

## Profile and The Awareness and Ease of Use towards Adoption Motivation of Cryptocurrency Ownership in Indonesia

*Felicia Abednego*

*Universitas Kristen Maranatha, Bandung, Indonesia*

*Email: [felicia.abednego@eco.maranatha.edu](mailto:felicia.abednego@eco.maranatha.edu)*

*Chandra Kuswoyo*

*Universitas Kristen Maranatha, Bandung, Indonesia*

*Email: [chandrakuswoyo@yahoo.com](mailto:chandrakuswoyo@yahoo.com)*

*Cen Lu*

*Universitas Kristen Maranatha, Bandung, Indonesia*

*Email: [london3lay@yahoo.com](mailto:london3lay@yahoo.com)*

*Christine Aliwinoto*

*Universitas Kristen Maranatha, Bandung, Indonesia*

*Email: [1952037@eco.maranatha.edu](mailto:1952037@eco.maranatha.edu)*

### **Abstract**

*Cryptocurrency is a digital asset accessible to the public and utilized for legal and illegal activities. While it serves as a medium of exchange and is recognized as a legal payment method in some countries, it has yet to attain such status in Indonesia. Nevertheless, by mid-2021, the number of Cryptocurrency investors in Indonesia had reached 6.5 million, with transaction values totaling 370.4 trillion rupiahs—surpassing the 5.37 million capital market investors recorded simultaneously. This study explores the profiles of Cryptocurrency investors. It also uses purposive sampling and multiple regression analysis to examine how awareness and perceived ease of use influence their motivation to adopt cryptocurrency. The findings reveal that awareness and ease of use significantly affect adoption motivation. These insights contribute to a better understanding of consumer behavior in the context of Cryptocurrency adoption.*

**Keywords:** *Crypto Currency, Profile, Awareness, Ownership Motivations*

### **Abstrak**

*Cryptocurrency adalah aset digital yang dapat diakses oleh publik dan digunakan untuk kegiatan baik secara legal dan ilegal. Meskipun berfungsi sebagai alat tukar dan diakui sebagai metode pembayaran legal di beberapa negara, masih banyak negara yang belum mengadopsi Cryptocurrency sebagai metode pembayaran ilegal salah satunya adalah Indonesia. Meski demikian, pada pertengahan 2021, jumlah investor mata uang kripto di Indonesia telah mencapai 6,5 juta, dengan nilai transaksi sebesar 370,4 triliun rupiah melampaui 5,37 juta investor pasar modal yang tercatat secara serentak. Studi ini dilakukan untuk mengeksplorasi profil investor cryptocurrency. Ini juga menggunakan purposive sampling dan analisis regresi berganda untuk memeriksa bagaimana kesadaran dan kemudahan penggunaan yang dirasakan memengaruhi motivasi mereka untuk mengadopsi cryptocurrency. Temuan ini mengungkapkan bahwa kesadaran dan kemudahan penggunaan secara signifikan mempengaruhi motivasi adopsi. Wawasan ini berkontribusi pada pemahaman yang lebih baik tentang perilaku konsumen dalam konteks adopsi mata uang kripto.*

**Kata kunci:** *Cryptocurrency, Profil, Kesadaran, Motivasi Kepemilikan*

## **1. Introduction**

Cryptocurrency is a form of digital asset that is publicly accessible and used for various purposes, both legal and illegal. Cryptocurrency can serve as a medium of exchange and is recognized as a legitimate means of payment in several countries worldwide, including the United States, European Union,

Canada, Australia, and recently, El Salvador, which announced the legality of Bitcoin (Bajpai et al., 2024). On the other hand, Cryptocurrency is explicitly considered illegal in some countries, while others implicitly declare it as such. Indonesia is a country that explicitly states that Cryptocurrency is not recognized as a legal means of payment and its use as a payment instrument is prohibited (Alam et al., 2022). However, Cryptocurrency is a tradable asset in the physical crypto asset market, overseen by Bappepti (Commodity Futures Trading Regulatory Agency) (Soerjadi & Kusmiadi, 2024). This situation has generated pros and cons among the public, as despite being considered illegal, Cryptocurrency has become a new phenomenon in Indonesia. According to surveys, Indonesia has one of the world's largest Cryptocurrency markets, especially in terms of its adoption rate within the country, approximately 28.5 million of the total 277 million population has adopted cryptocurrency. In a study presented by (Halaburda et al., 2022), it is stated that research on the demographic characteristics of Cryptocurrency ownership is still very limited. Various studies on the demographic ownership of Cryptocurrency show significant differences. Daniela et al. (2022) state that Cryptocurrency ownership in Canada is characterized by a low level of financial literacy compared to Cryptocurrency owners in Austria. Hackethal et al. (2021), suggest that the ownership profile of Cryptocurrency in the United States and Europe is predominantly male, with a relatively high monthly income, and they are active traders who hold a risky portfolio, while Cryptocurrency ownership in Japan is dominated by speculative individuals (Kawamura et al., 2020). There are many research that become the foundation on the factors of Cryptocurrency ownership, however, based on the significant increase in the number of cryptocurrencies and the majority of research focusing on technical aspects, there is still a scarcity of studies exploring the profiles, awareness, knowledge ease of use, and motivations adoption of Cryptocurrency ownership.

