

## Technology Acceptance and the Use of Non-Cash Payment Systems: Empirical Evidence from Generation Y and Z

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### Abstract

**Purpose:** This study aims to examine the determinants influencing the use of non-cash transaction services among Generation Y and Z, focusing on the application of the Unified Theory of Acceptance and Use of Technology (UTAUT) model.

**Method:** This research adopts a quantitative approach using convenience sampling with a total of 713 respondents. Data analysis techniques include descriptive statistics, Partial Least Square (PLS) regression, and path model analysis using SmartPLS.

**Results:** The results indicate that all latent variables—performance expectancy, facilitating conditions, social influence, risk perception, and trust perception—have a significant influence on the intention to use non-cash transaction services. Although effort expectancy shows a positive relationship, its effect is not statistically significant.

**Implication:** The findings offer valuable insights for digital financial service providers and policymakers to enhance system accessibility, trust, and user convenience to encourage broader adoption among tech-savvy generations.

**Originality:** This study contributes to the digital payment literature by integrating technological, social, and psychological factors within the UTAUT framework, specifically targeting Generation Y and Z as key demographic groups driving the future of cashless economies.

**Keywords:** Technology Acceptance, Non-Cash Transactions, Economic Activities, and Financial Technology.

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## Introduction

Technology has become a pivotal driver of business activity across scales—from small and medium enterprises to large corporations. Its benefits are evident in marketing, information access, and financial management systems such as Cash Management Systems (CMS), which have enabled more transparent and credible financial transactions (Cahya, 2020; Marheni, 2014). The transformation brought by digital technology is not limited to businesses. Individual consumers, especially younger demographics, are increasingly adopting digital tools to facilitate everyday activities. Terms like credit cards, electronic money, e-wallets, and online banking have become commonplace. These innovations offer not only convenience but also reduce the risks associated with carrying cash. As a result, non-cash payments have become part of a broader shift toward financial digitalization, in line with Indonesia's *Gerakan Nasional Non-Tunai* (GNNT) initiated in 2014 by Bank Indonesia to accelerate digital payment adoption (Bank Indonesia, 2015).

The adoption of non-cash transaction services is especially pronounced among Generations Y and Z, who are often described as digitally native and technologically literate (Howell, 2012; Levickaitė, 2010; Naumovska, 2017). However, this perception must be examined critically. While these generations are generally proficient with digital tools, such literacy levels and actual usage behavior vary and should be substantiated with empirical evidence. Studies have shown that technological familiarity does not always translate to adoption intent or usage frequency (Naci Çoklar & Tatli, 2021; Wiedmer, 2015).

To understand the behavioral dynamics behind technology adoption, this study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003). UTAUT has been widely used to model the influence of performance expectancy, effort expectancy, social influence, and facilitating conditions on user behavioral intention. However, multiple studies have extended UTAUT by incorporating variables like *perceived risk* and *trust*, especially in the context of financial and digital services where users are concerned about data breaches, fraud, and service reliability (Tarhini et al., 2016; Chang, 2012). Despite its strengths, UTAUT's application in digital payment systems among Indonesian youth remains limited and contextually underexplored.

Prior research has yielded mixed results. For instance, Sari (2011) found that performance expectancy did not significantly influence user behavior, while Rivai (2015) identified all core UTAUT constructs as influential. In e-learning adoption, Tarhini et al. (2017) showed that facilitating conditions were not a significant factor. These inconsistencies underscore the importance of contextualizing UTAUT within specific user populations, such as youth in emerging economies.

This study seeks to fill this research gap by analyzing the determinants of non-cash transaction adoption among Generations Y and Z in Kediri City, an area that has actively promoted GNNT. In contrast to prior studies that focus solely on UTAUT's original constructs, this research introduces *perceived risk* and *trust* as additional variables—an approach supported by literature on fintech and consumer trust in digital services (Gefen et al., 2003; Zhou, 2011). By integrating these constructs, we aim to provide a more nuanced understanding of user behavior in digital payment adoption. Thus, this study not only contributes to theoretical enrichment of UTAUT but also offers practical insights into how digital payment systems can be better aligned with the preferences and concerns of Indonesia's younger, tech-savvy generations.

