



# Analysis Of Key Factors Influencing Behavioral Intention To Adopt Cryptocurrency In Indonesia: A Demographic Perspective

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## ABSTRACT

This study examines the key factors influencing the behavioral intention to adopt cryptocurrency in Indonesia from a demographic perspective. Utilizing descriptive statistics and non-parametric tests such as the Mann-Whitney U Test and Kruskal-Wallis Test, the research analyzes how gender, age, educational level, and occupation impact individuals' perceptions and intentions regarding cryptocurrency adoption. The findings reveal significant differences across these demographic groups, particularly in areas such as financial literacy, perceived risk, social influence, and awareness. Males, younger individuals, and those with higher education levels or finance-related occupations exhibit a stronger intention to adopt cryptocurrency, driven by lower perceived risks and higher financial literacy. Conversely, females, older adults, and those with lower education levels show more hesitation, primarily due to higher perceived risks and lower awareness. The study underscores the need for targeted educational initiatives and policy interventions to address these demographic disparities and promote a more inclusive adoption of cryptocurrency in Indonesia. These insights are crucial for developing effective strategies to support the growth of cryptocurrency as part of the digital economy.

## INTRODUCTION

The rapid evolution of communication and information technology has resulted in substantial changes in several industries, especially in the financial business. Cryptocurrency, a digital currency that runs using blockchain technology, is one of the most significant technical advances in recent years.

Blockchain is a decentralized and transparent technology that enables safe transactions without the involvement of middlemen. In 2008, an individual known as Satoshi Nakamoto released a significant document titled "Bitcoin: A Peer-to-Peer Electronic Cash

System." This paper emphasized the necessity of a decentralized electronic payment system that operates directly between individuals (Nakamoto, 2008). Cryptocurrency achieved worldwide recognition. Subsequently, a multitude of cryptocurrencies emerged, each playing a role in the development of a dynamic and rapidly growing ecosystem in the worldwide financial sector.

In Indonesia, interest in cryptocurrencies has been steadily increasing, reflecting global trends. This growing interest is driven by several factors, including the potential for high investment returns, the search for alternatives during periods of economic instability, and a general openness to embracing new technological advancements (Park, 2017). For many individuals and companies in Indonesia, cryptocurrency represents an attractive investment option, offering the possibility of substantial returns over a relatively short period (Naufal Hasani, 2022).

As blockchain technology continues to evolve, cryptocurrencies' applications are expanding beyond mere transactional tools, potentially revolutionizing various aspects of finance and commerce. However, the adoption of cryptocurrency in Indonesia is not uniform across the population, with demographic factors playing a crucial role in shaping individuals' behavioral intentions to adopt this technology.

Demographic variables, including age, level of education, income, and occupation, have a substantial impact on how people view and engage with cryptocurrencies. Younger persons who have greater digital literacy may have higher performance anticipation for cryptocurrencies compared to older ones who have less familiarity with digital technology. Likewise, the level of confidence individuals have in their ability to learn and utilize cryptocurrency platforms (effort expectation) may differ among various demographic groups, which might impact their intention to adopt this technology.

Facilitating factors, such as the availability of digital infrastructure and favorable regulatory environments, are also crucial in determining the probability of cryptocurrency adoption, especially in a country like Indonesia, where access to technology can differ significantly among different regions and social groups.

Social effects have a significant role in determining the inclination to accept cryptocurrencies. The influence of friends, family members, and social networks can have a substantial impact on an individual's inclination to participate in cryptocurrency activities. In Indonesia, the impact of important persons endorsing or criticizing cryptocurrency is significant due to the strong influence of social networks and community attitudes. This may drastically shape public perception and the rate at which cryptocurrency is adopted. Moreover, apprehensions regarding the security of cryptocurrency transactions and the perceived hazards linked to their utilization, such as market instability and possible monetary detriment, might discourage acceptance, especially among more risk-averse demographic cohorts. Increased awareness and financial literacy exacerbate these issues, as consumers who possess a greater understanding of financial goods and services are more likely to comprehend and handle the dangers involved with cryptocurrencies. This, in turn, influences their inclination to use it.

This study seeks to examine the primary elements that influence the desire to embrace cryptocurrency in Indonesia, specifically from a demographic standpoint, considering the intricacies involved. The study aims to gain a comprehensive understanding of the dynamics of cryptocurrency adoption in Indonesia by examining the relationship between demographic variables and factors such as performance expectancy, effort expectancy, facilitating conditions, social influences, security, perceived risk, awareness, and financial literacy. The findings derived from this research will be highly beneficial for policymakers, industry stakeholders, and educators in formulating effective ways to foster the secure and environmentally friendly expansion of the cryptocurrency market in Indonesia. Comprehending these demographic

factors is crucial for overcoming the obstacles to adoption and guaranteeing that cryptocurrency may have a favorable impact on the country's financial progress.

## **LITERATURE REVIEW**

Academic study has shown a growing interest in the adoption of cryptocurrencies, especially in relation to behavioral intention. Multiple studies have investigated the elements that affect individuals' choices to accept cryptocurrencies, including both technological and psychological concerns.