This research adapted the findings from (Shahzad et al., 2018; Shahzad et al., 2024), by addressing the complexities of user awareness, knowledge of ease of use, and adoption. According to the background, research problem were identified and this research aims to identify the profile of Cryptocurrency ownership in five major cities in Indonesia, and to identify the relationship between awareness and knowledge on ease of use towards the motivation of adoption Cryptocurrency ownership in Indonesia.

## 2. Literature Review

Academic Literature on Cryptocurrency, specifically Bitcoin, has experienced significant growth in recent years. It is noted that 80.5% of research focuses on Bitcoin, while the remaining research is centered around blockchain technology. Studies regarding the motives of Cryptocurrency buyers, particularly in relation to Bitcoin, are still scarce and not representative due to the relatively small sample sizes used in previous research. Thus, it can be concluded that the current development of Cryptocurrency has not yet allowed for in-depth social research. Cryptocurrency is a digital currency that holds digital asset value and can be stored in digital wallets. Cryptocurrencies are used for various reasons, including considerations of security, transparency, and cost-effectiveness. According to Coingecko, there are at least six thousand types of coins traded in the Cryptocurrency market, but some of the well-known coins include Bitcoin, Dogecoin, Litecoin, and Ethereum. In recent years, the value of one of the anchor coins, Bitcoin, has experienced significant growth. British economist John Maynard Keynes identified three main motives for money demand: transaction, precautionary, and speculative motives. Thus, the increase in demand and price of Bitcoin can be attributed to the "transaction motive" and the speculative demand as an asset (Sedrati et al., 2020; Solimano, 2018). Several previous studies depict Cryptocurrency owners as being associated with young men, having a relatively high level of education, residing in urban areas, and being active internet users. However, these profiles may vary in each country. In a representative study of around 1000 German internet users, (Bosch, 2018) reported an increasing trend in Cryptocurrency awareness, from 72% in 2016 to 71% in 2017, and 88% of respondents in 2018. According to the authors, men tend to be more interested in Cryptocurrency and more likely to own it. The highest interest and usage were found among younger respondents (22%; 18-29 years old), followed by the 30-49 age group (17%) and 50-69 age group

(13%). Overall ownership rates were estimated at 5% (8.2% for men, 1.9% for women). Most previous studies depict the motivations for Cryptocurrency ownership according to Keynesian theory, which includes speculation and transaction motives. However, since transactions using Cryptocurrency are not feasible in Indonesia, the transaction motive is disregarded in this research. One popular Cryptocurrency asset known to most people is Bitcoin. Bitcoin is considered an anchor coin with the largest market capitalization, which also affects other alternative coins. Bitcoin has a high level of attractiveness due to its increasing value over the years, and it is also considered an asset that is not affected by economic conditions.

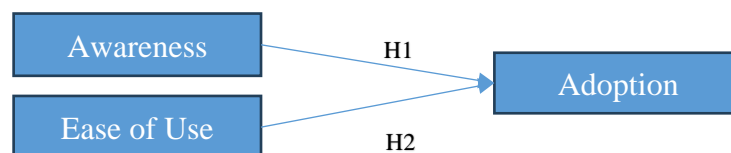
### Awareness and Adoption

Awareness is an important aspect in the acceptance and adoption stages of new technology. Although Cryptocurrency has been introduced since 2009 by Satoshi Nakamoto, its development in Indonesia is still considered relatively new. Several studies have investigated awareness and motivation for adopting cryptocurrency, including research by Kakinaka and Umeno (2022), and Gupta and Arora (2019). This study examines how awareness influences attitudes toward digital assets like cryptocurrency. According to survey on Cryptocurrency awareness in May 2023 in Indonesia, 58% respondents have heard about cryptocurrencies, but were not sure they understand. It means that only 10% of those surveyed reported never having heard about cryptocurrencies (Romero, 2024). Other findings about Cryptocurrency awareness in Indonesia was found by Jadhav et al. (2022), which stated that the educational level impact the students' awareness of Cryptocurrency and majority of the students are aware of Cryptocurrency and then become aware through friends and social media.