## Literature Review

UTAUT is a model that helps to find out what factors affect people's willingness to accept and use technology, like online services and digital money, which have been shown to

be very important (Merhi et al., 2019). UTAUT of 4 (four) constructs, namely: performance expectancy, performance expectations, social influence, and condition facilitation. In other UTAUT models, there are also variables used in measuring the perception of risk and the perception of trust from the use of technology as a construct to obtain more comprehensive analysis results. Performance expectation is the level of confidence that an individual has in the belief that using technology and information systems will be beneficial for them in carrying out activities (Venkatesh et al., 2003). Expectations businessness are constructs in the UTAUT model that explain the aspects that users get in the ease of using a technology. The condition of the facility is the user's thinking, which represents that the acceptance and use of a technology can be supported by the infrastructure around the user. Social influence is one of the constructs that can affect the use of a technology. People around who support the use of technology will influence other users and can influence the public's intention to use technology. (Venkatesh et al., 2003).

Risk perception encompasses the potential risks associated with technology use, including financial, social, and product risks, both directly and indirectly (Wu dan Wang, 2005). The perception of trust refers to an individual's belief, whether they are current users or potential users, in their ability to accept and use new technology from application or service providers, as well as their confidence that these providers can ensure user security and privacy. (Madan dan Yadav, 2016; Pham dan Ho, 2014).

## Method

The study used a quantitative-causality research model with the SEM-PLS approach. The population consists of economics students from generations Y and Z, while the sample selection for this study employs convenience sampling techniques to identify respondents. The sample size was determined by a rule that says it needs to be 10 times bigger than the number of paths in the study (Hair et al., 2021). As for achieving greater accuracy and avoiding problems that arise during the data analysis stage due to the small sample size, Cochran's unknown population formula is used, and the results indicate that the minimum sample size of 385 respondents is required (Cochran, 1977). Furthermore, the survey was conducted using Google Forms, and respondents were invited to participate through social media platforms such as Facebook groups and Telegram, as well as offline. A total of 803 questionnaires were received, but as many as 713 responses remained for statistical analysis after data screening showed an overall response rate of around 88.79%. The study used a Likert scale with a range of 1-7. The data used is primary information from the questionnaire. The analysis used in this study is descriptive statistics, Partial Least Square Regression or Path Model Analysis using SmartPLS 3.0 and Excel.

Hypothesis 1: There is an influence of determinant factors among Generation Y and Z economics students on their behavioral intention to use non-cash payment facilities (cashless). Hypothesis 2: The factors that affect Generation Y and Z economics students influence their behavior when using cashless payment facilities. Hypothesis 3: The factors affecting Generation Y and Z economics students influence their behavior of using non-cash payment facilities (cashless) along with their intention to use these facilities as a moderating variable.

## Results And Discussion

### Factors Affecting Generation Y and Z Economics Students in Using Non-Cash Payment Facilities (Cashless)

This study shows that performance expectancy has a construct consisting of factors such as benefits and ease, performance, experience, and advantages. The high loading factor

values indicate a strong relationship between the latent variable and the related factors. Additionally, the low t-statistic and p-values indicate a statistically significant relationship between the latent variable "performance expectancy" and the related factors. Students have the expectation that the use of cashless payments will provide benefits and convenience in financial transactions. They also expect an increase in efficiency and effectiveness in the payment process. Through the use of cashless payment methods, they can reduce dependence on cash, speed up the payment process, and avoid errors or delays. Furthermore, students expect a pleasant experience when using cashless payment methods; they enjoy the ease of use of digital payment applications or intuitive and easy-to-understand contactless technology (Dutot, 2015; Pham and Ho, 2014). The use of this method can provide a more practical, faster, and efficient experience in conducting financial transactions. This can also increase student satisfaction with the use of technology in the context of cashless payments.