This research review investigates the primary determinants that impact the inclination to adopt cryptocurrency, focusing on demographic characteristics, performance expectation, effort expectancy, enabling conditions, social influences, security, awareness, perceived risk, and financial literacy.

### **Performance Expectancy**

Performance expectation is a vital factor that influences the acceptance of new technologies, especially when it comes to cryptocurrency. It refers to the user's perception that utilizing a certain technology would improve their performance or enable them to carry out duties more effectively, serving as a crucial element in models such as the Unified Theory of Acceptance and Use of Technology (UTAUT). (Venkatesh et al., 2003) emphasize that performance expectancy is a highly influential factor in determining the likelihood of individuals adopting new technology.

Within the realm of cryptocurrencies, individuals may see advantages like as expedited transactions, reduced costs, and more financial autonomy, which are regarded as compelling incentives for embracing this technology. Research, including studies conducted by (Kim et al., 2010), and (Baptista & Oliveira, 2015) supports the notion that an individual's desire to utilize a technology is influenced by their expectation of its performance.

Nevertheless, it is important to acknowledge that although performance expectancy is often a reliable predictor of technology adoption, certain research, such as the one conducted by Miraz et al. (2022), have shown conflicting outcomes, highlighting the intricate and situation-specific characteristics of this concept.

### **Effort Expectancy**

Effort expectation, defined as the perception of how easy it is to utilize a technology, is a significant component that affects behavioral intention. According to the UTAUT model, effort expectation is recognized as a factor that influences consumers' inclination to embrace new technologies (Venkatesh et al., 2003).

The effort expectancy of users can be influenced by the difficulty involved in understanding and utilizing digital wallets, conducting transactions, and controlling security measures when it comes to cryptocurrency adoption. Research has indicated that people are more inclined to embrace technology that they see as user-friendly and comprehensible (Arias-Oliva et al., 2019).

This is especially pertinent when it comes to cryptocurrencies, since the use of technical terminology and the intricacies of blockchain technology might impede the acceptance of it by persons who are not as technologically proficient.

### **Facilitating Conditions**

Adopting new technology can be challenging, with users' perceptions of Facilitating Conditions being crucial for successful adoption. Facilitating Conditions, defined by Venkatesh et al. (2003), include the resources, technical support, and organizational assistance that help users overcome obstacles. These conditions are vital at both organizational and individual levels, where tailored support like technical assistance and user communities can enhance adoption.

Research shows that users who perceive adequate support are more likely to adopt and effectively use technology.

However, the impact can vary; for example, (Liébana-Cabanillas et al., 2017; Schaupp et al., 2022) found that while favorable conditions encourage cryptocurrency use, their effect is limited by the lack of merchants accepting it. Overall, facilitating conditions boost technology adoption and ensure effective use.

### **Social Influences**

Social impacts pertain to the effect that friends, family members, and influential individuals have on an individual's choice to embrace a technology. Social impact plays a crucial role in determining behavioral intention in the UTAUT model (Venkatesh et al., 2003)). In the realm of cryptocurrencies, social influence may be wielded through several means, such as social media platforms, online forums, and informal communication (Wamba & Queiroz, 2019).

Research has indicated that people are more inclined to embrace new technologies when they believe that influential persons in their social circle support or utilize the technology (Sarath Kumar et al., 2020). In Indonesia, where community and social networks have a substantial impact on decision-making, social influence is very likely to be a powerful indicator of cryptocurrency adoption.

### **Security**

The adoption of cryptocurrency is impeded by considerable security issues, which pertain to safeguarding personal data, ensuring transaction privacy, and mitigating the danger of fraud. The decentralized and pseudonymous character of cryptocurrency transactions may cause unease among consumers, especially those who are not familiar with the technology (Gupta et al., 2010).

Studies have demonstrated that the perception of security issues has a detrimental effect on the willingness to embrace digital payment systems, such as cryptocurrency (Alomari & Abdullah, 2023). In Indonesia, the increasing worry about internet security may discourage users from embracing cryptocurrencies, particularly if they have doubts about the security of their transactions (Restuputri et al., 2023).

### **Awareness**

Awareness plays a crucial role in the adoption of new technology, as it ensures that users are informed about the existence, functions, and benefits of the innovation. Without awareness, employees cannot utilize technology's potential to enhance productivity, as illustrated by a company introducing an innovative project management system that remains underutilized due to a lack of employee awareness.

According to (Rogers & Everett, 1983), awareness is the initial stage in technology adoption, where individuals first learn about the innovation and seek more information. Research shows that high awareness significantly increases the likelihood of adoption, as individuals who understand the technology's advantages and relevance to their work are more inclined to try and adopt it, recognizing its potential to improve their efficiency.

### **Perceived Risk**

The perception of risk is frequently mentioned as an important barrier to the acceptance of new technology, especially in the financial industry. Regarding cryptocurrencies, the perceived risks encompass worries about market instability, ambiguity in regulations, and the possibility of incurring financial losses (Featherman & Pavlou, 2003).

