

# The Future of Digital Finance: The Impact of Cryptocurrency and Blockchain on Digital Securities in Indonesia and Gen Z's Adoption Potential

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## ABSTRACT

**Research Aims:** This study aims to examine the intention of the young generation in Indonesia to adopt cryptocurrency and blockchain instruments in Digital Securities.

**Methodology:** This study adopts a Mixed Methods (Sequential Explanatory Design) approach. This method begins with the collection of quantitative data in the first stage, followed by the collection of qualitative data in the second stage.

**Research Findings:** This disclosure emphasizes public trust in the ability of the Financial Services Authority (OJK) and the Central Bank (BI) to launch and regulate blockchain regulations in the digital capital market.

**Theoretical Contribution:** The results of the study revealed that the involvement of facilitation, institutional trust and technological trust have a significant effect on Gen-Z's intention to use digital securities in Indonesia.

**Research limitation and implication:** The existence of maximum literacy facilities and consultations provided can increase public trust in the authorities providing digital exchange to continue to develop technological innovation optimally.

**Keywords:** *Digital Securities, Institutional Trust, Technological Trust, Generation Z, Involvement Facilitation, Blockchain Use Intention.*

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## INTRODUCTION

Transactions in the financial sector are increasingly experiencing rapid progress along with technological advances, especially in the capital market (Wulandari, D. et al., 2021). This is because there is a development of blockchain technology that integrates wireless communications, smartphones and banking systems that are gradually upgrading related to digital investment systems. Technological updates regarding this digital investment system are more widely developed by developing countries as an actualization of technological progress from the use of traditional transactions gradually (Tapscott, D et al., 2016). One of the technologies currently being developed in the financial sector is blockchain which has been developed in several countries such as Japan (Tapscott, D et al.,

2017), America (Fanning, K., & Centers, D. P., 2016), Indonesia (Cocco, L., Pinna, A., & Marchesi, M., 2017), and China (Chiu, J., & Koepl, T. V., 2017) as well as several other countries. Blockchain was first introduced in 2008 by Satoshi Nakamoto through the Bitcoin whitepaper, which offers a decentralized peer-to-peer electronic payment system (Eyal, I., & Sirer, E. G., 2014).

The emergence of this digital currency is certainly very closely related to two discussions, namely crypto and digital stocks. Cryptocurrency is a blockchain product that is not regulated by banking, authorities or governments, and its transactions are in the form of an anonymous system that also affects monetary and fiscal stability (Abramov, I., & Smirnov, P., 2018). This cryptocurrency-based digital currency also tends to be volatile and has a very high level of volatility so that there is ambiguity in its transactions which makes it difficult for investors to estimate maximum profits (Hughes, A et al., 2019). Meanwhile, to overcome the uncertainty in the return of crypto transaction values, currently several world capital market institutions are considering digital stock products. Reported from the World Bank press release and the Swiss National Bank have issued the first digital bonds in the Central Bank Digital Currency (CBDC) in Swiss Francs. This initiative aims to advance the digitization of capital markets, demonstrating the practical application of blockchain in digital securities (Pilkington, M., 2016).

Currently, development related to digital securities is still ongoing in several countries, most of which are still in the testing stage to perfect their technical and operational aspects before being used generally and used as a global reference (Rao, P., & Wang, Q., 2020). Previous research by Nakamoto, S. (2008) conducted a survey on stock exchanges that studied digital securities showing a percentage of 10% of the total global securities market. However, it is estimated that growth in this sector will continue to increase. This is because there is no truly optimal system in the development of digital securities technology by institutions, so that public trust still tends to be less interested in the use of digital stocks (Pilkington, M., 2016). Some digital securities that are still in the development stage are digital bonds, asset tokenization, blockchain-based securities and stock crowdfunding that have been introduced in Indonesia.

Based on the results of previous research (Nofer, M; Gomber, P., Hinz, O; Schiereck, 2017) studies related to CBDC still require in-depth analysis because there are still technical and technological security issues, this is related to the level of consumer trust in digital security provider institutions. Furthermore, analysis related to the acceptance of technology in society, understanding and literacy levels and user trust are also important to review further to develop digital security designs according to community needs. This is certainly related to the first step in the digital security implementation process, namely first identifying the needs and problems that will be faced by digital securities in the future which will definitely affect user acceptance and trust in digital security development institutions (Peregrino, C., & Moore, S., 2019). A study on the level of literacy in the trust of digital security development institutions initiated by the World Bank (Peters, G. W., & Panayi, E., 2016) states that an analysis is needed from a marketing perspective so that digital security users get the right benefits. In research by (Ramani, S., & Gupta, M., 2018) it is stated that problems related to digital securities must be analyzed from the perspective of consumer needs and government institutions holding securities. Naturally this requires analysis in terms of aspects of user understanding and trust in government institutions which can later influence

the public to use digital securities. Furthermore, in terms of institutions. This study is needed to maximize the design related to digital security facilities and complements such as consultation facilities when there are problems with digital securities. This is based on the process of developing digital securities that several developers have implemented pilot tests related to digital securities but many are still not optimal, thus causing a skeptical attitude of potential investors (Sutrisno, B., & Susanto, R., 2018).

Some problems related to the development of digital securities are in terms of system security which includes user transaction history, and personal account issues for digital securities users. Furthermore, related to technical matters, there are various things that cause users to still hesitate to use digital securities, including the basis of digital security tokens, whether anonymity that can be permitted by users (Patterson, S., & Carter, J., 2019). In addition, in terms of costs incurred in digital security transactions, do digital securities apply an interest or tax system. Research by (Underwood, S., 2016) found that digital securities can minimize the high costs incurred by the central bank related to cash which is estimated to be worth 5-10% of the amount of physical money in circulation, compared to the costs that can be saved for this type of digital security transaction.

For this reason, this study intends to analyze the antecedents that influence the adoption of the younger generation towards the digital security financial investment system (Tan, B., & Low, K., 2020). Furthermore, this study focuses on further analysis related to the understanding and level of public trust in institutions and technologies developed related to digital securities in the future. Furthermore, this study focuses on generation Z in Indonesia, this is in line with the projection of the potential demographic bonus in Indonesia in 2030-2040 and the high frequency of technology users by the younger generation because today's youth tend to be responsive to innovation and the use of the latest information technology (Otoritas Jasa Keuangan, 2020).

Thus, the main objective of this study is to explore the extent to which the antecedents of technology acceptance of new technology use analysis from the perspective of the younger generation regarding understanding and consultation facilities and their relationship with public trust which is expected to increase the adoption of digital securities in Indonesia. Furthermore, this study offers a new study in terms of: first, this study analyzes the adoption of digital securities in the context of understanding and trust in institutions among the younger generation in Indonesia. Second, using a more in-depth analysis using a pilot survey that can support the depth of analysis of community needs in supporting the adoption of digital security technology.