### Ease of Use

Shahzad et al. (2018) presented insightful findings that contribute significantly to the existing body of knowledge within the field, offering a nuanced understanding of the subject matter. The current research endeavors to build upon this foundational work by systematically investigating the hypothesis that the knowledge about ease of use and overall efficiency of cryptocurrencies have the potential to significantly enhance the user experience, which, in turn, may lead to increased adoption rates among potential users. Ease of use means that users have a basic understanding of cryptocurrency, allowing them to technically understand the platform, perform basic transactions such as buying and selling on the platform, and manage systems within that platform. In addition, knowledge ease of use about Cryptocurrency is also a crucial factor in determining the motivation to adopt new technology. Knowledge on ease of use plays as a crucial intermediary, effectively bridging the gap between these interconnected elements of technology adoption and user engagement.

Figure 1 Conceptual Framework



Source: Author, 2024

Based on the conceptual framework above, the hypotheses are formulated as follows:

H1: Awareness have significant effect on Cryptocurrency adoption in Indonesia.

H2: Ease of Use have a significant effect on Cryptocurrency adoption in Indonesia.

## 3. Research Method

This study utilizes quantitative research, using a survey-based approach to get the pattern which aimed at determining the profile, and relationship between awareness, knowledge and motivation of

Cryptocurrency ownership in Indonesia. Convenience sampling and purposive sampling were used sampling method. The sample used in this study is the Indonesian cryptocurrency's beginner holder in five major cities: Jabodetabek, Bandung, Surabaya, Medan, and Bali, totaling 200 respondents. The respondents will be given a two-stage questionnaire. In the first stage, the questionnaire will focus on the respondents' profiles related to Cryptocurrency ownership, and the second part is the questionnaire that contains questions regarding the respondents' awareness, knowledge ease of use, and the motivation of Cryptocurrency ownership. A questionnaire was adapted and designed to ensure the fit the purpose of this study, as in this research, sample were the beginner holder of cryptocurrency. This items in the questionnaire were utilised a five point Likert scale with the followong constructs: 1) Cryptocurrency awareness: this constructs is about individual's understanding of Cryptocurrency and this adopted from (Sagheer et al., 2022; Shahzad et al., 2024); 2) Cryptocurrency knowledge of use: this construct addressing an individual's perception regarding the use knowledge of Cryptocurrency (Chen & Aklikokou, 2019; Shahzad et al., 2024); 3) Cryptocurrency adoption or motivation to use : this construct addressing the individual's likelihood of adopting Cryptocurrency (Shahzad et al., 2018; Shahzad et al., 2024). The following questionnaire items aim to explore the results related to respondents' awareness, knowledge, and motivations for owning Cryptocurrency in Indonesia.

Table 1 Construct and Item Variable

| Contract                      | Item  |
|-------------------------------|---|
| <b>Awareness</b>              | (X1.1) I aware and I understand about cryptocurrency  |
|                               | (X1.2) I always follow and access Cryptocurrency regularly through the platform/applications                  |
|                               | (X1.3) I discuss about Cryptocurrency with the people around me   |
|                               | (X1.4) I always follow the news and update about cryptocurrency   |
|                               | (X1.5) I know the practice and implications of Cryptocurrency for the financial industry                      |
| <b>Knowledge Ease of Use</b>  | (X2.1) I found that searching and downloading platform or applications that related to Cryptocurrency is easy |
|                               | (X2.2) I found that learning about Cryptocurrency is managable and easy to understand                         |
|                               | (X2.3) I found that gaining knowlede and proficiency in Cryptocurrency is manageable                          |
|                               | (X2.4) I found that system in Cryptocurrency is user-friendly   |
|                               | (X2.5) I found that learning Cryptocurrency system is easy  |
|                               | (X2.6) I found that Cryptocurrency is safe and secure   |
| <b>Motivation of adoption</b> | (Y1.1) Government protect the security of cryptocurrency  |
|                               | (Y1.2) Cryptocurrency is reliable and safe  |
|                               | (Y1.3) I want to use Cryptocurrency regularly   |
|                               | (Y1.4) I want to ue platfoms that support cryptocurrency  |
|                               | (Y1.5) I want to use services that accept Cryptocurrency payment  |
|                               | (Y1.6) I want to use Cryptocurrency for my purchases  |
|                               | (Y1.7) I want to use Cryptocurrency for convenience   |

Source: Author (2024)

Hypothesis testing is conducted to make decisions or draw conclusions about a population based on collected sample data in this study. Hypothesis testing is conducted using multiple linear regression analysis to identify the factors that influence purchase intention, based on the Variable algorithm.