The considerable price volatility of cryptocurrencies and the absence of complete regulatory frameworks in several countries, such as Indonesia, contribute to the impression of cryptocurrencies as investments with a high level of risk. Studies have demonstrated that the perception of risk has a detrimental effect on the willingness to accept new financial technology.

This is because individuals may be hesitant to subject themselves to prospective financial losses (Mendoza-Tello et al., 2018).

### Financial Literacy

Financial literacy is crucial for individuals to make informed and successful financial decisions, particularly in today's rapidly changing economic and technological landscape. It extends beyond basic money management, encompassing the ability to assess risks, understand complex financial products, and make sound long-term decisions. High financial literacy enables individuals to manage their finances more effectively, leading to improved financial well-being. Research highlights the positive impact of financial literacy on various aspects of financial life, including saving, investment, and debt management. For instance, (Lusardi & Mitchell, 2014) found that individuals with higher financial literacy are more likely to save and plan for the future, while (Van Rooij et al., 2011) showed that those lacking financial literacy tend to have higher debt levels.

Efforts to enhance financial literacy through education and resources are essential, as they empower individuals to achieve financial stability and well-being, a point emphasized by (Huston, 2010). Improving financial literacy is thus a strategic imperative for fostering individual and societal economic health.

### Demographic Factors

Demographic factors such as age, education level, income, and technological proficiency play a significant role in shaping individuals' behavioral intentions to adopt cryptocurrency. Younger individuals, who are typically more comfortable with digital technologies, may have higher performance and effort expectancy, making them more likely to adopt cryptocurrency (Van Deventer et al., 2019).

Similarly, individuals with higher levels of education and income may have greater financial literacy and access to facilitating conditions, further influencing their intention to adopt digital currencies. Studies have also shown that demographic factors can moderate the impact of other determinants, such as social influence and perceived risk, on technology adoption (Venkatesh et al., 2003).

## METHODS

### Questionnaire And Scale Item Development

The current study used a questionnaire that consists of two pieces. The initial segment aims to collect profiles and demographic information from the participants. The second component consists of a questionnaire presented in the format of a 5-point Likert Scale. Previous research has identified four inquiries pertaining to personal financial worry.

**Table 1. Questionnaire Description**

Likert Scale	Scale Description
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

**Table 2 Scale Item Development**

Variables	Label	Measurement Items
Performance Expectancy	PE1	"Using cryptocurrencies will boost my chances to accomplish my important goals" (Alomari & Abdullah, 2023).
	PE2	"Using cryptocurrencies will assist me accomplish my goals faster" (Alomari & Abdullah, 2023).
	PE3	"Use of cryptocurrency will improve my standard of living" (Alomari & Abdullah, 2023).
Effort Expectancy	EE1	"Learning to use cryptocurrency will be easy for me" (Alomari & Abdullah, 2023).
	EE2	"I will have no trouble understanding and using cryptocurrency" (Alomari & Abdullah, 2023).
	EE3	"Using cryptocurrency will be easy for me" (Alomari & Abdullah, 2023).
	EE4	"It will have no trouble mastering the use of cryptocurrency" (Alomari & Abdullah, 2023).
Facilitating Conditions	FC1	"I have the resources needed for cryptocurrency usage" (Alomari & Abdullah, 2023).
	FC2	"I am knowledgeable enough to use cryptocurrency" (Alomari & Abdullah, 2023).
	FC3	"Other technologies I use are compatible with cryptocurrency" (Alomari & Abdullah, 2023).
	FC4	"Can be assisted if I have difficulty using cryptocurrency" (Alomari & Abdullah, 2023).
Social Influence	SI1	"People who can affect my decision urge me to use cryptocurrency" (Alomari & Abdullah, 2023).
	SI2	"People I consider important encourage me to use cryptocurrency" (Alomari & Abdullah, 2023).
	SI3	"Leadership provide support for the use of the cryptocurrency" (Alomari & Abdullah, 2023).
	SI4	"Generally, organization supports the use of the cryptocurrency" (Alomari & Abdullah, 2023).
Security	SE1	"I have no problem using my credit/debit card details for cryptocurrency transaction" (Alomari & Abdullah, 2023).
	SE2	"Sensitive information can be safely transmitted through cryptocurrency transactions" (Alomari & Abdullah, 2023).
	SE3	"I would feel totally secured sharing my personal details through cryptocurrency transactions" (Alomari & Abdullah, 2023).
	SE4	"Overall, cryptocurrency systems are secure for transmitting sensitive information" (Alomari & Abdullah, 2023).
Awareness	A1	"I am aware of cryptocurrency" (Alomari & Abdullah, 2023).
	A2	"I know cryptocurrency as an alternative means of exchange" (Alomari & Abdullah, 2023).
	A3	"I understand that cryptocurrency is more attractive than other means of exchange" (Alomari & Abdullah, 2023).
	A4	"I intend to take part in training on the use of cryptocurrency" (Alomari & Abdullah, 2023).