Cost savings are an important factor for students. The use of non-cash payment methods can help students (schoolchildren and university students) save money by avoiding the risks associated with carrying physical cash, such as loss or theft. In addition, non-cash payment methods can help students manage their finances better and monitor their expenses more effectively (Lovita, 2012; Mega Swasti, 2017). A study conducted on public perception of the use of cashless payment methods found that factors such as ease of use, security, benefits, and transaction costs influence the use of cashless payment methods (Mega Swasti, 2017). Another study found that factors such as ease of use, benefits, and security have a positive and significant impact on students' interest in using cashless payment methods, while costs and access to information have a negative and insignificant impact (Yutaviando, 2019). Therefore, the use of non-cash payment methods can be an effective way for students to save and manage their finances more efficiently.

Factor analysis on the effort expectancy variable (X2EE) among students using non-cash payment facilities. The analysis results show that the factors of ease of use, compatibility with devices, availability of support and assistance, as well as time, availability, and accessibility have a strong and significant relationship with the effort expectancy variable. The high loading factor values indicate a significant contribution from each factor to the effort expectancy variable. Additionally, the similar standard deviations show uniformity in the contribution of these factors. The high t-statistic values and low p-values indicate the statistical significance of the loading factors. Effort expectancy in the context of using cashless payment facilities, ease of use, and compatibility with devices becomes an important indicator. Students expect an intuitive interface and compatible device support so that they can easily use the payment method. The available support and assistance, as well as time, availability, and accessibility, are also factors that influence students' perceptions of the level of effort required in using cashless payment technology.

As for the time required for transactions, availability, and accessibility, these are also relevant indicators. Students hope that the use of cashless payment facilities will speed up the transaction process compared to using cash. They desire efficiency in the payment process and expect the time required to be shorter. In addition, students also want to ensure that non-cash payment facilities are widely available in various places or stores they frequently visit. They want to ensure that these payment methods are easily accessible and available in the campus environment or in public places they often visit.

Factor analysis was conducted for the latent variable "X3" related to the construct "facilitating conditions" in the context of cashless payments. The results show that the construct items, namely resource availability, organizational support, and ease of use, have a strong and significant relationship with the latent variable "X3". The low standard deviation indicates that the construct item data tend to be concentrated around the mean value, with a

small spread. A high t-statistic value indicates the statistical significance of the loading factor coefficient on the latent variable, showing a strong and significant relationship between the construct items and the latent variable "X3". A very low p-value indicates that the null hypothesis, which states that there is no relationship between the construct items and the latent variable, is rejected. Thus, it can be concluded that the construct items have a significant relationship with the latent variable "X3" in the context of "facilitating conditions."

The results of this analysis provide a deeper understanding of the factors that facilitate certain situations or conditions. In the context of cashless payments, the availability of resources, organizational support, and ease of use are important factors in building facilitating conditions. The availability of resources includes technological infrastructure, organizational support involves policies and training, while ease of use involves an intuitive interface and simple features. These findings can be used as a basis for deeper understanding and strategy development in facilitating the use of cashless payments.

In the context of cashless payment, a strong relationship between the availability of resources, organizational support, and ease of use will create conditions that support the widespread use of cashless payment systems. With sufficient resources, good organizational support, and high ease of use, users will feel more comfortable, confident, and motivated to use cashless payment services. On the other hand, if any of these constructs are not adequately met, the facilitating conditions for the use of cashless payment can be hindered. Therefore, it is important for service providers and related institutions to pay attention to and improve these aspects in order to create an environment that supports the widespread adoption and use of cashless payment systems. Raman and Don (2013), Wu and Wang (2005) explain that facility support, whether in the form of telecommunication networks, technological novelty, and the systems used, etc., has an influence on the acceptance and use of technology services. Additionally, other research also explains that there is an influence of facilitating conditions on behavioral intention in use (Kurniabudi and Assegaff, 2016; Rivai, 2015; Sikumbang, 2014).

