

DETERMINANTS OF INTENTION AMONG GEN Z IN BENGKULU CITY TOWARDS USING CASH WITHDRAWAL FEATURE

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Abstract. This study aims to examine the direct effects of the independent variables of perceived usefulness, perceived ease of use, perceived security, and customer trust on the dependent variable of the intention to use the cardless cash withdrawal feature through mobile banking services. This study applies the Technology Acceptance Model (TAM) extended with two additional variables: perceived security and customer trust, tested on Generation-Z users of the cardless cash withdrawal, living in Bengkulu City. The samples included 100 respondents according to predetermined criteria, selected through purposive sampling. The results of the Structural Equation Modeling analysis exhibit that perceived usefulness and perceived security have a significant positive effect on the intention to use the cardless cash withdrawal feature while perceived ease of use and customer trust have no effect on the intention to use the cardless cash withdrawal feature.

Keywords: Perceived Usefulness; Perceived Ease of Use; Perceived Security; Customer Trust; Intention to Use; Cardless Cash Withdrawal; TAM.

I. INTRODUCTION

In the ever-evolving digital era, banking technology is increasingly experiencing significant changes. Changes in people's lifestyles that use digital technology have increased dramatically after the 2019 Corona virus pandemic, resulting in people getting used to conducting various economic transactions online. This also increases people's demands on banks for convenience, security, and speed in conducting financial transactions. The emergence of digital technology encourages innovative solutions for traditional banks to take advantage of extraordinary opportunities (Gomber et al., 2018). In this case, the banking industry is highly prioritizing digital transformation to meet the needs of its customers in order to provide financial solutions that are more secure, efficient, fast, and easily accessible.

Results from the 2020 Population Census (SP2020) show that Indonesia is dominated by Generation Z (Gen Z). As many as 27.94% or more than a quarter of Indonesia's population composition is Gen Z.

As for Gen Z, according to the Central Bureau of Statistics (2021) quoting from William H. Frey analysis of Census Bureau Population Estimates (2020) is a generation born in the years 1997-2012. Nisaputra (2023) said that based on Jakpat's Special Report on Indonesian Fintech Trends for Semester I of 2023 of nearly 1,500 respondents aged 17 to 2023.

54 years old across Indonesia, it was revealed that 83% or 8 out of 10 respondents use digital payment methods for online and offline transactions. Of this number 52% of them use

digital banking, which includes mobile banking apps from banks. The majority are Millennials (45%) and Gen Z (30%). Based on the Monetary Policy Report for the Third Quarter of 2023 issued by Bank Indonesia (2023), the value of digital banking transactions reached Rp15,148.71 trillion, growing 12.83% yoy. Meanwhile, the value of payment transactions using ATM cards, debit cards, and credit cards reached Rp2,041.72 trillion or decreased by 4.94% (yoy). From the data described above, there is a phenomenon where there is an increase in the use of digital banking rather than cards. Currently, digital banking services include phone banking, SMS banking, mobile banking, and internet banking (Financial Services Authority, 2018). Said & Kaplelach (2019) stated that the successful application of digital technology innovation in the banking industry is mobile banking. This happens because of the ease of accessing accounts, sending funds, paying bills, and managing finances in general can be done on mobile banking.

Although the use of digital payment methods continues to increase, sometimes cash is still needed because it is a preferred and widely accepted medium of exchange for the purchase of goods and services (Ali et al., 2021). In general, customers need to use debit or credit cards to withdraw cash at ATM machines. Withdrawing with this card raises the risk of monetary losses and security breaches that can befall cardholders such as Skimming. Based on CNN Indonesia, skimming crimes have occurred in Indonesia in 2021 and 2022 in Jakarta with losses reaching IDR 17 billion and IDR 300 million. Cases like this have also occurred in Bengkulu City in 2020, and resulted in the loss of a number of funds by customers which led to compensation by the relevant Bank (Putri, 2021).

Monetary losses suffered by customers have been shown to damage the bank's reputation and negatively impact customer loyalty and shareholder confidence (Lim et al., 2017). It can also affect customer trust in the bank itself. To overcome this, banks present cardless banking or cash withdrawals that can be accessed through mobile banking applications without using ATM cards. According to Lim et al. (2017) cardless banking is a service provided by banks to protect customers from card crime.

This feature offers a high level of convenience and flexibility due to its advantage of being able to conduct financial transactions, especially cash withdrawals, using only a smartphone. In addition, the security of user data and financial information in this feature has been guaranteed due to mobile banking services that have been protected by authentication using One Time Password (Pote & Kulkarni, 2023). Cardless cash withdrawals also improve customer service by allowing customers to withdraw cash more quickly and effectively and there is no charge for this cash withdrawal. This trend of mobile banking usage in Indonesia, including Bengkulu City, has increased their expectations for features that are easy, useful and safe for their daily lives, so it is important for banks to understand the factors that influence Gen Z's intention to use this technology so that the features can be fully utilized.