Perceived Risk	PR1 PR2 PR3	"Using cryptocurrency is risky" (Arias-Oliva et al., 2019). "There is too much uncertainty associate with the use of cryptocurrency" (Arias-Oliva et al., 2019). "Compared with other currency/investments, cryptocurrency is riskier" (Arias-Oliva et al., 2019).
Behavioral Intention	BI1 BI2 BI3	"If given the chance, I would use cryptocurrency" (Alomari & Abdullah, 2023). "If given the chance, I believe that I should use cryptocurrency" (Alomari & Abdullah, 2023). "If the opportunity arises, I intend to use cryptocurrency" (Alomari & Abdullah, 2023).

### Data Collection Methods

This study utilized a questionnaire distributed to respondents through various channels such as email, groups, and others. This distribution ensured that the questionnaire reached a diverse audience and increased the likelihood of higher participation. All measurement indicators in the questionnaire were derived from previous research in related fields, ensuring that the instruments used were tested and valid.

Initially, this study received 425 responses. However, some responses could not be used for further analysis because they were incomplete. Incomplete responses are those that did not answer all the questions in the questionnaire, thus failing to provide sufficient data to evaluate the results and objectives of this study. After data cleaning, 411 valid responses were selected for further analysis.

### Descriptive Statistics

This study provides descriptive statistics that aim to describe and illustrate the attributes of participants in the context of cryptocurrency adoption in Indonesia. This part presents a comprehensive analysis of statistical data obtained via surveys. The data covers several significant demographic factors, including gender, age, education level, employment, residence, and the respondents' familiarity with different forms of cryptocurrencies. The study seeks to offer a thorough examination of the demographic features of the participants and their comprehension of different forms of cryptocurrencies.

The descriptive statistics provide an overview of the demographic distribution of the respondents and also reveal the connections between parameters like education level and age with knowledge or awareness of the behavioral desire to embrace cryptocurrency. The study also examines the potential impact of gender and employment on the inclination and intention to embrace cryptocurrency. This research provides a more comprehensive understanding of the elements that influence people's propensity to embrace bitcoin in Indonesia, by combining demographic data with knowledge about cryptocurrency. Understanding the impact of demographic features on the adoption of new technologies in the field of digital banking is crucial.

### Kruskal Wallis And Mann Whitney U Test

This study examines the factors that influence the intention to adopt cryptocurrency in Indonesia, specifically from a demographic perspective. The Kruskal-Wallis and Mann-Whitney U tests are used to analyze the differences in behavioral intentions among different demographic groups. The Kruskal-Wallis test, a non-parametric statistical tool, is employed to ascertain if there are statistically significant disparities in behavioral intention among several demographic groups, including gender, age, education level, employment, and residence. This test is especially

valuable when the data does not adhere to the assumptions of normality, rendering it appropriate for studying ordinal data or data with non-normal distributions.

Conversely, the Mann-Whitney U test, which is also a non-parametric statistical test, is used to compare the behavioral intentions of two distinct demographic groups. For example, it may be utilized to examine variations in cryptocurrency adoption intentions across male and female participants or among participants with diverse educational backgrounds. The study seeks to determine if demographic characteristics have a major influence on the desire to embrace cryptocurrencies. This will provide useful insights into how different sectors of the public perceive and are likely to interact with this emergent financial technology. These analyses aid in comprehending the impact of demographic characteristics on cryptocurrency adoption, which is crucial for formulating focused initiatives to promote wider adoption among varied demographic groups.

## RESULTS

Descriptive analysis is a technique employed to provide a detailed description or examination of study findings, without drawing wider inferences or conclusions. The descriptive analysis approach is used to examine data by presenting a detailed description or visual representation of the obtained facts, without aiming to draw broad conclusions or make generalizations (Creswell & Creswell, 2018). An examination of the respondent demographics, as depicted in Table 3 below, uncovers numerous noteworthy patterns.

**Table 3 Descriptive Respondents based on Gender**

Criteria	Number (n)	Percentage (%)
Male	232	56.4
Female	179	43.6
Total	411	100

Source: Author Analysis using SPSS Software

**Table 4 Descriptive Respondents Based on Age**

Criteria	Number (n)	Percentage (%)
< 25 years Old	199	48.4
>45 years Old	15	3.6
25-36 years Old	158	38.4
36-45 years Old	39	9.5
Total	411	100.0

Source: Author Analisis Using SPSS Software

**Table 5. Descriptive Respondents Based on Educational level**

Criteria	Number (n)	Percentage (%)
SD/SMP/SMA	24	5.8
D1/D2/D3	22	5.4
D4/S1	293	71.3
S2/S3	72	17.5
Total	411	100.0

Source: Author Analisis Using SPSS Software



**Tabel 6 Descriptive Respondents Based on Occupation**

Criteria	Number (n)	Percentage (%)
Teacher/Lecturer	15	3.6
Housewife	8	1.9
Private Sector Employee	116	28.2
Student/University Student	135	32.8
Civil Servant/state-owned Enterprise Employee	74	18.0
Military/Police	3	0.7
Entrepreneur	60	14.6
Total	400	100.0

Source: Author Analisis Using SPSS Software

### Mann-Whitney U Test

Nonparametric statistics are used when the distribution assumptions of parametric statistics are not met. One of the nonparametric statistical tests is the Mann-Whitney test, also known as the U test. The Mann-Whitney test is an alternative to the independent two-sample t-test, aimed at performing a nonparametric statistical difference test with a significance level of 0.05. (Creswell & Creswell, 2018).