Finally, in addition to the first part. This paper consists of the following parts and sub-sections: the second part reviews the literature related to digital securities and the urgency of the second generation in its development, empirical studies related to several previous studies and the development of research hypotheses. The third part describes the sampling procedure, methods used in data collection, and variables and measurement methods. Furthermore, data analysis and discussion related to the topic of study are presented in the fourth part. While the final part provides research conclusions, includes recommendations and implications theoretically, practically, and policies that can be applied in relation to the adoption of digital securities in Indonesia.

## LITERATURE REVIEW

### ***Digital Securities***

Financial transactions are no longer carried out traditionally since technological growth is getting faster and more advanced (Alzoubi, H., & Alghamdi, N., 2021). The increase in economic digitalization is a sign of the 21<sup>st</sup> century, including the financial system and its institutional foundations have evolved over time by changing the infrastructure in parallel using sophisticated technology (Ante, L., 2020). Most people have transacted using electronic payment methods rather than cash in recent decades (Peters, G. W., & Panayi, E., 2016). Even the development of currency has been designed digitally with various schemes that have emerged in general such as cryptocurrency and digital securities. Armed with various changes and fundamental aspects of the financial system, it can encourage the introduction of digital investment instruments to the public (Setiadi, M., & Utomo, S., 2018).

Interesting facts say that digital securities have been widely used during the capitalization process as carried out by large companies (Yusuf, H., & Saputra, W., 2020). The advantages received by financing and capitalization when adopting digital securities are aimed at automatic and more liquid, volatile, efficient and transparent transactions (Chen, G., Xu, B., Lu, M., & Chen, N., 2018). The trending of cryptocurrency in recent years has shown a significant impact on the financial system, but has created a misunderstanding of the public's view of digital currency (Anggraini, R., & Prasetya, D., 2019). Because the characteristics of cryptocurrency with digital stocks are very different where crypto currency is unable to carry out the three functions of money either orthodox or heterodox (FinTech Research Institute, 2019). The intended function is money as a means of payment, a unit of account, and a store of value/wealth (Indrawati, D., & Fauzi, H., 2021). Cryptocurrency basically has no intrinsic value and is issued by private companies so it is often used as an object of speculation rather than purchasing goods or services (Wang, Y., & Kogan, A., 2018). This currency only relies on blockchain and is not regulated by the government or central bank (Supriyadi, H., & Novita, A., 2018).

However, unlike digital securities, according to the World Bank (Siregar, H., & Kurniawati, D., 2019), digital securities are a new form of investment instrument in national unit of account denominations that represent direct capital market obligations. Meanwhile, Sumarsono, A., & Fatmawati, N. (2019) explains that digital securities are concise electronic investments in the form of capital or electronic fiat issued by stock exchanges as legal tender to complete capitalization and store of value. Broadly speaking, digital securities have a reserve value that is integrated into the system itself (Kurnia, S., & Widodo, S., 2019). Digital securities have become a major focus that has attracted many countries and regional organizations in recent years such as the European Central Bank and Bank Indonesia (Ines, S., Ubacht, J., & Janssen, M., 2017). International financial organizations, academics, and other related parties are increasingly trying to create a common digital securities analysis framework and mutually support policy making in designing digital investments (Malwa, M., & Zohar, A., 2020). Kumar, R., & Singh, S. (2020) and Kshetri, N., & Voas, J. (2019) explain that digital securities can be categorized according to usage scenarios into equity tokens and debt tokens. Equity tokens require indirect provision through inter-issuers such as capital between companies and other entities directly related to the capital market (Handayani, A., & Kusuma, H., 2019). While debt tokens are used to represent the debt obligations of token holders digitally (Nasution, A., & Mahardika, S., 2018). Equity tokens can increase efficiency

and transparency for investors, reduce costs for shareholders and shareholders, and help improve monetary policy (Morkunas, V. J., Paschen, J., & Boon, E., 2019).

Digital securities in their application can be implemented through three architectural structures, namely direct issuance, two-tier issuance, and hybrid models (Putri, E., & Wijaya, I., 2021). In short, direct issuance is based on the important role of the central bank in issuing digital securities directly to end users, tracking all transactions, and handling ownership in company equity (Rahayu, A., & Pratomo, R., 2019). Then the two-tier issuance structure actively involves tied securities and commercial securities (Rahayu, S., & Santoso, B., 2019). The capital market issues digital securities, while commercial securities manage all operations with customers directly. While the hybrid model combines the main features of the two structures mentioned above (Kurniawan, A., & Putra, D., 2020).

The introduction of digital securities still raises uncertainty regarding their advantages and disadvantages depending on their implementation in the capital market (Subekti, A., & Pratama, R., 2020). One of the main challenges in the socialization of digital securities is the disintermediation of the traditional capital market sector and its impact on the implementation of monetary policy (Xu, M., Chen, X., & Kou, G., 2021). What is still a problem is also related to how digital securities will face political opposition from the financial sector because it causes major losses and takes a long time to realize it (Yermack, D., 2017). The key to this success will depend greatly on the situation of the country and the parties that control the capital market in each country (Beck, R., Müller-Bloch, C., & King, J. L., 2018). Many studies support the positive creation of digital securities such as (Lee, J., & Pilkington, M. 2020; Lisk, A., & Koh, S. 2018; Risius, M., & Spohrer, K. 2017) which have discussed various elements of digital securities ranging from definitions, characteristics, classifications, main models, implications of investment variants, potential profits and risks of their introduction. Likewise, central banks surveyed from 20% of the world's population, as many as 10% tend to issue digital securities to the public in the short term (Hanifah, E., & Setiawan, M., 2020). But there are also those who say the opposite as in the opinion of (Anwar, R., & Lestari, D., 2019) on the grounds that it will increase central bank costs for the entire money supply system.

Although there are differences found, most show the positive effects of digital securities on the economy, for example, they can act effectively to encourage price stability (Hermawan, R., & Putra, W., 2018). Meanwhile, Anggraeni, D., & Yusuf, A. (2020) argues that digital securities have three beneficial effects, namely reducing crime related to physical capital markets, allowing interest payments on capital market obligations, and expanding the reach of capital market obligations through digital securities. In addition, digital securities are likely to provide direct clearing for transactions between individuals, thereby reducing clearing costs in the long term (Iansiti, M., & Lakhani, K. R., 2017). The most important influence to stimulate capital market plans in the implementation of digital securities depends on the use of stockbit tokens (Chen, G., Xu, B., Lu, M., & Chen, N., 2018). Individual and household preferences in using investments will have an impact on making digital securities policies (Lestari, N., & Hartono, M., 2021). Therefore, an empirical assessment of the adoption of digital securities in their use by the younger generation needs to be reviewed further Hapsari, R., & Widodo, B. (2018).