Factor analysis found three factors related to social influence in the use of cashless payment technology. The first factor is subjective norm, which indicates the influence of important people's expectations on the use of the technology. The second factor is measured social influence, which includes the direct influence of close individuals or other users. The third factor is belief about the norm, which reflects individual beliefs about the social norms applicable in the use of the technology. This analysis provides a deeper understanding of the factors influencing the use of cashless payment technology. These factors show a strong relationship between belief about the norm and the latent variable Social Influence (X4SI), which reflects individual beliefs related to the social norms applicable in the use of cashless payment technology.

Venkatesh et al. (2003) explain that people around who support the use of technology will influence other users and can also affect the public's intention to use the technology. In the context of using cashless services in society, people are influenced by the social influence around them. This is not without reason; the uncertainty of transaction activities makes them need support from those around them to share with each other. Another study also explains the influence of social influence on behavioral intention in use (Tarhini et al., 2016). Factor analysis found four indicators related to perceived risk in the use of technology. The first indicator is security risk, which indicates concerns about threats to data and personal information security. The second indicator is privacy risk, which includes concerns related to the disclosure of personal information. The third indicator is financial risk, which involves concerns about financial losses. The last indicator is performance risk, which indicates concerns about technology performance. In conclusion, the analysis shows

that the four perceived risk indicators in the Perceived Risk (X5PR) construct have a significant relationship with the latent variable Perceived Risk (X5PR). Security risk, privacy risk, financial risk, and performance risk play an important role in influencing the acceptance and use of technology. Understanding and addressing these risks becomes a key factor in increasing the acceptance and adoption of technology by individuals.

Based on the analysis, there are three significant indicators that influence perceived trust in cashless payment systems: Data Security (X6.1), Transaction Reliability (X6.2), and Consumer Protection (X6.3). Data Security has a significant impact (loading factor 0.812), followed by Transaction Reliability (loading factor 0.829) and Consumer Protection (loading factor 0.808). All these indicators have high t-statistic values and low p-values, affirming the statistical significance of their influence on perceived trust. Data security, transaction reliability, and consumer protection have a significant influence on perceived trust in cashless payment. A high level of these three factors will increase individuals' trust in the system. This trust can be measured through key indicators such as data security, transaction reliability, and consumer protection. Data security reflects trust in the safety of personal and financial data, while transaction reliability indicates the extent to which cashless transactions can be conducted smoothly. Consumer protection measures the level of protection felt when using cashless payment methods. The higher the level of data security, transaction reliability, and consumer protection in the cashless payment system, the higher the individual's trust in using it.

Perception of trust is the individual's thought, whether a user or a potential user, regarding their confidence in accepting and using new technology from application/service providers and believing that these providers are capable of maintaining user security and privacy (Madan and Yadav, 2016; Pham and Ho, 2014). Perception of trust is a factor that determines an individual's intention to accept and use technology services (Chong, 2013; Zhang et al., 2012). In the context of society, the level of public trust in accepting and using technology influences their use of non-cash transaction services implemented by the Indonesian government. Other research also explains that there is an influence of perceived trust on behavioral intention in use in the use of technology (Haning et al., 2021; Loanata and Tileng, 2016).

In this study, three indicators (attitude towards use, intention to use, and subjective norm perception) were found to have a significant influence on behavioral intention in use (Y1BIU) in the use of cashless payments. The indicators of attitude towards use and intention to use had a loading factor of 0.808, while the subjective norm perception had a loading factor of 0.832. The analysis results show that positive attitudes, intention to use, and perception of social expectations significantly contribute to the use of cashless payments. Additionally, the analysis also found that the frequency of use, the number of transactions, and the variety of payment methods have a significant influence on the behavior of non-cash payment usage (Y2BU). The frequency of use has a loading factor of 0.808, the number of transactions has a loading factor of 0.798, and the variety of payment methods has a loading factor of 0.805. Thus, the more frequent, numerous, and varied the use of cashless payments, the higher the usage behavior will be.