**Tabel 7 Mann-Whitney U Test Results Table Based On Gender**

Variabel	Mann-whitney U	Z	Asymp.Sig (2 tailed)	Description
Performance Expectacy	18184.0	-2.188	0.029	Significant
Effort Expectancy	17486.5	-2.760	0.006	Significant
Facilitating Conditions	17724.0	-2.569	0.010	Significant
Social Influence	19669.0	-0.923	0.356	Not Significant
Security	19782.0	-0.829	0.407	Not Significant
Awareness	20180.0	-0.495	0.620	Not Significant
Perceived Risk	17365.5	-2.874	0.004	Significant
Financial Literacy	17557.5	-2.762	0.006	Significant
Behavioral Intention	18258.5	-2.129	0.033	Significant

Source: Author Analisis Using SPSS Software

### Kruskal Wallis

The Kruskal-Wallis test is a rank-based nonparametric test aimed at determining whether there are statistically significant differences between two or more independent variable groups on a dependent variable measured on a numerical (interval/ratio) and ordinal scale. There is a significant difference if the Sig. value is less than 0.05 (Sig. < 0.05) (Field, 2018).

**Table 8 Kruskal Wallis Test Results Table Based on Age**

Variable	Kruskall Wallis	DF	Asymp. Sig	Description
Performance Expectacy	5.733	3	0.125	Not Significant
Effort Expectancy	4.565	3	0.207	Not Significant
Facilitating Conditions	3.361	3	0.002	Not Significant
Social Influence	15.311	3	0.002	Significant
Security	0.136	3	0.987	Not Significant
Awareness	24.136	3	0.001	Significant
Perceived Risk	9.760	3	0.021	Significant
Financial Literacy	0.595	3	0.897	Not Significant
Behavioral Intention	7.625	3	0.054	Not Significant

Source: Author Analisis Using SPSS Software

**Table 9 Kruskal Wallis Test Results Table Based On Last Education**

Variable	Kruskall Wallis	DF	Asymp. Sig	Description
Performance Expectacy	7.243	3	0.065	Not Significant
Effort Expectancy	14.237	3	0.003	Significant
Facilitating Conditions	15.311	3	0.002	Significant
Social Influence	15.560	3	0.001	Significant
Security	3.988	3	0.273	Not Significant
Awareness	4.261	3	0.235	Not Significant
Perceived Risk	14.234	3	0.003	Significant
Financial Literacy	8.200	3	0.042	Significant
Behavioral Intention	9.948	3	0.19	Significant

Source: Author Analisis Using SPSS Software

**Table 10 Kruskal Wallis Test Results Table Based On Last Occupation**

Variable	Kruskall Wallis	DF	Asymp. Sig	Description
Performance Expectacy	6.331	6	0.387	Not Significant
Effort Expectancy	1.927	6	0.926	Not Significant
Facilitating Conditions	3.163	6	0.788	Not Significant
Social Influence	15.815	6	0.015	Significant
Security	3.363	6	0.762	Not Significant
Awareness	16.324	6	0.012	Significant
Perceived Risk	14.162	6	0.19	Significant
Financial Literacy	13.104	6	0.027	Significant
Behavioral Intention	3.658	6	0.723	Not Significant

Source: Author Analisis Using SPSS Software

## DISCUSSION

### Descriptive Statistics

The analysis of key factors influencing the behavioral intention to adopt cryptocurrency in Indonesia highlights the importance of understanding the demographic characteristics of potential adopters. The study's descriptive statistics provide essential insights into the distribution of respondents by gender, age, educational level, and occupation, which help identify demographic segments more likely to engage with cryptocurrency. With a total of 411 respondents, the gender distribution reveals a slight predominance of males (56.4%), suggesting a potential gender inclination towards adopting new financial technologies like cryptocurrency.

Age emerges as a significant factor in shaping the behavioral intention to adopt cryptocurrency. The data shows that nearly half (48.4%) of the respondents are under 25 years old, indicating that this younger, tech-savvy demographic is a key target group for cryptocurrency adoption. Additionally, the substantial proportion of respondents aged 25-35 years (38.4%) suggests that this age group also holds considerable potential for embracing cryptocurrency, likely due to their early career stages and a greater interest in financial independence and investment opportunities.

Educational level plays a crucial role in the adoption of cryptocurrency, with the data indicating that a significant majority of the respondents hold a bachelor's degree (D4/S1), accounting for 71.3% of the sample, and another 17.5% holding postgraduate degrees (S2/S3). This high level of educational attainment suggests that individuals with more education may be better equipped to understand the complexities of cryptocurrency, making them more likely to adopt it. This finding aligns with the notion that higher education often correlates with a greater willingness to engage with new and potentially complex financial instruments.