Nurahmasari et al. (2023) state that the perceived usefulness or benefits of using digital banking have a significant effect on Gen Z's attitudes and intentions to use digital banking services. The combination of effectiveness and technology possessed by the cardless cash withdrawal feature has a positive impact on Gen Z who likes practical things in utilizing digital banking to withdraw cash at ATM machines. Pote & Kulkarni (2023) in their research on cash withdrawals found that overall digital banking users generally feel comfortable using mobile banking applications and accept innovative authentication techniques including cardless cash

withdrawals. This is based on the fact that most mobile banking users are aware of the fraud risks associated with unauthorized access to their accounts.

Previous research on cardless cash withdrawal features by Febriani (2021) found that ease of use and social factors have a positive and significant effect on the decision to use cardless cash withdrawal features in Surabaya. Pitaloka (2022) found that efficiency and security results had a positive and significant effect on interest in using cardless cash withdrawal features. Nambiar and Bolar (2023) found that perceived usefulness to customer preferences in choosing cardless cash withdrawal features over cards is very significant in India. Another study conducted by Napitulu (2023) using the extended UTAUT research model reached the conclusion that performance expectancy and facilitating conditions have a positive and significant effect on use behavior in Jabodetabek.

This research uses the Extended Technology Acceptance Model (TAM) model as the main framework. The Technology Acceptance Model (TAM) is a framework that has been widely used to understand the acceptance of technology by users. This model evaluates two main factors that influence technology acceptance, namely perceived usefulness and perceived ease of use. Extended TAM adds additional factors to understand more about technology acceptance. In this study, behavioral intention to use or intention to use is set as the dependent variable. Furthermore, researchers use the independent variables of perceived usefulness, perceived ease of use, perceived security, and customer trust.

The difference with previous research is that first, researchers added security and customer trust variables as done in Nambiar & Bolar's research (2023); Second, to distinguish it from Nambiar & Bolar's research, researchers used a different data analysis method, namely the Structural Equation Model; In addition, research that explores the factors that influence Gen Z's intention to use cardless cash withdrawal features in Bengkulu City is still not covered in any literature. The formulation of the problem in this study seeks to answer whether perceived usefulness; perceived ease of use; perceived security; and customer trust have a positive and significant effect on the intention of Gen Z's usage behavior in using cardless cash withdrawal features. The purpose of this research is to prove the factors that influence the behavioral intention of using these features are positive and significant or not.

II. LITERATURE REVIEW

A. *Technology Acceptance Model (TAM)*

The Technology Acceptance Model (TAM) proposed by Davis (1989) is a model used to measure the acceptance of technology adoption by users. Davis (1989) explained that this theory was adopted from the Theory of Reasoned Action (TRA). TRA is a psychological framework used to understand human behavior broadly, while TAM is more specific in the context of technology acceptance such as the use of information systems or new technologies. Davis (1989) found that the user's overall view of the use of information technology and applications can be known through two significant variables, namely perceived usefulness (PU) and perceived ease of use (PEU).

B. *Extended Technology Acceptance Model (TAM)*

The Extended Technology Acceptance Model (TAM) is a variation of the TAM model that has been modified by Venkatesh & Davis (2000) to include additional external variables. This model is designed to provide a more comprehensive understanding of the factors that influence technology adoption. Venkatesh also expanded the model by adding additional

external variables to the original TAM model to include aspects that are considered important in understanding user behavior related to technology adoption, such as experience, complexity, and gender.

C. Mobile Banking

Mobile banking is an innovation in the banking sector that allows customers to access their accounts, perform financial transactions such as fund transfers, bill payments, and deposits, as well as manage aspects of their finances through mobile devices such as smartphones and tablets. With mobile banking, customers have the ability to do all this quickly and it has changed the way customers access funds, without the need to use a card. Customers can make cash withdrawals from their accounts directly through ATM machines without the need to insert a card, which is one of the significant innovations in the use of mobile devices in banking services.

D. Cardless Cash Withdrawal

Cardless cash withdrawal is a feature in mobile banking where customers can withdraw cash from ATM machines without the need to use a physical card. This cardless option allows customers to withdraw cash without worrying about the risk of lost, stolen or swallowed cards. Therefore, cardless solutions best address customers' desire for convenience, but customers are also concerned about security issues (Singh & Srivastava, 2020).

One Time Password (OTP) is used as an additional protection to access ATMs. In general, when a customer wants to withdraw money from an ATM through this feature, the customer will get six OTP numbers after inputting the amount to be withdrawn and the pin through mobile banking. The duration of this OTP code usually varies according to each bank's policy. Next, customers visit the nearest ATM machine and choose the cardless option or cash withdrawal without a card on the ATM machine. The customer will be directed to fill in the cellphone number and OTP code listed on the mobile banking application, then the ATM will process the transaction and withdraw money without a card.

E. Behavioral Intention to Use

Behavioral intention is the desire to perform a behavior (Harris, 2018). The intention to use this feature is defined as the stage where a person has the intention to carry out cash withdrawal activities at ATMs cardlessly. Behavioral intention to use can be influenced by perceived usefulness and perceived convenience (Davis, 1989). The intention of users of this cardless cash withdrawal feature can be seen from the influence of four variables, including perceived usefulness, perceived ease of use, perceived security, and customer trust.

F. Perceived Usefulness

Davis (1989) introduced perceived usefulness as one of the components of TAM. It relates to how much a person believes that the use of technology will help them perform better. Users consider that cardless cash withdrawals will be more useful if integrated into daily life and have the potential to bring convenience to daily life activities (Rono, 2014). A better perceived usefulness of cardless cash withdrawal indicates a better acceptance of this technology.