Overall, the analysis results show that attitudes towards use, intention to use, perception of subjective norms, frequency of use, number of transactions, and variety of payment methods have a significant influence on behavioral intention in use and the behavior of using non-cash payments. These findings have important implications for non-cash payment service providers and related stakeholders to understand the factors that can enhance behavioral intention in use and encourage broader adoption of non-cash payments in society.

### **The Influence of Determinants of Generation Y and Z Economics Students on the Intention to Use Non-Cash Payment Facilities (Cashless)**

The results of the path analysis show that the X1PE factor (performance expectancy) has a loading factor of 0.138. The loading factor is a measure that indicates how strongly the independent variable affects the dependent variable. In this case, the figure 0.138 indicates that every one-unit increase in the factor X1PE (performance expectancy) will contribute 0.138 units towards the intention to use non-cash payment facilities. Additionally, the listed critical value and p-value (2.843 and 0.005) indicate that the relationship between X1PE (performance expectancy) and Y1BIU (behavioral intention in use) is quite strong and statistically significant. Similarly, the other factors also have relevant loading factors and critical value and p-value. Factor X2EE (effort expectancy) has a loading factor of 0.160 with a critical value and p-value of 3.631 (0.000). Factor X3FC (facilitating conditions) has a loading factor of 0.177 with a critical value and p-value of 4.100 (0.000). Factor X4SI (social influence) has a loading factor of 0.080 with a critical value and p-value of 2.238 (0.025). Factor X5PR (perceived risk) has a loading factor of 0.177 with a critical value and p-value of 3.846 (0.000). Lastly, factor X6PT (perceived trust) has a loading factor of 0.187 with a critical value and p-value of 4.173 (0.000).

These findings indicate that all factors have a significant influence on the intention to use non-cash payment facilities. This means that factors such as performance expectations, effort expectations, facility conditions, social influence, perceived risk, and perceived trust all significantly contribute to influencing the intention to use non-cash payment facilities. This information is very valuable in the development of strategies and policies aimed at encouraging the use of non-cash payment facilities in society.

Unified Theory of Acceptance and Use of Technology (UTAUT) or the UTAUT Theory has been applied in various contexts, including the implementation of e-money, mobile banking, and digital payment systems. Several studies have been conducted to explain the factors that can influence users' intentions to adopt the technology, both pro and con, in explaining the influential constructs such as performance expectancy, effort expectancy, facilitating conditions, social influence, perceived risk, and perceived trust. A study conducted in Egypt found that performance expectancy, effort expectancy, social influence, trust, and perceived risk are significant factors in retailers' intention to use mobile payment (Esawe, 2022). Research in Malaysia shows that factors such as effort, expectations, and social influence play an important role in the adoption of mobile payment systems by Millennials and Generation X. The level of effort required to use the system, expectations regarding the performance and benefits provided by the system, and the social influence from people around them all have a significant impact on their decision to adopt the mobile payment system (Ibrahim et al., 2022).

One study found that social influence, habits, and hedonic motivation have a direct impact on behavioral intentions (Rahmiati and Susanto, 2022). Another study found that perceived risk negatively affects consumer attitudes towards a product or service, which in turn negatively impacts behavioral intentions (Choi et al., 2013). Additionally, facilitating conditions were found to have a significant effect on behavioral intentions towards technology use (Mansour et al., 2021; Su and Chao, 2022). Effort expectancy was also found to have a positive relationship with behavioral intentions to use technology (Dagnoush and Khalifa, 2021; Sung et al., 2015; Utomo et al., 2021). Perceived trust was found to be another factor that can influence behavioral intentions to use technology. The three dimensions of trust that can be integrated into the technology acceptance model are integrity, benevolence, and competence. Integrating these dimensions of trust with perceived ease of use and

perceived usefulness of technology can provide a more accurate explanation of consumer behavior and the intention to adopt new technology (Mansour et al., 2021; Rahmiati and Susanto, 2022).