The regression equation used in this analysis is as follows:

$$A = \alpha + \beta_1Aw + \beta_2EoU + \varepsilon$$

Description:

A = Adoption (dependent variable)

$\alpha$  = Constant

$\beta_1, \beta_2$  = Regression coefficients for each independent variable

Aw = Awareness ( $X_1$ )

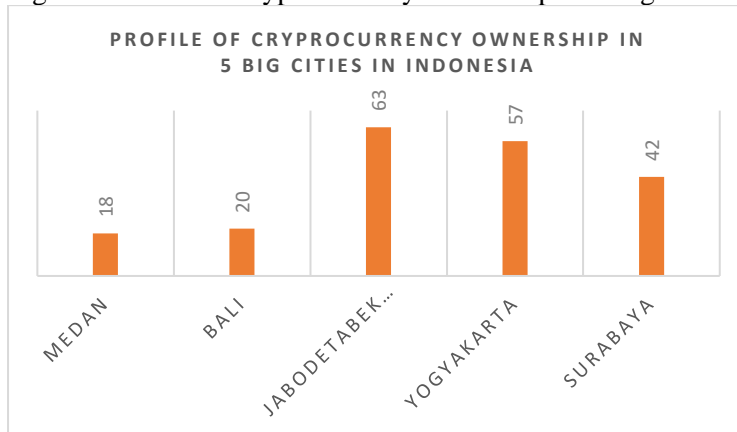
EoU = Ease of Use ( $X_2$ )

$\varepsilon$  = Error term

#### 4. Results and Conclusions

Cryptocurrency is a relatively new phenomenon in Indonesia. According to Widyastuti et al. (2021), Cryptocurrency represents a development in financial technology that allows for the replacement of traditional currency in future financial transactions. However, the Indonesian government is currently conducting an in-depth study on the prohibition of Cryptocurrency in Indonesia, aiming to protect the Indonesian market. This research obtained responses from 200 participants from various major cities in Indonesia. The following are the findings from the research. Based on geography, the major cities in Indonesia with the highest number of Cryptocurrency owners in Indonesia can be seen in Figure 2.

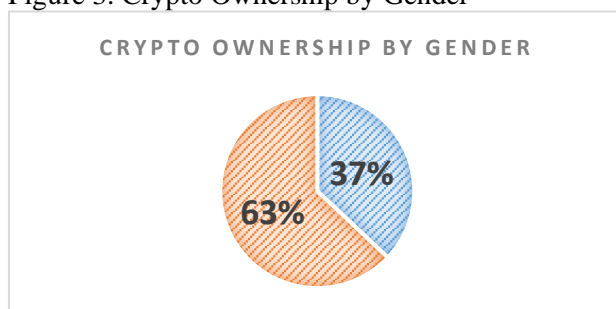
Figure 2 Profile of Cryptocurrency Ownership in 5 Big Cities in Indonesia



Source: primary data, 2024

According to Figure 2, Jakarta has the most Cryptocurrency owners among other cities, with a total of 63 participants, followed by Yogyakarta with 57 participants, Surabaya with 42 participants, and Bali and Medan with 20 and 18 participants, respectively. This is in line with the statement by (Hidayat, 2023) regarding the major cities with the highest Cryptocurrency ownership in Indonesia. This is highly plausible as Jakarta remains the capital of Indonesia, and cities surrounding it, such as Bogor, Depok, Tangerang, Bekasi, and Bandung, are still economic hubs, leading many people to allocate funds for Cryptocurrency ownership. The following is a further discussion on the profile of Cryptocurrency ownership in Indonesia

Figure 3. Crypto Ownership by Gender

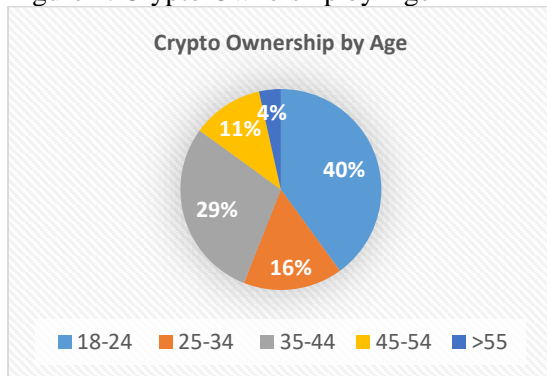


Source: primary data, 2024

#### 4.1 Profile of Respondents Based on Gender

A total of 63% of the respondents were men, while 37% were women. This suggests that males are considered to have a higher risk profile. This aligns with the research by Charness and Gneezy (2012), which states that women tend to invest less, and it is concluded that males are associated with being more risk-takers when it comes to investments. However, in this study, the difference in the number of male and female respondents was not significant. This is supported by the statement by Jenita (2022) that women's behavior towards investment has been evolving due to gender equality in careers and improved income.