G. Perceived Ease of Use

As defined by Venkatesh & Davis (2000), perceived ease of use refers to how easy it is to use digital banking. Perceived ease of use is a person's assessment of the effort expended due to the use of technology (Davis, 1989). People's perception of technology use can also be

described as their belief that technology helps them so they don't have to spend a lot of time and effort (Raza et al., 2017).

H. Perceived Security

One of the biggest barriers to implementing technological innovation is security. According to Chen & Zahedi (2016), security ensures authentication, non-denial confidentiality, and data integrity when using digital banking. Generally, such transaction actions are vulnerable to various attacks such as phishing, viruses, and malware. Many studies show that companies operating over the internet must first reassure their customers about security (Mattila & Mattila, 2005). If customers show positive perceptions of security, then security perceptions can increase acceptance of cardless cash withdrawal features.

I. Customer Trust

Sutarso and Setyawan (2022) revealed that the higher the level of trust, the more positive the attitude and intention of customers to use internet banking. customers' intention to use internet banking. The nature of internet banking has directly increased the value of trust, because the process does not have direct physical interaction between customers and bankers (Yap et al., 2009). Reichheld and Scheffer (2000) found that trust is a prerequisite for technology adoption in internet-based services.

J. Research Framework

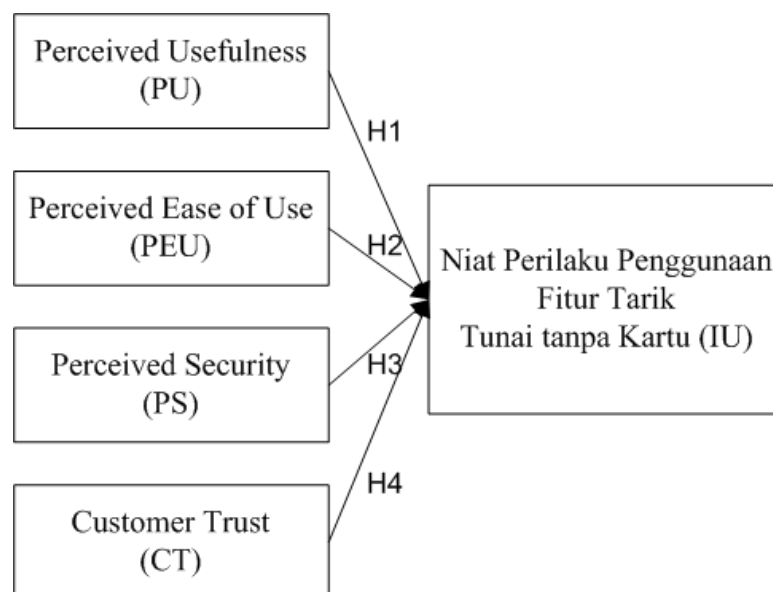


Figure 1: framework model

(source: Processed by the author, 2023)

K. The Effect of Perceived Usefulness on Intention to Use Cardless Cash Withdrawal Features

Perceived usefulness in TAM refers to individual beliefs about the extent to which the use of cardless cash withdrawal features is considered useful in meeting needs or achieving certain goals in their banking activities. In this study, the usefulness of this feature is assessed from how the feature can provide benefits and success in meeting the needs or goals of its users. The more technology is considered useful, the greater the user's intention to use the technology. Similar research conducted by Ali et al (2021) has the result that perceived usefulness has been tested to have a positive influence on individual interest in using a cardless

banking system in Malaysia. This study wants to define the extent to which perceived usefulness affects the interest in adopting cardless cash withdrawal features among Gen Z Bengkulu City.

H1: Perceived Usefulness has a positive and significant effect on the Intention of Gen Z Bengkulu City to Use Cardless Cash Withdrawal Features.

L. The Effect of Perceived Ease of Use on Intention to Use Cardless Cash Withdrawal Features

Perceived ease of use in the TAM concept refers to the beliefs a person has about how easy a system or technology can be used. In the context of banking, the ease of use of a system is assessed by how banks can create services that are not too complicated, simple, easy, and friendly for their customers. Singh & Srivastava (2020) suggest that simple and clear application *interfaces* can encourage customers to try technology-led banking channels. Research by Ali et al., (2021) revealed that perceived convenience has a significant influence on interest in using cardless cash withdrawals. This is supported by research conducted by Singh & Srivastava, (2020) which found that perceived usefulness and perceived ease of use are the most important main factors in determining behavioral intentions towards technology adoption. Then the second hypothesis to be tested is:

H2: Perceived Ease of Use has a positive and significant effect on the Intention of Gen Z Bengkulu City to Use Cardless Cash Withdrawal Features.

M. The Effect of Perceived Security on Intention to Use Cardless Cash Withdrawal Features

In TAM theory, perceived security refers to an individual's beliefs about the level of safety associated with using a technology. Perceived security is defined as the degree to which a user feels that a mobile banking application is safe from any risk (Mombeuil & Uhde, 2021). Mattila & Mattila (2005) state that one of the biggest barriers to the adoption of technological innovation is security. Research by Patel & Patel (2018) states that security perceptions have a strong and positive impact on customer interest in using internet-based banking services. Meanwhile, the results of Nambiar & Bolar's research (2023) found that security perceptions did not have a significant impact on behavioral intention to use. Therefore, this study seeks to define how the effect of security perceptions on behavioral intention to use the cash withdrawal feature.