### **Generation Z:**

World changes due to the advancement of the internet, smartphones, free network access, digital media, and other technological devices have given birth to a new generation that is an evolution of the previous generation (Lestari, M., & Fajri, H., 2021). Generation Z as a descendant of generation X or millennials emerged due to the increasingly developing industrial revolution so that many nicknames were given to this group such as postmillennial, centennial, pivotal, or digital native (Riani, R., & Mulyadi, Y., 2021). An interesting fact was found that around 32% of the world's population is generation Z (Sudirman, A., & Sari, E., 2019). Even in the United States, almost a quarter of the population is dominated by the younger generation (Vo, V., & Zheng, L., 2021). While in Malaysia, this digital native generation contributes 26% of the total population (Walton, R., & Seldon, J., 2019). According to Utami, S. N., & Hidayat, S. (2018) and Pratama, R., & Wijayanto, D. (2020), births that occurred between 1997 and 2012, both children and adults, can be called generation Z. Meanwhile, if we follow the opinion of Catalini, C., & Gans, J. (2017) and Catalini, C., & Gans, J. S. (2016) said that the range of years for this generation is between 1995 and 2010.

Postmillennials deserve special attention as the first generation in the 21<sup>st</sup> century who grew up with world conditions that are very different from previous generations (Pinho & Gomes, 2023). The public's perception of generation Z, which is driven by consumers, gives the impression of being fast-paced, materialistic, the most impatient, individualistic, independent, and demanding (Agarwal, 2018). This happens because this generation is the first to live in the virtual and real world (Tseng et al., 2021). The background of the emergence of this generation cannot be separated from the development of digitalization which makes technology and the internet a source of information so that it goes hand in hand in shaping consumer behavior and their basic social values (Bako, 2018; Goh & Lee, 2018). The independence that arises from generation Z makes all requests for access to information must be there and obtained quickly (Stergiou et al., 2018). However, generation Z's awareness of global problems such as inequality, poverty, unemployment, the environment, and other economies is very high because these problems concern their lives (Cho et al., 2018; Haddouche & Salomone, 2018).

Generation Z, which is considered a technology-literate group, is the main target segment for digital banking services (Aji et al., 2020; Windasari et al., 2022). One reason is because this group already represents more than \$373 billion in purchasing power in the United States and is expected to have a major impact on consumer products or services worldwide (Berfin Ince et al., 2023; Thach et al., 2021). The use of digital securities has spread by 55% to non-digital customers and has doubled the growth of digital service use in Indonesia over the past three years (Windasari et al., 2022). This is influenced by the involvement of generation Z with its characteristics of preferring to explore new technologies, ease of use of devices, a desire to always feel safe and temporarily turning away from reality when facing challenges (Ng et al., 2019). Therefore, marketers can actively adjust the needs of generation Z, especially technological developments as priority customers to be reached (Roblek et al., 2019).

## **Hypothesis Development**

### **Literacy Facilitation**

The implementation of technology in an organization is quite complicated because many things must be changed such as social performance and personal or group pressure, and the parameters of organizational survival are determined by the ability to adapt and adopt new technology (Akgiray, V., 2019). The introduction of new technology will trigger social and technical changes in an organization, so it is necessary to invest in supporting resources to help employees cope with this (Akhtar, T., Tareq, M. A., & Rashid, K., 2021). Most organizations implement security technology to protect valuable and sensitive information and reduce the effects of technostress conditions on employees Al-Dhamari, R. A., & Ismail, N. I. K. (2014). The phenomenon of technostress in research conducted by Almatarneh, A. (2020) and . Arrunada, B., & Garicano, L. (2018) conceptualizes it as a trigger factor for its creation, the results that occur, and the mitigation mechanism for the event. Several factors or situations that can form stress due to the use of technology are techno-overload, techno-complexity, techno-insecurity, techno-uncertainty, and techno-invasion (Wang, Q., & Su, M., 2020). One mechanism that has the potential to reduce stress levels related to employee work is the technostress inhibitor (Xu, X., Weber, I., & Staples, M., 2019).

Tapscott, D., & Tapscott, A. (2017) explains the technostress inhibitor as an organizational mechanism that has the potential to reduce the negative impacts of technology creation such as decreased employee productivity. Amaral-Baptista, M., Klotzle, M., & De Melo, M. (2011) said that inhibitors are useful for reducing the negative impacts of technostress such as reduced commitment to the organization, decreased employee innovation, and job dissatisfaction. Examples of activities that can minimize the effects of technostress include literacy facilities (training and education), end-user participation, and technical support (Wang, Q., & Su, M., 2020). Literacy facilities include activities that encourage understanding of technological knowledge in the organization. Training and education will help users in playing new applications (Yu, J., & Xue, Y., 2018). Based on the explanation of the literacy facilitation elements that have been described, the hypothesis can be postulated as follows:

*H1: Literacy Facilitation has a significant positive influence on Institutional Trust.*

*H2: Literacy Facilitation has a significant positive influence on Technological Trust.*

*H3: Literacy Facilitation has a significant positive influence on Intention to Use Digital Curities.*

### **Involvement Facilitation**

Technical support facilities explain the mechanism of the end-user support process and explain the extent to which the information system assistance routine is responsive and effective in handling problems faced, increasing their comfort level, and assurance (Ormeño, N., Lequeux, P., & Ansell, J., 2021). Technical support in implementing new technology is also very much needed to encourage users to explore the system and assist in solving problems (Saber, S., 2024). Then the facilitation of end-user involvement measures the extent to which the encouragement to try new information systems, get rewards for using them, and have involvement in the implementation and change of information systems (Tsuchiya, N., 2020). The role of end-user expertise in using new systems in the early stages of introduction will reduce their anxiety so that training in the use of technology will greatly assist employees (Xu, X., Weber, I., & Staples, M., 2019).

The provision of technological support allows central bank digital currency users to be given sufficient training, guidance, and information in using the information system so that it is easy to navigate the application (Zyskind, G., Nathan, O., & Pentland, A., 2015). The involvement facilitation mechanism allows traders and digital stock investors to appreciate why a particular application is implemented and its potential benefits. Thus, the technical support mechanism, and end-user involvement in educating central bank digital currency users about the implementation of their application can eliminate potential confusion about why the application is beneficial and how the application should be used properly. Based on the explanation of the involvement facilitation element that has been described, the following hypothesis can be postulated:

*H4: Involvement Facilitation has a significant positive influence on Institutional Trust.*

*H5: Involvement Facilitation has a significant positive influence on Technological Trust.*

*H6: Involvement Facilitation has a significant positive influence on Intention to Use Digital Curities.*

### **General trust**

Institutional trust is a belief in an institution or individual that the institution is reliable, competent, and can be cooperative which can influence a person's perception of a particular intention or action (Zyskind, G., Nathan, O., & Pentland, A., 2015). This concept of trust consists of multidimensional factors that depend on the context (Yermack, D., 2017). Viewed from the context of technology, previous studies related to trust state that there are several dimensions of trust that influence the intention to use the latest technology, namely dispositional trust, trust in institutions and technology trust (Firth, M., & Gounopoulos, D., 2017) states that the dimension of technology trust has a major role in the intention to use technology, this is related to reliability and good performance can form a positive perception of society. Dispositional trust is also an effective trust formation factor, that society is naturally vulnerable to trusting the latest technology, therefore general trust consists of complementary dimensions to create high trust among technology users. (Yu, J., & Xue, Y., 2018).