The occupational distribution of respondents further enriches the demographic perspective on cryptocurrency adoption. Students and university students, comprising 32.8% of the respondents, emerge as a critical demographic with high potential for cryptocurrency adoption.

The significant representation of private-sector employees (28.2%) and civil servants or state-owned enterprise employees (18.0%) also underscores the relevance of targeting working professionals who may have both the disposable income and the interest in exploring cryptocurrency as an alternative investment or payment method.

In conclusion, this demographic analysis provides valuable insights into the factors influencing the behavioral intention to adopt cryptocurrency in Indonesia. By understanding the distribution of respondents across gender, age, educational level, and occupation, the study identifies key demographic segments more likely to engage with cryptocurrency. These insights are essential for developing targeted strategies that address the specific needs and preferences of different population groups, ultimately enhancing cryptocurrency adoption rates in Indonesia. This demographic perspective is crucial for policymakers, financial institutions, and technology providers aiming to promote the widespread adoption of cryptocurrency in the country.

### Gender

The Mann-Whitney U Test results reveal significant gender differences in key factors influencing the behavioral intention to adopt cryptocurrency in Indonesia, such as Performance Expectancy, Effort Expectancy, and Facilitating Conditions. These findings suggest that men and women perceive the benefits, ease of use, and available resources for adopting cryptocurrency differently, possibly due to varying levels of familiarity with technology, financial literacy, or access to support systems (Venkatesh, Thong, & Xu, 2012).

Additionally, significant differences in Perceived Risk and Financial Literacy between genders indicate that women may perceive higher risks and have lower financial literacy levels compared to men, which could lead to a lower intention to adopt cryptocurrency (Chen & Volpe,

2002). This highlights the need for targeted education and risk mitigation strategies that specifically address these gender-specific concerns.

Overall, the analysis emphasizes the importance of considering gender when examining the factors influencing cryptocurrency adoption in Indonesia. Tailoring promotional strategies to address the unique concerns and needs of both men and women could enhance the overall adoption of cryptocurrency (Eagly & Wood, 2012). By developing inclusive approaches that consider gender differences, policymakers and industry stakeholders can ensure that both genders can equally participate in and benefit from the growing cryptocurrency market.

### **Age**

The Kruskal-Wallis Test results based on age provide critical insights into how different age groups perceive various factors influencing the behavioral intention to adopt cryptocurrency in Indonesia. The test reveals significant differences across age groups for variables such as Social Influence, Awareness, and Perceived Risk, indicating that age plays a crucial role in shaping these perceptions. For instance, Social Influence, with a significance level of 0.002, suggests that older and younger respondents may have differing views on how peer pressure or societal norms affect their decision to adopt cryptocurrency. This finding aligns with the diffusion of innovations theory, which posits that social influence is a key factor in the adoption process, particularly across different age groups (Rogers, 2003). Moreover, prior research has demonstrated that social influence and perceived risk are critical factors in cryptocurrency adoption across age demographics (Nguyen & Dang, 2020).

Awareness, with a significant value of 0.001, underscores that knowledge about cryptocurrency varies significantly among age groups, with younger individuals generally being more tech-savvy and having a more positive attitude towards cryptocurrency compared to older populations (Liu & Li, 2020). This awareness gap can serve as a substantial barrier to adoption for older individuals, who may also have different risk perceptions (Featherman & Pavlou, 2003). Perceived Risk, which shows a significance level of 0.021, further varies across age groups, with older adults potentially perceiving higher risks associated with cryptocurrency compared to younger ones.

Previous studies indicate that perceived risk is a significant barrier to cryptocurrency adoption, especially among older demographics (Kim & Kim, 2016). These generational differences highlight the importance of tailoring promotional and educational strategies to address the specific concerns and perceptions of different age groups, thereby facilitating broader adoption of cryptocurrency in Indonesia.

### **Last Education**

The results from the Kruskal-Wallis test applied to the data show that all research The Kruskal-Wallis Test results based on the last education level provide significant insights into how education influences various factors related to the behavioral intention to adopt cryptocurrency in Indonesia. The test shows that Effort Expectancy, Facilitating Conditions, Social Influence, Perceived Risk, Financial Literacy, and Behavioral Intention all have significant differences across different educational levels. For instance, Effort Expectancy has a significance level of 0.003, indicating that individuals with different educational backgrounds perceive the effort required to adopt cryptocurrency differently.

This is consistent with findings from the UTAUT model, which suggests that educational background can influence how individuals perceive the ease of use of new technologies (Venkatesh, Thong, & Xu, 2012). Similarly, Facilitating Conditions, with a significance level of 0.002, highlight that access to resources and support varies significantly among different educational groups, potentially affecting their ability to adopt cryptocurrency (Nguyen & Dang, 2020).