H3: Perceived Security has a positive and significant effect on the intention of Gen Z Bengkulu City to use the cardless cash withdrawal feature.

N. The Effect of Customer Trust on Intention to Use Cardless Cash Withdrawal Features

Customer trust in the TAM concept refers to the level of confidence that individuals have in banks or digital banking service providers in maintaining the security and integrity of their financial transactions. Banks in increasing their technology adoption require a high level of trust in their security and privacy (Yousafzai et al., 2007). The benefits of online banking for customers and banks are inseparable from customer trust in the service itself. Customer trust has been tested to have a positive and significant influence on behavioral intention of use in a number of previous studies, including those conducted by Al-Sharafi A. et al. (2018) in their research on the impact of customer trust and perceptions of security and privacy on the acceptance of online banking services and research by Sutarso & Setyawan (2022) who examined the adoption of internet banking in Indonesia.

H4: Customer Trust has a positive and significant effect on the intention of Gen Z Bengkulu City to use the cardless cash withdrawal feature.

III. RESEARCH METHODOLOGY

This research is quantitative in nature with the data source used is primary data. Primary data in this study were obtained through filling out Questionnaires (structured questionnaires) online using Google Form which were collected directly by researchers during the research process. The population determined in this study were Gen Z users of mobile banking applications in Bengkulu City who were aware of the cardless cash withdrawal feature in the mobile banking application. The sample in the study was selected using purposive sampling technique. The criteria set by the researcher are:

1. Domiciled in Bengkulu City
2. Born in 1997 - 2006 (Generation Z)
3. Mobile banking service users (Bank Mandiri, BCA, BNI, BRI, etc.)
4. Have used the "Cash Withdrawal Feature without Card" at least 1 time

Determination of the population size of this study using the Lemeshow formula based on Roscoe's opinion (cited by Bougie & Sekaran, 2019) p. 249) with a tolerable error rate of 10% so that a sample of 100 is obtained. 249) with a tolerable error rate of 10% so that a sample of 100 was obtained. The research implements a Likert scale to measure individual opinions, traits, and perceptions by choosing a five-point scale. The information about the independent variables and question indicators used in this study is listed in table 1.

Table 1. Question variables and indicators

| Label | Indikator Pertanyaan | Referensi |
|--|---|--------------------------|
| Persepsi Kemudahan (PU) | | |
| PU1 | Finir tarik tunai tanpa kartu membantu saya menarik uang tunai dengan lebih cepat | Nambiar & Bolar (2023) |
| PU2 | Finir tarik tunai tanpa kartu membuat transaksi tarik tunai menjadi sangat mudah | Ali <i>et al.</i> (2021) |
| PU3 | Menggunakan finir tarik tunai tanpa kartu dapat meningkatkan produktivitas saya | Nambiar & Bolar (2023) |
| PU4 | Finir tarik tunai tanpa kartu bermanfaat bagi saya dalam mengontrol transaksi keuangan | Ali <i>et al.</i> (2021) |
| Persepsi Kemudahan Penggunaan (PEU) | | |
| PEU1 | Finir tarik tunai tanpa kartu lebih mudah digunakan daripada menggunakan kartu | Ali <i>et al.</i> (2021) |
| PEU2 | Belajar mengoperasikan finir tarik tunai tanpa kartu adalah mudah bagi saya | Nambiar & Bolar (2023) |
| PEU3 | Saya tidak memerlukan keahlian khusus untuk menggunakan finir tarik tunai tanpa kartu | Bonang & Fitriyah (2021) |
| PEU4 | Interface (antarmuka) pengguna finir tarik tunai tanpa kartu mudah dipahami | Ditambahkan Penulis |
| Persepsi Keamanan (PS) | | |
| PS1 | Saya yakin rincian transaksi saya tidak tersebar kepada orang lain dengan cara apapun | Nambiar & Bolar (2023) |
| PS2 | Saya yakin bahwa akses tidak sah ke rincian akun saya tidak diperbolehkan melalui finir ini | Nambiar & Bolar (2023) |
| PS3 | Saya yakin bahwa informasi keuangan saya terlindungi saat menggunakan finir ini | Ditambahkan Penulis |
| Kepercayaan pelanggan (CT) | | |
| CT1 | Saya percaya dengan penyedia layanan (Bank) | Nambiar & Bolar (2023) |
| CT2 | Saya percaya bahwa penyedia layanan selalu mempertimbangkan kepentingan pelanggan | Nambiar & Bolar (2023) |
| CT3 | Saya percaya bahwa finir ini akan beroperasi dengan baik setiap kali saya menggunakannya | Ditambahkan Penulis |
| Niat perilaku penggunaan (IU) | | |
| IU1 | Saya akan menggunakan finir tarik tunai tanpa kartu saat menarik setor tunai di masa depan | Ali <i>et al.</i> (2021) |
| IU2 | Saya berencana menggunakan finir tarik tunai tanpa kartu untuk mengontrol aktivitas keuangan saya | Ali <i>et al.</i> (2021) |
| IU3 | Saya berniat untuk memilih tarik tunai tanpa kartu dibandingkan metode tarik tunai lainnya | Ditambahkan Penulis |

(source: Data processed by researchers, 2023)

The research data was processed with Smart-PLS *software* version 4. Researchers used the PLS-SEM analysis technique which was carried out by first conducting validity and reliability tests of the research data. The second stage carried out is the t-statistical test to identify the relationship between the independent variable and the dependent variable in the study.