An institution in order to be effective in carrying out its functions must gain the trust of the community as the target it serves (). Regarding trust in the academic realm, it has been studied that there is no standard or universal definition of this (Franco, P., 2014). Institutional trust is an indicator of citizen assessment of the performance and service policies issued by related institutions (Fanning, K., & Centers, D. P., 2016). As a result, the system in community institutions can be measured briefly, both in terms of responsiveness and objectivity in working even though constant monitoring is not carried out (Finextra, 2017). The trust built by the community towards regulators and related organizations aims for these institutions to be able to provide services and products in accordance with applicable regulations, and hopes to be able to protect the rights of citizens by doing good things Babich, V., & Hilary, G. (2020). The level of institutional trust is closely related to economic growth, even further related to inclusive welfare programs and the success of welfare state reforms (AXA, 2017). Reflecting on the positive impacts and consequences caused by public trust in institutions, maintaining the commitment of each institution in improving performance and issuing policies must always be carried out optimally (Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W., 2018).



Various previous studies have said that institutional trust can improve the welfare, happiness, satisfaction, or quality of life of individuals. According to [Bhagat, S., & Bolton, B. \(2019\)](#) in his research, he said that there is a direct correlation between institutional trust and happiness. Likewise, institutional trust is also found to be directly related to consumer life satisfaction and welfare ([Beck, R., 2018](#)). Meanwhile, previous research by [Chod, J., Trichakis, N., Aspegren, H., & Weber, M. \(2018\)](#) stated that an important factor in the success of marketing and reciprocal relationships with the community is equipped with a conceptualization of the formation of their trust in institutions or institutions. Institutional trust can encourage the application of socially and economically sustainable practices because the community will choose a good institutional reputation ([Pinna, A., & Ruttenberg, W., 2016](#)). Furthermore, research conducted by ([Shanaev, S., Sharma, S., Ghimire, B., & Shuraeva, A., 2019](#)) on 334 consumers in India in a study of consumer online retailing showed that the institutional trust dimension is formed by the community's trust that the organization or server system that operates the technology must have adequate competence.

Furthermore, research by [Ormeño, N., Lequeux, P., & Ansell, J. \(2021\)](#) on a survey of technology usage among 192 undergraduate students showed that reliability and technology services are important factors in terms of growing the intention to use technology. In a practical case study in Indonesia, it can be seen from some time ago related to the ransomware attack on the National Data Center (PDN) ([Saber, S., Kouhizadeh, M., Sarkis, J., & Shen, L., 2019](#)). In the case study, the ransomware attack was aimed at the digital migration, education, and banking systems so that people's data was leaked to hackers, this of course not only disrupts people's economic activities but also affects people's trust in the security of financial transactions more comprehensively. So with this case, data security related to financial transactions must of course be maximized to avoid data leaks or other cyber crimes, because this can certainly affect people's perceptions and trust in financial institutions in Indonesia. By linking this logic to the intention to adopt cryptocurrency and digital securities, IDX and BI as vendors with high integrity are expected to be able to regulate regulations and be reliable in preparing cryptocurrency and digital securities systems so that they can minimize the risks that occur, so that they can grow high trust among the public as technology users. Based on the explanation of the general trust element that has been described, the hypothesis can be postulated as follows:

*H7: Institutional Trust has a significant influence on Trust Technology.*

*H8: Institutional Trust has a significant influence on Intention to Use Digital Curities.*

*H9: Technological Trust has a significant influence on Intention to Use Digital Curities.*

## RESEARCH METHOD

This study adopts a Mixed Methods (Sequential Explanatory Design) approach. This method begins with the collection of quantitative data in the first stage, followed by the collection of qualitative data in the second stage. The purpose of the first stage is to collect quantitative data to measure the phenomenon or variable being studied in an objective and systematic manner, while the purpose of the second stage is to gain a deeper understanding of the phenomenon through qualitative analysis. Qualitative data in the second stage is often used to explain the quantitative results obtained in the first stage, thus, this design is also referred to as an "explanatory" design ([Huang, R., & Stoll, H. R., 1997](#)).

### Research Procedures and Samples

The research sample unit is specifically directed at educational institutions, communities and youth organizations. This study uses a questionnaire approach (primary data) with a Likert scale of 1 (strongly disagree) to 5 (strongly agree), while the convenience sampling method is used and the data obtained is taken offline (face-to-face) and online (google-form) (Lee, J., & Shin, D., 2018). The questionnaire approach based on convenience sampling has been proven and reliable for use in measuring intentions towards renewable technology products such as; tokens as digital assets (McKinsey, 2016), digital securities (Lindman, J., Rossi, M., & Tuunainen, V. K. 2017), blockchain technology (Lee, J., & Shin, D., 2018), and financial technology platforms (Lindman, J., Rossi, M., & Tuunainen, V. K., 2017). The field research process resulted in 865 sample respondents. The total final sample analyzed was 865 respondents, with various spectrums based on gender, education, income, domicile, experience and frequency of using crypto. The proxy for crypto use is used to filter the tendency of young people who like to use new technology products, which ultimately more objectively captures the perception of the digital securities system as an investment asset. Table 1 can provide detailed information regarding the socio-demographics of respondents.