Figure 4. Crypto Ownership by Age



Source: primary data, 2024

#### 4.2 Profile of Respondents Based on Age

A total of 40% of the respondents were aged between 18-24 years, 16% were aged between 25-34 years, and 29% were aged between 35-44 years old, and total of 15% were aged between 45-55 years old. This aligns with the research by Pham et al. (2021), which states that young people tend to be more inclined towards challenges compared to older age groups, which reflected on younger group age. This study reflects that the majority of respondents were young individuals with a higher risk profile.

Figure 5. Crypto Ownership by Monthly Income



Source: primary data, 2024

According to Figure 5. The group who owns cryptocurrency mostly from the group who have monthly income more than Rp. 8.000.000,- with 22%, followed by the group of monthly income Rp. 2.000.000,-



until Rp. 4.000.000,- and Rp. 4.000.000,- until Rp. 6.000.000,-, with 20% respectively. This is interesting because at every income level, there is an interest in Cryptocurrency ownership. However, follow-up questions arise regarding awareness and knowledge about cryptocurrency. The majority of respondents either disagreed or had limited understanding of cryptocurrency. The primary reason for the limited understanding of Cryptocurrency was that most respondents were still in the stage of experimenting with Cryptocurrency investments. From the questionnaire results, 35.8% of respondents obtained information about Cryptocurrency from the internet, followed by 34.2% from social media, 23.3% from friends/family, and only a small percentage from specific Cryptocurrency groups. Furthermore, 50% of respondents had never owned Cryptocurrency but always sought information about it. This can be attributed to the drastic decline in Cryptocurrency in 2022, caused by various systemic factors such as the ongoing COVID-19 pandemic and the Russia-Ukraine conflict, which led people to be cautious and favor liquid assets instead of cryptocurrency.

Regarding the perception of cryptocurrency, 47.5% of respondents disagreed that Cryptocurrency is a stable asset, while 51.7% agreed that it is a volatile asset. Although most respondents considered their knowledge of Cryptocurrency to be inadequate, the majority were aware that Cryptocurrency is highly fluctuating. Additionally, 36.7% of respondents disagreed that Cryptocurrency can be a legal payment instrument.

### 4.3 Empirical Analysis

Based on the data analysis conducted by the researcher using SPSS 30, the study involving 200 respondents was processed accordingly. The accuracy of the instrument was assessed using validity through confirmatory factor analysis, the consistency of the measurement tool was tested using reliability based on Cronbach's Alpha, and the classical assumption of normality was also examined. Based on the validity test using confirmatory factor analysis, the following data were obtained:

Table 2 Sample Adequacy KMO and Bartlett's Test

|  |                    |         |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .786    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 1425.33 |
|  | df                 | 7       |
|  | Sig.               | .001    |

Source: Processed data, 2024

Based on Table 2, it can be seen that the KMO MSA value is 0.786, which is greater than 0.5. This indicates that the sample size of 200 is sufficient and meets the requirements for further analysis.

Table 3 Rotated Component Matrix<sup>a</sup>

|      | Component |      |      |
|------|-----------|------|------|
|      | 1         | 2    | 3    |
| X1.1 | .834      |      |      |
| X1.2 | .847      |      |      |
| X1.3 | .756      |      |      |
| X1.4 | .694      |      |      |
| X1.5 | .834      |      |      |
| X2.1 |           |      | .877 |
| X2.2 |           |      | .868 |
| X2.3 |           |      | .863 |
| Y1.1 |           | .714 |      |
| Y1.2 |           | .821 |      |
| Y1.3 |           | .814 |      |
| Y1.4 |           | .919 |      |

|      | Component |      |   |
|------|-----------|------|---|
|      | 1         | 2    | 3 |
| Y1.7 |           | .919 |   |

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 5 iterations.

Source: Processed data, 2024

The results show that there are 3 indicators in variable X2 (ease of use) that do not meet the validity criteria, namely questions X2.4, X2.5, and X2.6. Additionally, there are 2 indicators in variable Y (adoption motivation) that do not meet the validity criteria, namely questions Y1.5 and Y1.6. These questions were eliminated, leaving 16 indicators that can be considered valid, because all the nominal in rotated component matrix exceeds the factor loading minimum 0.4 for sample size 200 (Hair, 2010), and they were classified into three variable factors.