IV. RESULT AND DISCUSSION

A. Respondent Characteristics

Table 2. Characteristics of *mobile banking* users

| Karakteristik | Kategori | Jumlah | Persentase |
|---|----------------------------|--------|------------|
| Jenis Kelamin | Laki-laki | 32 | 32% |
| | Perempuan | 68 | 68% |
| Usia | < 18 | 0 | 0% |
| | 18 - 20 | 6 | 6% |
| | 21 - 25 | 92 | 92% |
| | > 25 | 2 | 2% |
| Pekerjaan | Pelajar | 0 | 0% |
| | Mahasiswa | 75 | 75% |
| | Pegawai Swasta | 12 | 12% |
| | Pegawai Negeri | 2 | 2% |
| | BUMN | 2 | 2% |
| | Lainnya | 9 | 9% |
| Pendidikan Terakhir atau Saat Ini | SD/MI/Sederajat | 0 | 0% |
| | SMP/MTs/Sederajat | 0 | 0% |
| | SMA/SMK/Sederajat | 36 | 36% |
| | Diploma (D3) | 5 | 5% |
| | Sarjana (D4/S1) | 59 | 59% |
| | Pascasarjana (S2/S3) | 0 | 0% |
| Pengeluaran Bulanan | ≤ Rp 1.000.000 | 31 | 31% |
| | Rp 1.000.001 - 1.500.000 | 32 | 32% |
| | Rp 1.500.001 - 2.000.000 | 17 | 17% |
| | Rp 2.000.001 - 2.500.000 | 9 | 9% |
| | > Rp 2.500.000 | 11 | 11% |
| Frekuensi Penggunaan <i>Mobile banking</i> dalam 1 Minggu | 1 - 5 kali | 56 | 56% |
| | 6 - 10 kali | 24 | 24% |
| | 11 - 15 kali | 12 | 12% |
| | 16 - 20 Kali | 2 | 2% |
| | > 20 Kali | 6 | 6% |
| Mobile banking yang dimiliki | BCA (BCA Mobile) | 20 | 20% |
| | BRI (BRImo) | 37 | 37% |
| | BNI (BNI Mobile banking) | 19 | 19% |
| | Mandiri (Livin by Mandiri) | 19 | 19% |
| | BSI (BSI Mobile banking) | 4 | 4% |
| | Bank Jago | 1 | 1% |

(source: Data processed by researchers, 2023)

Table 3. Respondents' knowledge and experience

| Karakteristik | Kategori | Jumlah | Presentase |
|--|---|--------|------------|
| Mengetahui manfaat fitur | Ya | 100 | 100% |
| | Tidak | 0 | 0% |
| Manfaat fitur tarik tunai tanpa kartu yang diketahui | Cepat | 10 | 10% |
| | Lebih Aman | 2 | 2% |
| | Fleksibilitas dan kemudahan tarik tunai tanpa kartu | 37 | 37% |
| | Dapat tarik tunai ketika kartu atau dompet tertinggal | 39 | 39% |
| | Terhindar dari risiko kartu ATM hilang atau tertelan ke dalam mesin | 12 | 12% |
| | Sangat Jarang (kurang dari 1 kali) | 13 | 13% |
| | Jarang (1 - 2 kali) | 31 | 31% |
| Frekuensi rata-rata menarik uang tunai dengan fitur tarik tunai tanpa kartu dalam satu bulan | Kadang-kadang (3 - 5 kali) | 33 | 33% |
| | Sering (6 - 10 kali) | 16 | 16% |
| | Sangat Sering (lebih dari 10 kali) | 7 | 7% |
| | Terbiasa menggunakan kartu ATM/debit | 30 | 30% |
| Hal yang menghalangi responden untuk menggunakan fitur tarik tunai tanpa kartu | Spesifikasi smartphone tidak mendukung | 1 | 1% |
| | Sinyal atau jaringan yang tidak mendukung | 32 | 32% |
| | Ketidakterseediaan layanan tarik tunai tanpa kartu di mesin ATM | 32 | 32% |
| | Lainnya | 5 | 5% |

(source: Data processed by researchers, 2023)

Based on the data analysis listed in Table 2, it is illustrated that the majority of *mobile banking* users who are aware of the cardless cash withdrawal feature in Bengkulu City are female. In addition, the table also shows that 92% of *mobile banking* users belong to Gen Z, most of whom are between 21 to 25 years old. Furthermore, 75% of *mobile banking* users who are familiar with the cardless cash withdrawal feature are university students. This finding supports Bhalla et al.'s (2021) claim that Generation Z tends to be more proficient in using technology, so it can be considered a group that is very familiar with the digital world, given that they grew up in an era of rapid technological development.