Another study examined the variables that can influence the desire of Muslim Generation Z to make digital zakat payments. The results show that while performance expectancy does not impact the intention to pay zakat through digital payments, effort expectancy, social influence, facilitating conditions, and trust do (Ferdana et al., 2022). Additionally, trust promotes conditions and mediates the social effects on behavioral intentions, but does not mediate performance expectations or effort expectations. Risk and cost perception are important factors in shaping the intention to use mobile payment in Indonesia. Risk perception relates to the likelihood of risks or losses associated with the use of mobile payment, while cost perception reflects an individual's assessment of the associated costs. This study shows that performance expectancy, effort expectancy, social influence, risk perception, and cost perception are significant factors in the intention to use mobile payment in Indonesia. Understanding these factors can help in the successful development and introduction of mobile payment in the Indonesian market by considering user preferences and addressing potential obstacles (Saputri, 2022).

A study in Hong Kong found that perceived risk, perceived trust, and perceived security influence consumers' intentions to use mobile payments. Perceived risk involves considerations of potential loss or difficulty. Perceived trust relates to the belief in the reliability and integrity of the mobile payment system. Perceived security is important so that consumers feel their data and transactions are safe from cyber threats. The findings of this study indicate that these factors play a significant role in shaping the intention to use mobile payments. Understanding these factors can help in designing strategies and developing more effective mobile payment systems that are acceptable to consumers in Hong Kong (Wong and Mo, 2019).

In general, the UTAUT theory can be applied to explain the factors influencing the adoption and use of technology, including non-cash payment facilities. In this conceptual framework, there are several constructs that play an important role in determining the intention and behavior of use, namely performance expectancy, effort expectancy, social influence, facilitating conditions, perceived risk, and perceived trust. These factors interact and contribute to shaping attitudes, intentions, and behaviors related to the use of cashless payment technology. The presence of attitudes, intentions, and behaviors related to the use of technology or cashless payment facilities also achieves the goals of financial literacy itself, where behavior intention in use refers to a person's intention to use cashless payment facilities, while financial literacy refers to a person's knowledge and understanding of financial concepts, including money management and financial transactions. There are several studies that investigate the relationship between financial literacy and behavioral intention. For example, a study conducted in Pakistan found that financial literacy affects the intention to invest in the stock market (Zahid et al., 2021).

Another study conducted in Indonesia found that financial literacy and the intention to save significantly influence saving behavior (Widyastuti et al., 2016). Additionally, a study conducted in Malaysia found that perceived behavioral control, attitudes, and subjective norms of Islamic banking depositors are positively influenced by the depositors' intention to learn about Islamic banking (Ganesan et al., 2020). Additionally, a study conducted in Australia found that financial literacy is a precursor to fear of missing out (FoMO) on cryptocurrency and stock investments (Gerrans et al., 2023).

### **The Influence of Determinants of Generation Y and Z Economics Students on the Behavior in Use of Non-Cash Payment Facilities (Cashless)**

The results of the path analysis indicate a significant relationship between the variable Y1BIU (behavioral intention in use) and other factors such as X1PE (performance expectancy), X2EE (effort expectancy), X3FC (facilitating conditions), X4SI (social influence), X5PR (perceived risk), and X6PT (perceived trust) in the context of using non-cash payment facilities. The findings also indicate that all latent variables have a significant influence on the behavior of using non-cash payment facilities, although the effort expectancy variable has a positive but not significant influence (X2EE (effort expectancy)  $FL = 0.086$ ; critical value = 1.869 and  $p$ -value = 0.062).

Based on the results of several previous studies, the influence of various factors on the adoption and use of non-cash payment systems. These studies have used different models and frameworks, such as the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Post-Acceptance Model of IS Continuance. A study on mobile payment applications in Jordan found that perceived privacy and perceived assurance have a positive impact on the behavioral intention of mobile payment systems (Almajali et al., 2022). Another study on e-wallet adoption in Malaysia found that the intention to continue using cryptocurrency mobile wallets is significantly influenced by perceived security, effort expectancy, and social influence (Ghaisani et al., 2022).