Table 4 Reliability Test Variables

| Variables           | Cronbach's Alpha | N of Items |
|---------------------|------------------|------------|
| Awareness           | 0.944            | 5          |
| Ease of Use         | 0.893            | 3          |
| Motivation Adoption | 0.921            | 5          |

Source: Processed data, 2024

In Table 4, The Cronbach's alpha value of 0.944 indicates that all indicators in the awareness variable can be considered reliable. The Cronbach's alpha value of 0.893 indicates that all indicators in the ease of use variable can be considered reliable. Cronbach's alpha value of 0.921 indicates that all indicators in the motivation of adoption variable can be considered reliable.

Table 5 Normality Test One-Sample Kolmogorov-Smirnov Test

| Unstandardized Residual  |                |
|--|----------------|
| N  | 200            |
| Normal Parameters <sup>a,b</sup>   | Mean           |
|  | .0000000       |
|  | Std. Deviation |
|  | 1.04228422     |
| Most Extreme Differences   | Absolute       |
|  | .108           |
|  | Positive       |
|  | Negative       |
|  | -.108          |
| Test Statistic   | .108           |
| Asymp. Sig. (2-tailed) <sup>c</sup>  | .897           |
| a. Test distribution is Normal.  |                |
| b. Calculated from data.   |                |
| c. Lilliefors Significance Correction.   |                |
| d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000. |                |

Source: Processed data, 2024

Based on Table 5, the normality test shows that the Asymp. Sig. (2-tailed) value is 0.897, which is greater than the significance level of 0.05. Therefore, it can be concluded that the data is normally distributed.

Table 6 Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .467 <sup>a</sup> | .218     | .210              | 1.04756                    |

a. Predictors: (Constant), X2, X1

Source: Processed data, 2024



Based on Table 6, it can be concluded that the influence of variables X1 awareness and X2 ease of use simultaneously has an effect on the motivation to adopt Cryptocurrency ownership by 21%, with significant value  $<0.001$

Table 7 ANOVA<sup>a</sup>

| Model        | Sum of Squares | df  | Mean Square | F      | Sig.      |
|--------------|----------------|-----|-------------|--------|-----------|
| 1 Regression | 60.311         | 2   | 30.155      | 27.479 | $<.001^b$ |
| Residual     | 216.185        | 197 | 1.097       |        |           |
| Total        | 276.496        | 199 |             |        |           |

a. Dependent Variable: Y b. Predictors: (Constant), X2, X1

Source: Processed data, 2024

Based on the SPSS output table 6 above, it can be seen that the Sig. value in the ANOVA table is  $<0.001$ , which means that the value  $<0.001 < 0.05$ . Therefore, according to the basis for decision-making in the F-test, it can be concluded that the hypothesis is accepted. In other words, awareness and knowledge of ease of use simultaneously have a significant effect on the adoption of Cryptocurrency ownership.

Table 8. Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.    |
|-------|------------|-----------------------------|------------|---------------------------|-------|---------|
|       |            | B                           | Std. Error | Beta                      |       |         |
| 1     | (Constant) | .805                        | .388       |                           | 2.078 | .003    |
|       | X1         | .533                        | .089       | .420                      | 5.965 | $<.001$ |
|       | X2         | .119                        | .094       | .089                      | 1.269 | .002    |

a. Dependent Variable: Y

Source: Processed data, 2024

According to Table 8 Coefficient, it can be described that the regression model is

$$Y = 0.805 + 0.533X_1 + 0.119X_2$$

Indicates that constant (0.805) when both  $X_1$  and  $X_2$  are equal to zero, the expected value of Y is 0.805; Coefficient of  $X_1$  (0.533), for each one unit increase in  $X_1$ , while keeping  $X_2$  constant, Y is expected to increase by 0.533 units; Coefficient of  $X_2$  (0.119), for each one-unit increase in  $X_2$ , while keeping  $X_1$  constant, Y is expected to increase by 0.119 units. With all sig. value less than 0.05, this indicates that this model is significant. This findings suggest that  $X_1$  (awareness) has a stronger influence on Y (motivation adoption) compared to  $X_2$ , (ease of use), as its coefficient is larger. This findings were supported by Shahzad et al. (2024), pointed that awareness of cryptocurrency plays crucial role in its adoption. While Gong et al. (2023) noted that ability to recognize and comprehend the efficacy is important for its acceptance in the market. Knowledge about ease of use of Cryptocurrency emphasizes the importance of knowledge and user-friendly experiences, if potential users perceive that knowledge of Cryptocurrency inaccessible, they are tend to avoid it and less likely to adopt it, even if they are aware of its existence. (Chen & Aklikokou, 2019).