59% of *mobile banking* users are currently pursuing or have completed a Bachelor's degree (D4/S1). The majority of *mobile banking* users' monthly expenditure is in the Rp 1,000,001 - 1,500,000 category. The frequency of *mobile banking* usage in a week for users is 1 - 5 times. In order of the three types of *mobile banking* most owned by *mobile banking* users are BRI_{mo}, BCA *Mobile*, and BNI *Mobile banking* and Livin by Mandiri is in the same position.

Based on the data contained in Table 3, out of a total of 100 *mobile banking* users involved in this study, all stated that they knew the benefits of the feature. Among the known benefits, being able to withdraw cash when the card or wallet is left behind received the most attention with a percentage of 39. The high awareness of the benefits of this feature indicates that the communication efforts made by the Bank have been quite effective in building *mobile banking* users' awareness of the benefits that can be obtained through the use of this feature. From the results of the experience of *mobile banking* users who have used the cardless cash withdrawal feature, it can be seen that the frequency of very often and often is at a fairly small percentage compared to all *mobile banking* users. This shows that even though *mobile banking* users have known and realized the benefits of cardless cash withdrawal, this awareness has not necessarily changed their habits in making transactions.

Of the total 100 *mobile banking* users who have tried the cardless cash withdrawal feature, the majority face obstacles related to unsupportive signals or networks and the unavailability of cardless cash withdrawal services at ATM machines, each with the same percentage of 32%. From the obstacles felt by *mobile banking* users, it can be interpreted that the main obstacles to using this feature are external factors from the users themselves.

B. Outer Loading Test

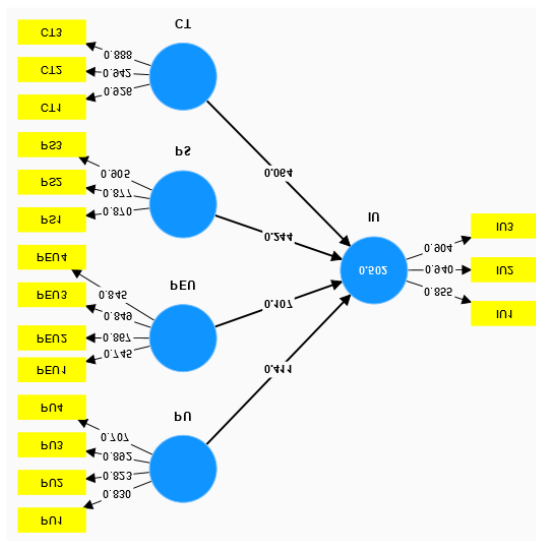


Figure 2. *Outer Loading* model and calculation
(Source: Data processed by Smart PLS, 2024)

Table 4. *Outer Loading* Test Results

| Item | Variabel | Nilai | Ket |
|------|---|-------|-------|
| PU1 | Persepsi Kemanfaatan (PU) | 0,830 | Valid |
| PU2 | | 0,823 | Valid |
| PU3 | | 0,892 | Valid |
| PU4 | | 0,707 | Valid |
| PEU1 | Persepsi Kemudahan Penggunaan (PEU) | 0,745 | Valid |
| PEU2 | | 0,867 | Valid |
| PEU3 | | 0,849 | Valid |
| PEU4 | | 0,845 | Valid |
| PS1 | Persepsi Keamanan (PS) | 0,870 | Valid |
| PS2 | | 0,877 | Valid |
| PS3 | | 0,905 | Valid |
| CT1 | Kepercayaan Pelanggan (CT) | 0,926 | Valid |
| CT2 | | 0,942 | Valid |
| CT3 | | 0,888 | Valid |
| IU1 | Niat Perilaku Penggunaan (IU) | 0,855 | Valid |
| IU2 | | 0,940 | Valid |
| IU3 | | 0,904 | Valid |

(source: Smart PLS processed by researchers, 2024)

The information obtained from Figure 2 shows that all indicators have been declared valid and meet the outer loading value criteria, this can be seen from each item on the research indicator which has an *outer loading* value > 0.7. The PU3 indicator in the customer trust variable has the highest *outer loading* value of 0.892 among the other three indicators. So it can be seen that the PU3 indicator, namely "using the cardless cash withdrawal feature can increase my productivity", is the best indicator to reflect the contribution of the cardless cash withdrawal feature in the perceived usefulness variable.

In the perceived ease of use variable, the PEU2 indicator, namely "Learning to operate the cash withdrawal feature without a card is easy for me" is the indicator with the highest *outer loading* value of 0.867 so that it can be seen that the PEU2 indicator has the strongest relationship with the perceived ease of use variable. Perceived security, indicator PS3, namely "I believe that my financial information is protected when using this feature" is the indicator with the highest *outer loading* value of 0.905, indicating that PS3 has the strongest relationship among the other 3 indicators.

The CT2 indicator, namely "I believe that the service provider always considers the interests of customers", is the indicator with the highest *outer loading* value of 0.942, indicating that a person's image is the most important thing that reflects the variable among other indicators in customer trust. In the usage behavior intention variable, IU2, namely "I plan to use the cardless cash withdrawal feature to control my financial activities" is the indicator that best reflects the variable with an *outer loading* score of 0.940.