In promoting the adoption and use of cashless payment systems, it is important for providers to consider these factors and design their systems accordingly. For example, providers can focus on enhancing the perceived security of their systems, providing an easy-to-use interface, and offering incentives to encourage adoption. To protect against potential security breaches when using cashless payment facilities, users can take steps such as using strong passwords, avoiding public Wi-Fi networks, using two-factor authentication, keeping software up to date, monitoring account activity, and being cautious of phishing scams. (Misango, 2018)

Specific findings from the search results regarding the relationship between behavior in the use of cashless payments and financial inclusion include. A study conducted in Indonesia analyzes the factors influencing the use of electronic payments among Generation Z in the city of Bandung. The research findings indicate that performance expectancy, social influence, and culture significantly affect the use of electronic payments by Generation Z in Bandung (Rahadi et al., 2021). Another study conducted in Nigeria examined the impact of cashless payment systems on financial inclusion in Nigeria. The results show that the proximity of financial products and service outlets to rural settlements, the ease of digital financial transactions, and the reduced visits to banking spaces facilitated by access to cashless payment media have increased financial inclusion in Nigeria (Eze & Markjackson, 2020). A study conducted in the University of Indonesia cafeteria shows that the implementation of cashless payment methods has advantages and disadvantages. Factors such as the simplicity and security of using TapCash, as well as certain technical issues, affect the user experience (Putri & Mardiaty, 2020).

However, it is very important to ensure that technological advancements and non-cash payment services do not leave behind vulnerable individuals or groups. In an effort to promote financial inclusion through the use of cashless payments, it is important to pay attention to equal access, financial literacy, and consumer protection. By implementing regulatory actions and policies that ensure fair access, adequate protection, and sufficient financial education, the development of financial inclusion can be supported through the use of cashless payments.

### **The Influence of Determinants of Generation Y and Z Economics Students on the Behavior of Non-Cash Payment Facilities (Cashless) with Behavioral Intention in Use as a Moderation Variable.**

The results of the path analysis indicate that the factor X1PE (performance expectancy) has a direct influence on the variable Y2BU through Y1BIU as a moderating variable. This influence is indicated by a loading factor coefficient of 0.020, a standard deviation of 0.008, a critical value of 2.432, and a p-value of 0.015. Thus, it can be concluded that factor X1PE provides a direct contribution to the behavioral use of cashless payment facilities through the behavioral intention in use as a moderating variable. The same thing happens with factor X2EE (Effort Expectancy) which has a direct influence on variable Y2BU through Y1BIU as a moderating variable with a loading factor coefficient of 0.023, a standard deviation of 0.009, a critical value of 2.594, and a p-value of 0.010.

Next, the factor X3FC (Facilitating Conditions) has a direct influence on the variable Y2BU through Y1BIU as a moderating variable with a loading factor coefficient of 0.025, a standard deviation of 0.009, a critical value of 2.912, and a p-value of 0.004. Similarly, the factor X4SI (social influence) has a direct effect on the variable Y2BU through Y1BIU as a moderating variable with a loading factor coefficient of 0.011, a standard deviation of 0.006, a critical value of 1.990, and a p-value of 0.047. The factor X5PR (perceived risk) has a direct effect on the variable Y2BU through Y1BIU as a moderating variable with a loading factor coefficient of 0.025, a standard deviation of 0.010, a critical value of 2.660, and a p-value of 0.008. Finally, the factor X6PT (perceived trust) also has a direct influence on the variable Y2BU through Y1BIU as a moderating variable with a loading factor coefficient of 0.027, a standard deviation of 0.009, a critical value of 2.935, and a p-value of 0.003.