Future research could include a more diverse range of cities and rural areas to explore Cryptocurrency adoption in less economically dominant regions. This would provide a more holistic view of national adoption patterns. Explore deeper behavioral and psychological motivators, such as trust in technology, risk tolerance, and perceived benefits, which might explain adoption disparities. Investigate the evolving role of gender and income in Cryptocurrency adoption, particularly focusing on how societal changes (e.g., increasing gender equality) influence investment behavior. Research should delve into the impact of financial literacy programs on improving knowledge how to use properly, and informed decision-making in Cryptocurrency investments. With Indonesia's regulatory on Cryptocurrency still evolving, future studies could focus on the interplay between government policies and consumer

adoption. Conduct longitudinal research to understand how perceptions, motivations, and ownership behaviors evolve over time, especially during periods of market volatility. By addressing these areas, future research can better inform policy-makers, educators, and industry stakeholders to foster more informed and responsible Cryptocurrency adoption.

## 5. Conclusion

This study provides a comprehensive understanding of Cryptocurrency ownership across major cities in Indonesia, highlighting geographic, demographic, and behavioral factors influencing ownership and perception. The findings reveal the following key point: Jabodetabek and West Java leads Cryptocurrency ownership due to its role as an economic hub, followed by other urban centers like Yogyakarta and Surabaya. Younger individuals (18–24 years) dominate Cryptocurrency ownership, suggesting a higher propensity for risk-taking and experimentation among youth, however this cohort also need the right education and the right foundation knowledge about cryptocurrency. Ownership spans various income levels, but a significant portion of respondents exhibit limited understanding of cryptocurrency, viewing it as volatile and unstable.

The validity and reliability tests confirm the robustness of the variables used, but certain indicators were excluded due to didn't meet the validity test. It can be observed that the indicators failing to meet validity are related to the perception that the Cryptocurrency learning system is not yet considered user-friendly (X2.4), Cryptocurrency learning is perceived as not easy (X2.5), and the belief that Cryptocurrency is not secure (X2.6). Additionally, indicators of Cryptocurrency adoption motivation reveal that participants do not yet consider Cryptocurrency a viable payment method for services (Y5) or for purchasing goods (Y6). Therefore, a comprehensive understanding of the easy use of Cryptocurrency must be developed, not only among users but also with the support of stakeholders such as Cryptocurrency platforms, custodian banks, and the government in educating the market. Awareness and knowledge ease of use were found to influence Cryptocurrency adoption motivation, though only moderately 21%. While many factors can influence the motivation of adopting cryptocurrency, such as education, government policy, even the marketing communication such as influencer and social media which can communicate about Cryptocurrency ownership.

## 6. References

- Alam, S., Jamil, M., & Syamsir, A. (2022). Digital Currency in Indonesia (Prospects and Challenges in Inclusive Financial Reviews). *Jurnal Ad'ministrare*, 9, 515. <https://doi.org/10.26858/ja.v9i2.39498>
- Bajpai, S., Sharma, K., & Chaurasia, B. (2024). Detection of Anomalous Bitcoin Transactions in Blockchain Using ML. *EAI Endorsed Transactions on Internet of Things*. <https://doi.org/10.4108/eetiot.7042>
- Bosch, R. (2018). *The crypto rollercoaste*. Retrieved 18 December from <https://www.bearingpoint.com/en/insights-events/insights/the-crypto-rollercoaster/>
- Charness, G., & Gneezy, U. (2012). Strong Evidence for Gender Differences in Risk Taking. *Journal of Economic Behavior & Organization - J ECON BEHAV ORGAN*, 83. <https://doi.org/10.1016/j.jebo.2011.06.007>
- Chen, L., & Aklikokou, A. (2019). Determinants of E-government Adoption: Testing the Mediating Effects of Perceived Usefulness and Perceived Ease of Use. *International Journal of Public Administration*, 43, 1-16. <https://doi.org/10.1080/01900692.2019.1660989>
- Daniela, B., Engert, W., Henry, C., Huynh, K., & Voia, M.-C. (2022). Private Digital Cryptoassets as Investment? Bitcoin Ownership and Use in Canada, 2016-2021. <https://doi.org/10.34989/swp-2022-44>