**Tabel 1. Description of Respondent Distribution**

	Demographics	Frequency	%
<b>Gender</b>	Man	775	89.7%
	Woman	90	10.3%
<b>Age</b>	<20 Year	63	7.3%
	21-25 Year	489	56.6%
	26-30 Year	201	23.2%
	>30 Year	112	13.9%
<b>Level of education</b>	Junior High School	29	3.4%
	Senior High School	521	60.3%
	D1/D2/D3	228	26.4%
	Bachelor S1/S2	87	9%
<b>Work</b>	Student	710	82.1%
	Entrepreneur	48	5.6%
	Government employees	33	3.7%
	Private employees	74	8.6%
<b>Income</b>	<3 million rupiah	123	14.3%
	5-7 million rupiah	318	36.7%
	7-10 million rupiah	222	25.6%
	>15 million rupiah	202	23.4%
<b>Monthly expenses</b>	<2 million rupiah	667	77.1%
	2-4 million rupiah	69	8%
	6-8 million rupiah	75	8.6%
	>10 million rupiah	54	6.3%
<b>Frequency of cryptocurrency and digital securities transactions</b>	Every Day	10	1.2%
	Every Week	39	4.5%
	Every 3 Month	546	63.2%
	Every 6 Month	270	31.1%
<b>Experience using cryptocurrency and digital securities</b>	<1 Year	235	27.1%
	1-3 Year	263	30.5%

	Demographics	Frequency	%
<b>Domicile</b>	3-5 Year	112	12.9%
	>5 Year	255	29.5%
	Java Island	758	87.6%
	Outside of Java Island	107	12.4%

**Source: Data processed by the author, 2024**

The first stage, the approach used is partial least squares structural equation modeling (PLS-SEM). This is because the complexity of the research model and the purpose of the research is to predict the main target and identify relevant antecedent constructs (Mukherjee, A., Singh, M., & Žaldokas, A., 2017). The complexity in question refers to the research model that uses various antecedents with various criteria. Furthermore, the constructs in this study as a whole are items adapted from previous research and modified according to the context and research model. The constructs of technology trust (three items) and institutional trust (four items), each adapted from (Sheel, A., & Nath, V., 2019). In addition, the constructs of literacy facilitation (three items) and involvement facilitation (three items), these constructs are each adapted from (Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S., 2016).

In the second stage, this study conducted in-depth interviews with 8 generation Zs of different ages, backgrounds, incomes, and experiences of using m-payment (according to demographic results) to cross-validate the output obtained from the quantitative study. Respondents who fit the criteria of 8 generation Zs who participated in the in-depth interview were respondents who had experience in using e-payment. Because it is not possible to conduct in-depth interviews with all elements of the population, non-probability sampling, more specifically judgmental sampling, was carried out in the implementation of the in-depth interview (Treleaven, P., Brown, R. G., & Yang, D., 2017). Specifically, individuals who have more than 5 years of cryptocurrency experience are considered as targets in the implementation of the in-depth interview. Respondents who have more than 5 years of cryptocurrency experience are assumed to have better knowledge and preferences for the use of technology, especially related to financial transactions. Furthermore, it is expected that respondents who have more than 5 years of experience using digital securities will provide better and more reliable information. In short, this activity is a qualitative research method that involves in-depth discussions with respondents as research subjects. Its main characteristic is the interaction between researchers and respondents as part of the discussion. This interaction distinguishes in-depth interviews from other qualitative research methods such as observation. Respondents are mainly asked several open-ended questions regarding the construction of the research model. The ideal number of respondents is between 6-12 respondents (Mistry, I., Tanwar, S., Tyagi, S., & Kumar, N., 2020), because too many respondents are also ineffective because the time required is too long.

### **Data Analysis**

This study was analyzed using partial least squares structural equation modeling (PLS-SEM), and SmartPLS 3 software was used in data management. Then, the reason for using PLS-SEM was due to the limited number of respondents and the complex research

model. Complexity refers to the combination of reflective-formative analysis, and the use of HCM constructs (Marke, A., 2018). Therefore, the use of PLS-SEM is relevant for this study.

## RESULTS AND DISCUSSIONS

### *Data Screening*

This phase is intended to check the completeness of the data (no missing value), the absence of a straightline pattern in the collected data, and no tendency for common method bias (CMB). CMB can occur when both independent and dependent constructs are captured by the same response method. While the consequences of CMB, it is agreed that it can damage the validity of the study. Therefore, Harman's single factor test was used to verify the potential existence of CMB (Ormeño, N., Lequeux, P., & Ansell, J., 2021). The analysis showed that the total structure of the seven construct factors (eigenvalue more than 1), while the maximum variance by one factor was (41.30 percent), and each factor contributed less than 50 percent (49.72 percent) of the covariance in a variable. The results of this test statistically verify that there is no potential for CMB to interfere with the validity of the data used (De Filippi, P., 2014). Finally, in order to identify the adequacy of the sample in the SEM-PLS analysis, the inverse square root method applied (Black, J., & Baldwin, R., 2012). Assuming a statistical power level of 80%, a significance of 5% and a minimum path coefficient of 0.11, the minimum size of respondents needed is 155 (Pinna, A., & Ruttenberg, W. 2016). Therefore, a total of 865 respondents analyzed have met the requirements.

### *Measurement Model Assessment (Outer Model)*

Entering the outermost PLS-SEM model stage, the measurement of loading factors (outer model) is applied and the threshold used is the loading value  $>0.70$ . The results show that the measurement of the outer model substantially contributes to each construct (Sheel, A., & Nath, V., 2019), the majority of the values are above the threshold, namely from 0.748 to 0.929. In the second stage, convergent and discriminant validity are applied using the average variance extracted (AVE) ratio and the Fornell-larcker Criterion. The results of the analysis show that the overall AVE root ratio is greater than the correlation value between variables. In addition, the AVE value also shows the expected results, namely; in the range of 0.663 to 0.820. This analysis shows that the overall value is in accordance with the threshold for  $AVE > 0.50$  (Tsuchiya, N., 2020). It can be concluded that all reflective constructs show the expected validity values (see Appendix 1 and Table 3). In the third stage, testing is directed at the reliability of the research constructs using Cronbach's alpha ( $\alpha$ ) and composite reliability (CR) values. The results of the analysis produce  $\alpha$  values (0.754 to 0.860) and CR (0.867 to 0.921) indicating good internal consistency, according to the threshold of  $\alpha > 0.70$  and CR 0.70- 0.95 (Saber, S., Kouhizadeh, M., Sarkis, J., & Shen, L., 2019). A more complete explanation can be seen in tables 2 and 3.

**Tabel 2. Outer Model Evaluation**

Constructs	Code	Loadings	a	Rho_A	CR	AVE
<b>Involment Facilitation</b>	INF1	0.921***	0.891	0.931	0.817	0.271
	INF2	0.907***				
	INF3	0.860***				
<b>Institutional trust</b>	INT1	0.867***	0.785	0.750	0.741	0.754
	INT2	0.876***				
	INT3	0.875***				
	INT4	0.798***				
<b>Literacy Facilitation</b>	LFC1	0.921***	0.890	0.865	0.841	0.980
	LFC2	0.872***				
	LFC3	0.763***				
<b>Technological Trust</b>	TCT1	0.847***	0.786	0.764	0.891	0.875
	TCT2	0.790***				
	TCT3	0.787***				
<b>Intention Use Digital Scurities</b>	USE1	0.792***	0.834	0.784	0.845	0.861
	USE2	0.876***				
	USE3	0.982***				