Social Influence, with a significance level of 0.001, underscores the varying impact of societal and peer pressures on cryptocurrency adoption among different educational levels. This aligns with Rogers' Diffusion of Innovations theory, which emphasizes that individuals' adoption decisions are heavily influenced by their social environment, particularly within educated communities (Rogers, 2003). Perceived Risk, showing a significance level of 0.003, indicates that risk perceptions are significantly different among educational levels, with those having higher education potentially perceiving lower risks associated with cryptocurrency, as they may have better financial literacy (Kim & Kim, 2016).

The significance of Financial Literacy ( $p=0.042$ ) further supports this, as individuals with higher education are likely to have a better understanding of financial products, reducing perceived risks and increasing adoption intentions (Lee & Ryu, 2021). The overall significance of Behavioral Intention across educational levels ( $p=0.019$ ) suggests that education plays a crucial role in shaping the intention to adopt cryptocurrency, reinforcing the need for targeted educational initiatives to promote cryptocurrency adoption across various educational backgrounds.

### **Occupation**

The Kruskal-Wallis Test results based on occupation reveal significant differences in several key factors that influence the behavioral intention to adopt cryptocurrency in Indonesia. The test shows that Social Influence, Awareness, Financial Literacy, and Perceived Risk have significant variations across different occupational groups. Social Influence, with a significance level of 0.015, suggests that the impact of peer pressure or societal norms on cryptocurrency adoption varies significantly depending on one's occupation. This finding is consistent with Rogers' Diffusion of Innovations theory, which emphasizes that social structures and networks within different professional groups can strongly influence the adoption of new technologies (Rogers, 2003). Additionally, Awareness, with a significance level of 0.012, indicates that different occupations are associated with varying levels of knowledge about cryptocurrency, which could be attributed to the varying degrees of exposure to financial and technological information across professions (Nguyen & Dang, 2020).

Furthermore, Financial Literacy shows a significance level of 0.027, suggesting that the level of financial understanding required to navigate cryptocurrency differs among occupations. Those in finance-related professions may have higher literacy and, consequently, a higher propensity to adopt cryptocurrency (Lee & Ryu, 2021). Perceived Risk, although approaching significance at 0.19, still highlights the importance of occupational background in shaping how risks associated with cryptocurrency are perceived, potentially influencing adoption behavior (Kim & Kim, 2016).

The non-significant results for Performance Expectancy, Effort Expectancy, and Facilitating Conditions suggest that these factors may be uniformly perceived across different occupations, indicating that these aspects of cryptocurrency adoption do not vary significantly by occupation. These findings emphasize the importance of tailoring cryptocurrency adoption strategies to specific occupational groups, considering their unique social influences, awareness levels, and financial literacy.

### **CONCLUSION**

Based on the comprehensive analysis of demographic factors such as gender, age, educational level, and occupation, it is evident that these variables significantly influence the behavioral intention to adopt cryptocurrency in Indonesia. The results indicate that males are slightly more inclined towards cryptocurrency adoption, potentially due to different levels of financial literacy and perceived risk compared to females. Age differences highlight that younger individuals are more aware and have a higher tendency to adopt cryptocurrency, influenced by

their tech-savvy nature and lower perceived risks. Additionally, educational background plays a crucial role, with higher education levels correlating with greater financial literacy and lower perceived risks, which in turn foster a stronger intention to adopt cryptocurrency.

Occupational differences further emphasize the diverse impact of social influence, awareness, and financial literacy on cryptocurrency adoption. Those in finance-related occupations or with higher financial literacy are more likely to adopt cryptocurrency, driven by their understanding of its benefits and mitigated perceptions of risk. These findings underscore the need for targeted educational and promotional strategies that address the specific needs and concerns of various demographic groups to effectively enhance cryptocurrency adoption in Indonesia. Understanding these demographic nuances is vital for developing inclusive approaches that cater to the diverse population and ensure a broader acceptance of cryptocurrency as a financial innovation.

## SUGGESTION

In order to promote the comprehension and acceptance of cryptocurrency in Indonesia, it is advisable for future research to further investigate the distinct obstacles and incentives encountered by various demographic segments described in this study. Customized educational programs and awareness campaigns should be designed to cater to the specific requirements of different demographic groups, with a special emphasis on enhancing financial literacy and mitigating perceived hazards linked to cryptocurrencies.

In addition, governments and financial institutions should work together to provide a conducive environment that promotes secure and knowledgeable use of cryptocurrencies, with a specific focus on women, older folks, and individuals with limited educational backgrounds. By focusing on these crucial elements, stakeholders may promote a broader and more inclusive acceptance of cryptocurrencies, hence enhancing the expansion of the digital economy in Indonesia.

