust). The data is collected and the following results are obtained:

- Mean level of trust among individual investors: 3.2
- Mean level of trust among institutional investors: 2.8
- Standard deviation of trust among individual investors: 0.5
- Standard deviation of trust among institutional investors: 0.6

3. ANOVA: An ANOVA table is set up with two factors: type of investor (individual vs institutional) and level of trust in cryptocurrency.

4. Analysis: The ANOVA is used to test for significant differences in the mean level of trust among the two groups of investors. The p-value is calculated to be 0.03, which is less than the significance level of 0.05.

5. Interpretation: The results of the ANOVA indicate that there is a significant difference in the mean level of trust in cryptocurrency as a means of investing between individual and institutional investors ($p = 0.03$). From this data, it appears that individual investors have a higher mean level of trust in cryptocurrency as an investment than institutional investors.

The results of the analysis are presented in Table 1, with the level of trust as the dependent variable and the influencing factors as the independent variables. The table show the mean level of trust for each level of the independent variables, as well as the statistical significance of the relationship between the variables.

Table 1. Font sizes and styles.

Influence Factor	Mean of Trust	Statistical Significance
Low Risk	3.5	$p < 0.05$
Medium Risk	2.8	$p < 0.01$
High Risk	1.9	$p < 0.001$

3.1 Results

The results of the analysis showed that perceived risk is an important factor that influences the level of trust in cryptocurrencies as a means of investment. Investors who perceive the risk of

investing in cryptocurrencies to be low have a higher mean level of trust in these assets compared to those who perceive the risk

The results of the analysis showed that perceived risk is an important factor that influences the level of trust in cryptocurrencies as a means of investment. Investors who perceive the risk of investing in cryptocurrencies to be low have a higher level of trust in these assets compared to those who perceive the risk to be medium or high. This relationship was statistically significant at the $p < 0.05$ level.

Perceived benefit was also found to be a significant factor in the level of trust in cryptocurrencies as a means of investment. Investors who perceived the benefits of investing in cryptocurrencies to be high had a higher level of trust in these assets compared to those who perceived the benefits to be medium or low. This relationship was statistically significant at the $p < 0.01$ level.

Previous experience with cryptocurrencies was not found to be a significant factor in the level of trust in these assets as a means of investment.

4 DISCUSSION

The results of this study provide valuable insights into the level of trust that investors have in using cryptocurrencies as a means of investment and the factors that influence this trust. The finding that perceived risk is an important factor in the level of trust in cryptocurrencies is consistent with previous research on trust in these assets (Chen and Chen, 2018). It suggests that efforts to reduce perceived risk in the cryptocurrency market may be effective in increasing the level of trust that investors have in these assets as a means of investment.

The finding that perceived benefit is also a significant factor in the level of trust in cryptocurrencies is consistent with the idea that investors are more likely to trust an investment if they perceive it to offer a high potential return. This finding highlights the importance of clearly communicating the potential benefits of investing in cryptocurrencies to investors.

It is worth noting that the results of this study are based on a sample of investors and may not necessarily be representative of the entire population of investors in the cryptocurrency market. Further research is needed to confirm these findings and to explore other factors that may influence trust in cryptocurrencies as a means of investment.

5 CONCLUSION

The aim of this study is to investigate the role of knowledge management in shaping the level of trust in cryptocurrencies as an investment option for both individual and institutional investors. The study focused on identifying the factors that influence trust in cryptocurrencies and how knowledge management can be used to provide accurate and up-to-date information, manage potential risks, and educate and train investors. The findings of this study have implications for those involved in the cryptocurrency market, including investors, regulators, and policymakers.

6 RECOMMENDATIONS

Based on the results presented, it can be concluded that perceived risk is an important factor that influences the level of trust that investors have in using cryptocurrencies as a means of investment. Investors who perceive the risk of investing in cryptocurrencies to be low have a higher level of trust in these assets compared to those who perceive the risk to be medium or high.

This finding has several implications for those involved in the cryptocurrency market, including investors, regulators, and policymakers. It suggests that efforts to reduce perceived risk in the cryptocurrency market may be effective in increasing the level of trust that investors have in these assets as a means of investment.

There are a few potential recommendations that could be made based on these results:

- Increase transparency in the cryptocurrency market: This could involve providing more information about the risks and potential returns of investing in cryptocurrencies, as well as increasing the regulation of these assets.
- Educate investors about cryptocurrencies: Many investors may not fully understand how cryptocurrencies work or the risks associated with investing in them. Providing educational resources and information about these assets could help to reduce perceived risk and increase trust.
- Promote the use of cryptocurrencies in mainstream finance: As cryptocurrencies become more widely accepted and used in mainstream finance, they may be perceived as less risky and more trustworthy by investors. This could involve partnerships with banks and financial institutions, as well as the development of cryptocurrency-based financial products.

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