C. Test Average Variance Extracted (AVE), Cronbach's alpha, and Composite Reliability

Table 5. Test Results Average Variance Extracted (AVE), Cronbach's alpha, and Composite Reliability

| Variabel | AVE | Cronbach's Alpha | Composite Reliability |
|--|-------|------------------|-----------------------|
| Persepsi Kemudahan (PU) | 0,665 | 0,831 | 0,839 |
| Persepsi Kemudahan Penggunaan (PEU) | 0,685 | 0,845 | 0,844 |
| Persepsi Keamanan (PS) | 0,781 | 0,860 | 0,861 |
| Kepercayaan Pelanggan (CT) | 0,844 | 0,908 | 0,912 |
| Niat Perilaku Penggunaan (IU) | 0,810 | 0,882 | 0,890 |

(source: Smart PLS processed by researchers, 2024)

Table 5 shows the AVE value, Cronbach's alpha and composite reliability. Based on table 5, it is obtained that all variables in this study are valid because they have an AVE value of more than 0.5. The requirement for a variable to be said to be reliable based on Hair et al. (2017), namely when Cronbach's alpha and composite reliability are at least 0.7. Therefore, the variables in this study are declared reliable and consistent.

D. Structural Model Evaluation

Table 6. *R-square* Test Results

| Variabel | <i>R-square</i> | <i>Adjusted R-square</i> |
|-------------------------------|-----------------|--------------------------|
| Niat Perilaku Penggunaan (IU) | 0,502 | 0,481 |

(source: Smart PLS processed by researchers, 2024)

The coefficient of determination (R^2) is used to determine the percentage of variation in the dependent variable that can be explained by the independent variable. Based on table 4.5, the *R-square* value of the perceived usefulness, perceived ease of use, perceived security, and customer trust variables on the usage behavior intention variable is 0.502 with an *adjusted r-square* value of 0.481. So it can be explained that the variables of perceived usefulness, perceived ease of use, perceived security, and customer trust can explain the behavioral intention of use by 0.481 or 48.1%.

E. Direct Hypothesis Testing

Table 4. 6. *Direct Effect Path Coefficient* Test Results

| | <i>Org. Sam- ple</i> | <i>T- statis- tic</i> | <i>P- value s</i> | Hasil Uji | |
|----------------|--------------------------|-------------------------------|---------------------------|------------------|----------|
| H1 : PU -> IU | 0,411 | 3,428 | 0,001 | Signifikan | Diterima |
| H2 : PEU -> IU | 0,107 | 1,124 | 0,261 | Tidak Signifikan | Ditolak |
| H3 : PS -> IU | 0,244 | 2,568 | 0,010 | Signifikan | Diterima |
| H4 : CT -> IU | 0,064 | 0,578 | 0,562 | Tidak Signifikan | Ditolak |

(source: Smart PLS processed by researchers, 2024)

Hypothesis testing is done by performing a *bootstrapping* process to get the *original sample* value of the *path coefficients*, *T-statistic*, and *P-values*. The *original sample* value has a range from -1 to 1. The *original sample* value indicates the influence of the variable so that the greater and closer to 1 an *original sample* value, the stronger and more positive the influence of the independent variable on the dependent variable, and vice versa (Hair et al., 2017). (2017). In addition, a variable is said to have a significant effect if it has a *T-statistic* value of more than 1.984 because it uses a confidence level (*alpha*) of 95% and *P-values* smaller than 0.05.

Based on table 4.6, the *original sample* value obtained for all hypotheses is more than 0 or has a positive value, so it is concluded that all independent research variables affect the dependent variable positively. Furthermore, it is obtained that H1 and H3 have *P-values* of 0.001 and 0.010, respectively, which are smaller than the alpha value of 0.05, and the *T-statistic* value of 3.428 and 2.568 is greater than the *T-table* of 1.984, which means that perceived usefulness and perceived security have a significant effect on behavioral intention to use the cash withdrawal feature, so it means that H1 and H3 are accepted.

The values of H2 and H4 have *P-values* greater than 0.05, namely 0.261 for H2 and 0.562 for H4, as well as *T-statistic* values of 1.124 and 0.578 where this value is smaller than 1.984 which means that perceived ease of use and customer trust have no influence on behavioral intention to use the cash withdrawal feature, so that means H2 and H4 are rejected and H0 is accepted.

1. *Effect of perceived usefulness on behavioral intention to use*

Based on the findings in this study, perceived usefulness affects behavioral intention to use. Therefore, these results are in accordance with the first hypothesis (H1) which states that perceived usefulness has a positive and significant effect on behavioral intention to use so that H1 is accepted.

Perceived usefulness according to TAM refers to individual beliefs about the extent to which the use of a technology will improve performance or productivity. In this study, users feel that the cardless cash withdrawal feature can increase productivity. Therefore, this study supports the TAM theory. Other benefits perceived by users are related to practicality, flexibility, and convenience in the cash withdrawal process without the need to use a physical card.

This hypothesis is supported by the results of previous studies such as Al-Sharafi et al. (2018), Phothisakitti (2020), Ali et al. (2021) and Nambiar & Bolar, (2023) which show the results that perceived usefulness has a positive and significant effect on behavioral intention to use...