Note: \*\*\* significant at the level of 0.001

Source: Data processed by the author, 2024

**Tabel 3. Outer Fornell-Lacker Criterion**

Constructs	1	2	3	4	5
<b>Institutional Trust</b>	<b>0.834</b>				
<b>Intention to use Digital Securities</b>	0.765	<b>0.904</b>			
<b>Involment Facilitation</b>	0.672	0.457	<b>0.908</b>		
<b>Literacy Facilitation</b>	0.567	0.412	0.651	<b>0.819</b>	
<b>Technological Trust</b>	0.619	0.523	0.590	0.781	<b>0.874</b>

Source: Data processed by the author, 2024

### **Structural Model Assessment (Inner Model)**

Before entering the hypothesis testing, the multicollinearity indicator is calculated using the variance inflation factor (VIF) value. The threshold value used is VIF less than 5, according to (Tapscott, D., & Tapscott, A., 2017). The VIF value shows the expected results, namely; the lowest is 1,388, and the highest is 3,219. Furthermore, the Goodness-of-fit (GoF) model is applied through the Standardized Root Mean Squared Residual (SRMR) value, the threshold used is below 0.080 (Ormeño, N., Lequeux, P., & Ansell, J., 2021). The SRMR value can be used as a reference for the GoF measure for PLS-SEM as a reference to avoid model specification errors, the SRMR value is 0.062 which is below the specified threshold.

**Tabel 4. Hypotesis**

PLS-Path	VIF	$\beta$	$p$	BCCI 95%	Conclusion
<i>Institutional Trust -&gt; Intention to use Digital Scurities</i>	1.723	0.432	0.002	0.070; 0.455	Accepted
<i>Institutional Trust -&gt; Technological Trust</i>	1.647	0.567	0.000	0.106; 0.500	Accepted
<i>Involvement Facilitation -&gt; Institutional Trust</i>	3.157	0.312	0.015	0.378; 0.536	Accepted
<i>Involvement Facilitation -&gt; Intention to use Digital Scurities</i>	3.167	0.121	0.014	0.120; 0.578	Accepted
<i>Involvement Facilitation -&gt; Technological Trust</i>	3.198	0.321	0.065	0.023; 0.636	Accepted
<i>Literacy Facilitation -&gt; Institutional Trust</i>	3.209	0.446	0.006	0.087; 0.439	Accepted
<i>Literacy Facilitation -&gt; Intention to use Digital Scurities</i>	3.234	0.435	0.836	-0.367; 0.176	Rejected
<i>Literacy Facilitation -&gt; Technological Trust</i>	3.144	0.325	0.002	0.245; 0.376	Accepted
<i>Technological Trust -&gt; Intention to use Digital Scurities</i>	1.289	0.370	0.000	0.231; 0.903	Accepted

Source: Data processed by the author, 2024

After all assumptions are met, the structural model is tested using t-values and p-values ( $t = > 1.96$  and  $p = < 0.05$ ), in accordance with the recommendations of Hair et al. (2019). Furthermore, this study uses a 5,000 bootstrap (resampling) confidence and accelerated interval (BCCI) approach with a p-value for two-way significance (\*p: 0.05, \*\*p: 0.01, \*\*\*p: 0.001). Based on the calculated analysis, in the direct effect (see table 4), the path of Literacy Facilitation to Intention to use Diital Securities is not significant (p-value =  $> 0.05$ ). Therefore, H3 is not supported. Meanwhile, over all the relationship between antecedents and consequences is significant at the 5% level and none of the confidence interval values exceed the value of 0. It can be concluded that the hypotheses H1, H2, H4, H5, H6, H7, H8 and H9 are accepted in this study. Table 4 explains in more detail the output and conclusions of the hypothesis testing.

Finally, the assessment of the determination coefficient of the intention construct shows an adjusted  $R^2$  value of 0.40. This means that 40 percent of the variation in intention to adopt CBDC is explained by the construct used in the study. However, it is important to interpret the  $R^2$  value in the context of the study. Further,  $R^2$  cannot be used to evaluate the predictive power out-of-sample model. Therefore, the Stone-Geisser  $Q^2$  evaluation technique and the PLSpredict method were applied to measure the prediction accuracy of the PLS path model. The  $Q^2$  value on the intention antecedent was 0.323 and the indicators in the PLS-SEM analysis produced balanced prediction errors (RMSE and MAE) compared to the benchmark measurement. This indicates that the observed values have been reconstructed correctly and the model has good prediction accuracy (Zyskind, G., Nathan, O., & Pentland, A., 2015). Further explanation can be seen in table 5.

**Tabel 5. PLS predict Output**

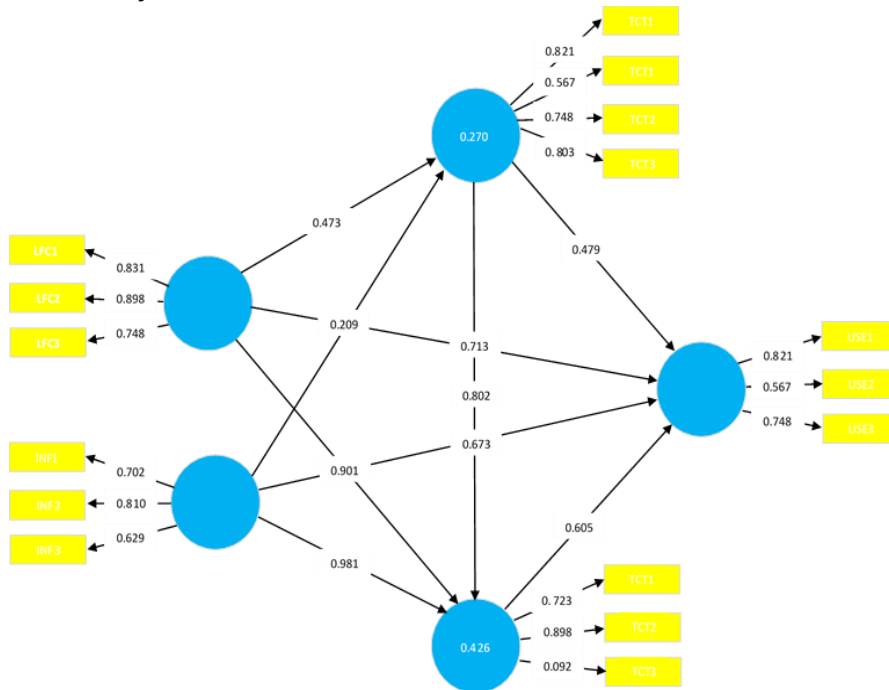
Indicator	PLS		Benchmark	
	RMSE	MAE	RMSE	MAE
INT1	0.712	0.759	0.617	0.736
INT2	0.756	0.538	0.625	0.728
INT3	0.878	0.647	0.737	0.620
INT4	0.891	0.626	0.779	0.730