## REFERENCES

- Alomari, A. S. A., & Abdullah, N. L. (2023). Factors influencing the behavioral intention to use Cryptocurrency among Saudi Arabian public university students: Moderating role of financial literacy. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2178092>
- Arias-Oliva, M., Pelegrín-Borondo, J., & Matías-Clavero, G. (2019). Variables influencing cryptocurrency use: A technology acceptance model in Spain. *Frontiers in Psychology*, 10(MAR), 1–13. <https://doi.org/10.3389/fpsyg.2019.00475>
- Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. *Computers in Human Behavior*, 50, 418–430. <https://doi.org/10.1016/j.chb.2015.04.024>
- Creswell, J. W., & Creswell, J. D. (2018). Qualitative, Quantitative, and Mixed Methods Approaches. In *European University Institute* (Vol. 1, Issue 2). <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32016R0679&from=PT%0Ahttp://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012PC0011:pt:NOT>
- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11(3), 289-307. [https://doi.org/10.1016/S1057-0810\(02\)00105-0](https://doi.org/10.1016/S1057-0810(02)00105-0)
- Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human Computer Studies*, 59(4), 451–474. [https://doi.org/10.1016/S1071-5819\(03\)00111-3](https://doi.org/10.1016/S1071-5819(03)00111-3)

- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics 5th Edition* (5th ed.). SAGE Publications Inc.
- Gupta, B., Iyer, L. S., Weisskirch, R. S., & Gupta, Babita; Iyer, Lakshmi S; Weisskirch, R. S. (2010). Facilitating Global E-Commerce: A Comparison of Consumers' Willingness to Disclose Personal Information Online in the US and in India. *Journal of Electronic Commerce Research* 11(1) <http://search.proquest.com/docview/236644862/14A57DAD3C7046A1PQ/5?accountid=2896>
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Kim, C., Mirusmonov, M., & Lee, I. (2010). An empirical examination of factors influencing the intention to use mobile payment. *Computers in Human Behavior*, 26(3), 310–322. <https://doi.org/10.1016/j.chb.2009.10.013>
- Liébana-Cabanillas, F., Marinković, V., & Kalinić, Z. (2017). A SEM-neural network approach for predicting antecedents of m-commerce acceptance. *International Journal of Information Management*, 37(2), 14–24. <https://doi.org/10.1016/j.ijinfomgt.2016.10.008>
- Liu, Y., & Li, H. (2020). The impact of perceived risk on cryptocurrency adoption: Evidence from Chinese users. *Telematics and Informatics*, 49, 101360.
- Lusardi, A., & Mitchell, O. S. (2014). of Financial Literacy : Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. <http://dx.doi.org/10.1257/jel.52.1.5>
- Mendoza-Tello, J. C., Mora, H., Pujol-López, F. A., & Lytras, M. D. (2018). Social Commerce as a Driver to Enhance Trust and Intention to Use Cryptocurrencies for Electronic Payments. *IEEE Access*, 6(September), 50737–50751. <https://doi.org/10.1109/ACCESS.2018.2869359>
- Naufal Hasani, (2022). Cryptocurrency as an Attractive Alternative Investment Option. *Journal of Finance and Economics*, 10(2), 123-137.
- Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. <https://bitcoin.org/bitcoin.pdf>
- Nguyen, D. C., & Dang, V. T. (2020). Social influence and perceived risk in cryptocurrency adoption among young Vietnamese consumers. *International Journal of Business and Economics Research*, 18(1), 24-33. <https://doi.org/10.5829/idosi.ijber.2020.18.01.19>
- Park, J. Y. (2017). The Impact of Economic Instability on Cryptocurrency Adoption. *International Journal of Technology and Economics*, 15(2), 245-259.
- Restuputri, D. P., Refoera, F. B., & Masudin, I. (2023). Investigating Acceptance of Digital Asset and Crypto Investment Applications Based on the Use of Technology Model (UTAUT2). *FinTech*, 2(3), 388–413. <https://doi.org/10.3390/fintech2030022>
- Rogers, E. M., & Everett, M. (1983). *DIFFUSION OF* Third Edition. [teddykw2.files.wordpress.com/.../everett-m-rogers-diffusion-of-innovati..](http://teddykw2.files.wordpress.com/.../everett-m-rogers-diffusion-of-innovati..)
- Sarath Kumar, R., Micha Premkumar, T., Seralathan, S., Dominic Xavier, D., Elumalai, E. S., Hariram, V., & Sabapathi, S. (2020). Simulation studies on influence of shape and number of blades on the performance of vertical axis wind turbine. *Materials Today: Proceedings*, 33, 3616–3620. <https://doi.org/10.1016/j.matpr.2020.05.665>
- Schaupp, L. C., Festa, M., Knotts, K. G., & Vitullo, E. A. (2022). Regulation as a pathway to individual adoption of cryptocurrency. *Digital Policy, Regulation and Governance*, 24(2), 199–219. <https://doi.org/10.1108/DPRG-08-2021-0101>
- Van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2011). Financial literacy and retirement planning in the Netherlands. *Journal of Economic Psychology*, 32(4), 593–608. <https://doi.org/10.1016/j.joep.2011.02.004>

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology : Toward a Unified View. 27(3), 425–478.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157-178. <https://doi.org/10.2307/41410412>
- Wamba, S. F., & Queiroz, M. M. (2019). The role of social influence in blockchain adoption: The Brazilian supply chain case. IFAC-PapersOnLine, 52(13), 1715–1720. <https://doi.org/10.1016/j.ifacol.2019.11.448>