2. The Effect of Perceived Ease of Use on Behavioral Intention to Use

Based on the findings in this study, perceived ease of use has no effect on behavioral intention to use. This result is not in accordance with the second hypothesis (H2) which states that perceived ease of use has a positive and significant effect on behavioral intention to use so that H2 is rejected and H0 is accepted.

Perceived ease of use in TAM includes an individual's view of how easy a technology can be used, understood, and executed in terms of operating it. In this study, the majority of users experienced barriers originating from external factors, namely the unavailability of cardless cash withdrawal services at ATM machines and unsupportive signals. Therefore, although this feature is an easy-to-use technology, external factors that hinder users in operating this feature can lead to different views on the ease of cardless cash withdrawal features.

Based on the TAM theory by Davis (1989), it is revealed that perceived ease of use is an antecedent to perceived usefulness. This means that there is no direct influence between the perceived ease of use that will generate user interest in using technology, so it can be interpreted that the acceptance of this feature as seen from the behavioral intention of use is not directly influenced by perceived ease of use because this perception alone is not enough to influence individual intentions for the use of cardless cash withdrawal features.

This hypothesis is supported by the findings of Al-Sharafi et al. (2018) and Nambiar & Bolar (2023) which show that perceived ease of use cannot influence behavioral intention to use cardless cash withdrawals.

3. Effect of perceived security on behavioral intention to use

Based on the findings in this study, perceived security has an effect on behavioral intention to use. Therefore, these results are in accordance with the third hypothesis (H3) which states that perceived security has a positive and significant effect on behavioral intention to use so that H3 is accepted.

Perceived security in the context of TAM refers to the level of user confidence or trust in the security of a technology. In this study, security includes an individual's belief that using the cash withdrawal feature will not jeopardize their financial and personal information. The process of cardless cash withdrawal transactions carried out through personal smartphones and personal mobile banking applications that have been protected with OTP codes and cash withdrawal tokens that can only be accessed by users is seen to provide adequate protection of user security and data, so that the threat of monetary crimes such as skimming, hacking, and phishing will not occur.

These results are supported by previous research conducted by Pitaloka (2022) where the results of the study show that the security variable has a positive and significant effect on public interest in using cardless cash withdrawal services.

4. The Effect of Customer Trust on Behavioral Intention to Use

Based on the findings in this study, customer trust has no effect on behavioral intention to use. This result is not in accordance with the fourth hypothesis (H4) which states that customer trust has a positive and significant effect on usage behavior intention so that H4 is rejected and H0 is accepted.

Customer trust in the context of TAM refers to customer confidence in the integrity and availability of a technology or service. In this study, users were more concerned with factors directly related to features such as technology security and perceived benefits, rather than general perceptions of banks. This means that even though individuals feel trust in the service provider and *the mobile banking service*, it does not significantly affect the interest of *mobile banking* users to adopt the cardless cash withdrawal feature.

The results of this study are supported by the research of Nambiar & Bolar (2023) which reveals that the effect of customer trust on behavioral intention of use is insignificant.

V. CONCLUSION

This study aims to examine the factors that directly influence behavioral intention to use the cardless cash withdrawal feature in mobile banking applications using the Technology Acceptance Model (TAM) developed by Davis (1989), taking into account the variables of perceived usefulness, perceived ease of use, and behavioral intention to use, as well as the extension variables of perceived security and customer trust.

This study successfully proves that two of the four independent variables, namely perceived usefulness and perceived security, affect the behavioral intention of mobile banking users to use the cardless cash withdrawal feature. While the other two variables, namely perceived ease of use and customer trust, have no effect on the behavioral intention of using this feature. Perceived usefulness has a positive influence on behavioral intention to use, which means that the higher the perceived usefulness indicates the greater the individual's intention to use the feature. Perceived security has a positive influence on behavioral intention to use, which means that the higher the perceived usefulness indicates the greater the individual's intention to use the feature.

Suggestions for future research can oversee the distribution of questionnaires and consider appropriate sample criteria to minimize data that is original and cannot be used. Furthermore, secondly, it can consider distributing questionnaires to respondents with a more even gender by setting a balanced percentage of questionnaire distribution between female and male prospective respondents in the research population to increase representativeness.

Based on the research results, there are the following implications:

1. Policy Implications

The results of this study can be an important contribution to the management and analysis of banking systems that prioritize digital services to assess and evaluate their organizational performance in terms of technology acceptance by users. The information in this study is useful for banks to develop *mobile banking* services, especially cardless cash withdrawal features with a focus on the elements of usefulness, convenience, and security. Furthermore, banks can evaluate whether their marketing and promotion strategies are on target or lagging behind their competitors in attracting customers' intention and trust in using their digital services.

2. Theoretical Implications

The results of this study are also expected to contribute to the *ExtendTAM* theory. The results showed that perceived usefulness and perceived security had an effect on behavioral intention to use. This is in accordance with the TAM theory which states that perceived usefulness towards behavioral intention of use is one of the important determinants in terms of technology adoption.

This study has several limitations that need to be considered. First, there is a mismatch of research respondents against the predetermined criteria so that quite a lot of data cannot be used. Second, there is a gap between female and male respondents which is quite far, making the results of this study not definitively present the behavioral intention of using the cardless cash withdrawal feature among Gen Z Bengkulu City.

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