Source: Data processed by the author, 2024

**Tabel 6. Output Q<sup>2</sup>, SRMR and R<sup>2</sup>**

Constructs	R <sup>2</sup>	R <sup>2</sup> Adj	Q <sup>2</sup>	SRMR
Institutional trust	0.226	0.203	0.158	
Intention to use Digital Securities	0.407	0.405	0.327	0,076
Technological Trust	0.409	0.427	0.309	

Source: Data processed by the author, 2024



**Figure 1. Outer Full Model PLS-SEM**  
Source: Data processed by the author, 2024

**Discussion**

In general, this study examines empirical findings regarding the intention of young people to adopt the cryptocurrency system, in order to encourage monetary policy and increase the efficiency of the resilience of the digital investment system in Indonesia. Furthermore, the hypothesis that Literacy Facilitation has an effect on Institutional Trust is supported in this study. This finding suggests that the level of individual understanding of blockchain mechanisms and technology then directly affects the trust of digital security developer institutions Xu, X., Weber, I., & Staples, M. (2019). The younger generation tends to understand and have higher levels of literacy compared to other age groups, this is certainly inseparable from the literacy program created by digital security developer institutions such as socialization, campaigns through social media and print media to real actions in collaboration with various government institutions to disseminate the socialization of cryptocurrency use. If the public has good trust in crypto development

institutions, then the institution can easily propose policies related to the digital security system so that it is easier for the wider community to use it.

Therefore, institutional trust is very important to be developed among the public when digital securities have been launched. In relation to the in-depth interviews that have been conducted, it has been validated that literacy facilities can increase trust in cryptocurrency provider institutions and their technology. Literacy facilities have a high urgency to provide an understanding related to blockchain technology and the understanding provided is expected to form a positive perception of digital security development institutions. Not only to build institutional trust, the literacy facilities provided are in accordance with the aim of increasing public literacy related to with financial inclusion in Indonesia. Literacy facilities are expected to facilitate the community in using digital securities so as to minimize the confusion of the younger generation and the community from using the latest blockchain technology as a digital currency that can be used in daily transactions.

Furthermore, empirically the hypothesis that literacy facilitation has a significant effect on technological trust in adopting digital securities is accepted in this study. The findings suggest that the facilities provided to the community in the form of socialization, digital securities use campaigns, usage guides and information related to blockchain can build trust in the performance of digital securities. More deeply, when the community, especially the younger generation, can understand the use of new technology in depth, the younger generation can minimize the difficulties or problems caused by the latest technology. Furthermore, when the community has a deep understanding of the latest technology, the community can provide feedback on the use of the technology to optimize the development of better technology. This is in line with previous research that public perceptions related to the mechanism of use, ease of use of the latest technology, and understanding related to the security of the blockchain system can form technological trust that can form the intention to use the technology in the long term (Black, J., & Baldwin, R., 2023).

From the respondent's perspective, literacy is needed to understand the latest technology that is being developed. This is related to the reliability and ease of the technology offered, so that the younger generation can voluntarily move from cash transactions to transactions using blockchain technology. Positive perceptions and trust formed by the younger generation can then strengthen the actions of the younger generation to use digital securities. This can be Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange as developers of digital securities to optimize blockchain technology in terms of security, risks and obstacles caused by the technology to foster the intention to use digital securities when it is launched. In contrast to previous results, the relationship between literacy facilitation and intention to Use crypto did not show the expected results. This indicates that there are still doubts among the public regarding security risks such as access to information, transaction services, and payment methods, as well as privacy risks when using blockchain, even though the public is well-literate. This process has given rise to a highrisk perception among the public, which can result in low intention to use digital securities in Indonesia. This finding is in line with previous studies that the perception of risk in the cloud sector and technological capabilities, especially for



financial transaction purposes, is still relatively high, thus reducing the intention to use the technology (Yermack, D., 2017).

The launch of digital securities will later be accompanied by maximum strengthening techniques and technology encryption systems, and will need to be supported by massive socialization to the entire community. Institutions developing digital securities also need to provide consultation facilities and assistance (help desks) that can help overcome problems related to cryptocurrency transactions. In accordance with these indications, in-depth interview analysis shows that the public considers literacy facilities related to blockchain technology important, but along with this, there are several factors that need to be optimized along with literacy, namely optimizing technology and its supporting infrastructure. Currently, people still do not have full access to the internet network, so this can be an obstacle in using crypto investment assets.

The next discussion is about the influence of the involvement facilitation construct on institutional trust. The findings assume that the system/method in order to reduce the level of stress from the use of new technology, where this is manifested in the existence of literacy facilities, supporting facilities, and technical support can form an intention to adopt digital securities. This is in line with previous research which stated that involvement facilitation is intended to reduce the negative impact of technostress caused by the launch of the latest technology products Ormeño, N., Lequeux, P., & Ansell, J., (2021). The consulting facilities provided are expected to increase public trust in digital securities development institutions, this is related to the institution's efforts to overcome digital securities problems in the field. In line with this indication, the in-depth interview analysis shows that involvement facilitation can affect trust in digital securities development institutions. Not only as a solution provider for problems arising related to digital securities, involvement facilitation can also be used by the community to contribute to the development of digital securities technology. Involvement facilitation allows the community to participate during the technology planning and implementation process so that it can minimize the emergence of technology use problems. By being directly involved, the community can provide feedback and get information related to the latest digital securities technology. In line with these findings, the proxy involvement facilitation also has a significant effect on technological trust. In this case, the results of the study revealed that consultancy facilities can minimize the difficulty of using new technology by the public, if the digital securities provider authority can socialize consultancy facilities optimally, this can increase public trust in digital securities technology. This is in line with previous research which revealed that involvement facilitation accompanied by improving internet supporting infrastructure and maximizing digital securities design increases public trust in digital securities developer authorities Tsuchiya, N. (2020).

In-depth interview analysis shows that involvement facilitation, namely facilitation provided by the authority, is able to determine the intention of digital securities users. This refers to the importance of assistance service facilities related to the use of new digital securities technology, central banks and other authorities, as holders of the digital securities system, need to always update technical information and procedures for its use. The involvement of facilitation carried out is expected to be able to reduce resistance from the technical side in the use of digital securities among the public. More deeply, the maximized consultancy facility technique can influence the public's intention to use digital securities.

This is related to the perception and trust of the community that has been formed well so that the community has fully had the intention to use digital securities. This is reinforced by previous research which revealed that consultation facilities can channel public concerns related to technological problems and confusion in understanding the latest technology so that they can strengthen actions to adopt digital securities in the future (Yu, J., & Xue, Y., 2018).