- Gong, Y., Tang, X., & Chang, E.-C. (2023). Group norms and policy norms trigger different autonomous motivations for Chinese investors in *Cryptocurrency* investment. *Humanities and Social Sciences Communications*, 10(1), 521. <https://doi.org/10.1057/s41599-023-01870-0>
- Gupta, K., & Arora, N. (2019). Investigating consumer intention to accept mobile payment systems through unified theory of acceptance model: An Indian perspective. *South Asian Journal of Business Studies*, ahead-of-print. <https://doi.org/10.1108/SAJBS-03-2019-0037>
- Hackethal, A., Hanspal, T., Lammer, D., & Rink, K. (2021). The Characteristics and Portfolio Behavior of Bitcoin Investors: Evidence from Indirect *Cryptocurrency* Investments. *Review of Finance*, 26. <https://doi.org/10.1093/rof/rfab034>
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E., (2010). Multivariate data analysis: A global perspective (seventh ed.). New Jersey: Pearson Education, Inc.
- Halaburda, H., Haeringer, G., Gans, J., & Gandal, N. (2022). The microeconomics of cryptocurrencies. *Journal of Economic Literature*, 60(3), 971-1013.
- Hidayat, M. (2023). 6 Provinsi di Indonesia dengan Minat Kripto Tertinggi. 6 Provinsi Di Indonesia Dengan Minat Kripto Tertinggi. Retrieved January 6, 2025, from <https://www.liputan6.com/tekno/read/5174073/6-provinsi-di-indonesia-dengan-minat-kripto-tertinggi>
- Jadhav, S., Raghunath, C., Hamid, W., & Anil, M. (2022). A study on awareness of college students about *Cryptocurrency* and Its relation to Level of Education. *Indonesian Journal of Educational Research and Technology*, 3, 155-160. <https://doi.org/10.17509/ijert.v3i2.50083>
- Jenita, A. M. A. (2022). A Study On The Perception Of Crypto Currency Investment Among Salaried Employees In Chennai City With Special Reference Based On Gender. *Journal of Positive School Psychology*, 7733-7741.
- Kakinaka, S., & Umeno, K. (2022). Asymmetric volatility dynamics in *Cryptocurrency* markets on multi-time scales. *Research in International Business and Finance*, 62, 101754. <https://doi.org/https://doi.org/10.1016/j.ribaf.2022.101754>
- Kawamura, Tetsuya and Mori, Tomoharu and Motonishi, Taizo and Ogawa, Kazuhito, Is Financial Literacy Dangerous? Financial Literacy, Behavioral Factors, and Financial Choices of Households (June 8, 2020). Available at SSRN: <https://ssrn.com/abstract=3621890> or <http://dx.doi.org/10.2139/ssrn.3621890>
- Pham, Q. T., Phan, H. H., Cristofaro, M., Misra, S., & Giardino, P. L. (2021). Examining the Intention to Invest in Cryptocurrencies. *International Journal of Applied Behavioral Economics*, 10(3), 59–79. <https://doi.org/10.4018/ijabe.2021070104>
- Romero, L. (2024). *Cryptocurrency awareness Indonesia* 2023. <https://www.statista.com/statistics/1466362/indonesia-cryptocurrency-awareness/>
- Sagheer, N., Khan, K. I., Fahd, S., Mahmood, S., Rashid, T., & Jamil, H. (2022). Factors Affecting Adaptability of *Cryptocurrency*: An Application of Technology Acceptance Model. *Front Psychol*, 13, 903473. <https://doi.org/10.3389/fpsyg.2022.903473>
- Sedrati, A., Stoyanova, N., Mezrioui, A., Hilali, A., & Benomar, A. (2020). Decentralisation and governance in IoT: Bitcoin and Wikipedia case. *International Journal of Electronic Governance*, 12, 166-189. <https://doi.org/10.1504/IJEG.2020.109540>
- Shahzad, F., Xiu, G., Wang, J., & Shahbaz, M. (2018). An empirical investigation on the adoption of cryptocurrencies among the people of mainland China. *Technology in Society*, 55, 33-40. <https://doi.org/https://doi.org/10.1016/j.techsoc.2018.05.006>
- Shahzad, M. F., Xu, S., Lim, W. M., Hasnain, M. F., & Nusrat, S. (2024). *Cryptocurrency* awareness, acceptance, and adoption: the role of trust as a cornerstone. *Humanities and Social Sciences Communications*, 11(1), 4. <https://doi.org/10.1057/s41599-023-02528-7>
- Soerjadi, D., & Kusmiadi, R. (2024). Transition of Crypto Asset Supervision From Bappebti to OJK. *Action Research Literate*, 8, 3322-3327. <https://doi.org/10.46799/ar.v8i11.2531>
- Solimano, A. (2018). Crypto-currencies, Speculation and the Evolution of Monetary Systems. *Revista Perfiles Económicos*. <https://doi.org/10.22370/rpe.2018.6.1390>

Widyastuti, M., Hermanto, Y., Ekonomi, F., Katolik, U., & Cendika, D. (2021). *Cryptocurrency Analysis Of Indonesian Market Education Facilities*.

**Acknowledgement**

The research is financed by Maranatha Christian University

**Copyright Disclaimer**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.