Behavioral intention is a mediating variable that can influence the relationship between these factors and behavioral usage. One study found that behavioral intention significantly influences usage behavior (Ifedayo et al., 2021). Another study found that perceived risk, perceived ease of use, perceived usefulness, and trust are factors associated with the behavioral intention to use mHealth technology (Schnall et al., 2015). The UTAUT model, which consists of six main constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions, can also be used to predict factors that influence behavioral intention to use mobile learning (Chao, 2019). Additionally, a study exploring behavioral intention to use mobile nursing applications found that the UTAUT model integrates performance expectancy, effort expectancy, social influence, and facilitating conditions, which directly impact behavioral intention (Pan & Gao, 2021). In short, the factors that can influence behavioral intentions to use technology are diverse and can include performance expectancy, effort expectancy, facilitating conditions, social influence, perceived risk, perceived trust, habit, and hedonic motivation. Behavioral intention can mediate the relationship between these factors and behavioral usage. It is important to address these factors to enhance users' behavioral intentions to use new technology.

### **Conclusion**

Based on the analysis, it was found that the results of factor analysis showed a strong connection between the latent variables measured—namely performance expectancy, effort expectancy, facilitating conditions, social influence, perceived risk, and perceived trust—and user behavioral constructs. Furthermore, all latent variables significantly influence the intention to use non-cash payment facilities, and this intention subsequently mediates the relationship between the independent variables and the actual behavior of using such services. However, effort expectancy, while showing a positive relationship, was not statistically significant in predicting usage behavior. These findings affirm the applicability of

the UTAUT model in the context of digital payment adoption among Generations Y and Z in Indonesia. The study also validates the inclusion of *perceived risk* and *trust* as extensions to the traditional UTAUT framework, particularly in financial contexts where users face uncertainty and require reassurance. The dominance of trust and perceived risk over effort expectancy suggests a shift in behavioral drivers among digital natives—where the ease of use is no longer the primary concern, but rather the security, privacy, and credibility of the service.

From a theoretical standpoint, this study contributes to the ongoing refinement of UTAUT by confirming that additional constructs—namely trust and risk—are not only relevant but critical in high-stakes digital environments. This opens avenues for further conceptual development of UTAUT to incorporate context-sensitive factors, especially in financial and technological domains within emerging markets. Practically, the study has several implications. For developers of non-cash payment systems, the findings underscore the importance of prioritizing system reliability, transparency, and data security to foster user trust. Enhancing the user interface may be less effective if users do not perceive the platform as trustworthy. Service providers should also invest in proactive communication strategies that educate users on privacy safeguards and risk mitigation. Educational institutions, particularly universities, have a strategic role in fostering digital financial inclusion. By integrating digital payment systems on campus and promoting them through student organizations or coursework, institutions can serve as testing grounds for broader adoption. Additionally, they should offer targeted digital literacy programs that emphasize the safe and effective use of cashless technologies.

Policymakers must address the digital divide and ensure inclusive access to technology and financial services. This includes supporting infrastructure development, reducing access costs, and encouraging private-public partnerships that expand digital payment ecosystems to underserved populations. Despite its contributions, this study is not without limitations. The use of convenience sampling may limit the generalizability of the findings beyond the studied student population in Kediri. Moreover, while SEM-PLS provides a robust analytical approach, the cross-sectional nature of the data does not allow for examination of long-term behavioral changes or causal inferences. Future research should explore longitudinal data to understand how trust and perceived risk evolve over time with continued usage. Additionally, comparative studies across different demographic groups or regions could help identify whether these behavioral patterns are consistent or context-dependent. It would also be valuable to investigate the role of digital literacy, mobile device ownership, and socioeconomic status as potential moderating variables within the UTAUT framework.

Ultimately, this study reinforces the central role of psychological factors—particularly trust and perceived risk—in shaping digital payment behavior. As Indonesia continues its journey toward a cashless economy, understanding and addressing these behavioral drivers will be key to designing systems that are not only technologically advanced but also socially and culturally aligned with the needs of young users.

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