Furthermore, the hypothesis stating that institutional trust has a significant effect on the intention of the younger generation to adopt digital securities is accepted in this study. This finding suggests that individual trust felt in the adoption of digital securities has a significant effect on the intention of the community to use digital securities (Bhagat, S., & Bolton, B., 2019). Related with in-depth interviews that have been conducted validated that institutional trust directly influences the intention to use digital securities. Trust in the institution can be built by strengthening the design of the digital securities system and regulations governing its transactions, so that people feel safe and comfortable in using digital securities when they have been launched. In this regard, the next hypothesis that states that institutional trust has a significant effect on technology trust can be accepted in this study. In general, this finding supports previous studies that people have high trust in the launch of digital securities in Indonesia, although there is still little literature that can provide information related to digital securities, so that when digital securities have been launched they have the intention to use digital securities (Ormeño, N., Lequeux, P., & Ansell, J., 2021). Technology trust indicates that the trust built by individuals is in line with the performance of the technology to be used (Saber, S., 2024), and is supported by the institutional trust dimension which indicates that individuals have high trust in Bank Indonesia to issue digital currency, which can later be used by the younger generation and the wider community (Saber, S., 2024). This means that Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange have a good opportunity to develop digital securities, marked by the trust of the younger generation who are ready to use digital money. In addition, it is necessary to develop technological performance that can later be used in digital securities practices, so that users will not find it difficult to operate digital securities.

Judging from the in-depth interview analysis, the institutions of Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange as digital securities authorities need to conduct comprehensive socialization regarding the launch of digital securities. In addition, the authorities need to collaborate with international companies regarding the use of digital securities so that socialization can be carried out comprehensively among business actors and individuals. The final discussion, related to technological trust, has an effect on the intention to Use Blockchain technology accepted in this study. Regarding the operation of digital securities which are directly operated by the government, the younger generation has high trust in the level of reliability of technology related to the security of accounts and transactions using digital securities.

The younger generation who understand that in terms of efficiency, digital securities are easier to use and are easily accessible can increase the intention to use digital securities. This is in line with previous research that trust in technological access and supported by the urgency to use a currency that is more easily accessible increases the preference of the younger generation in using digital securities (Chu et al., 2022). This is in line with the results

of in-depth interviews stating that technological security and trust in digital securities regulatory authorities can directly affect the level of use of digital securities. The younger generation believes that it is important to first fixate on the roadmap and system of digital securities, and it is necessary to conduct a pilot test on blockchain technology before it is officially launched. This is related to the security system used, if the system is secure, the younger generation is more interested in using digital securities.

## **CONCLUSION AND RECOMMENDATION**

In general, this study analyzes the intention of the younger generation to adopt digital securities and finds that consulting facilities, trust in authorities and trust in the latest technology have a significant effect on the intention to use cryptocurrency. The findings emphasize the importance of building technological and institutional trust, which is intended to increase public trust in the ability of the central bank to launch and regulate the digital securities system. In addition, the involvement and literacy facilities by the crypto asset developer authorities have been empirically proven to shape the intention to adopt blockchain technology. The facilities provided by the authorities, such as assistance services related to the use of new crypto technology and literacy that minimizes risks related to security and transaction systems, are expected to reduce resistance from the technical side in the use of digital securities.

However, the literacy facilities provided by the crypto developer authorities cannot immediately influence the intention to use blockchain technology. This finding shows that the literacy facilities implemented must be accompanied by maximization and improvement of infrastructure and internet networks in Indonesia. Currently, the delivery of information quickly and efficiently can be delivered through electronic devices and social media so that it is important for the leveling of internet network infrastructure. In addition, the younger generation as a generation that is proficient in the latest technology can be the spearhead in efforts to adopt the latest technology so that it is expected to influence the surrounding environment to also use blockchain technology.

Finally, although this study discusses in depth the antecedents of cryptocurrency acceptance among the younger generation in Indonesia. However, the findings need to be defined wisely in relation to; first, the findings have not been able to clearly show how cryptocurrency is applied in everyday life and how it impacts the payment system in Indonesia. Second, this study focuses on the analysis of institutional trust and technology trust where technology is still in the design development stage in Indonesia so that it cannot be analyzed further regarding technological issues. Therefore, further research on early adopter and post-adoption perceptions is still very much needed, and is expected to provide a deeper understanding of the factors that influence people's intention to adopt cryptocurrency in Indonesia and can help Bank Indonesia to increase the effectiveness of launching digital securities.

### ***Recommendation***

The findings of this study offer empirical literature on the acceptance of the latest technology related to crypto investment instruments, especially in Indonesia. The findings in this study are expected to be a reference or literature related to further decision-making regarding the development of the latest cryptocurrency digital currency technology, and this study can be a reference for further studies related to digital securities.

The government, especially Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange as the authorities developing capital markets and digital securities, can optimize the roadmap and design of digital securities that are currently being designed by referring to the development of blockchain technology and pilot tests that have been carried out in various countries. Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange need to develop effective literacy facility methods so that information can be widely conveyed to the Indonesian people. Literacy can be carried out by collaborating with several business and e-commerce actors and can collaborate with several government agencies to be able to further socialize CBDC to the community.

The implementation of digital securities in Indonesia certainly cannot immediately replace cash transactions as a whole as is currently still being done, but further steps are needed to facilitate blockchain technology as a complement to cash currency which is currently still widely used in society. Thus, Bank Indonesia, the Financial Services Authority and the Indonesia Stock Exchange in collaboration with the government can implement strategic steps starting from providing literacy facilities in the form of socialization, campaigns, and consulting facilities (help desk) that support the delivery of information to the public, supported by adequate improvements to the internet network infrastructure. Furthermore, optimization in terms of blockchain technology needs to be carried out such as guaranteeing the security of user transactions, account security, and ease of transactions need to be improved to build trust among the public. The government needs to build adequate technological infrastructure, including a strong security system, sufficient capacity to handle high transaction volumes, and good integration with existing financial systems.

In relation to policy, the Government and Bank Indonesia need to formulate the latest regulations related to the use of cryptocurrency in Indonesia. In more detail, the government and Bank Indonesia need to formulate regulations related to consumer protection, data security, anti-money laundering regulations and prevention of other illegal activities related to digital securities. With strong regulations related to digital securities, it can provide trust to the public, especially the younger generation, and reduce the risk of using cryptocurrency for undesirable purposes. Policies related to stakeholders and transaction flows need to be clarified and disseminated directly to the public.

The flow of cryptocurrency transactions with various financial institutions and the costs arising from crypto transactions need to be formulated clearly so that the public avoids doubts in making decisions to use crypto assets in the future. Furthermore, the government needs to create effective supervision and security for crypto transactions, this can be implemented by establishing an independent audit and strict supervision team to protect digital securities from the threat of cybercrime and other criminal activities. Finally, an in-depth analysis needs to be conducted to consider the impact of cryptocurrency usage on money supply, interest rates, financial system stability, and related policies, which is intended to ensure that the launch of digital securities does not disrupt overall economic stability.

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