Unpacking the Digital Banking Preferences of Generation Z Students: Empirical Evidence from Indonesia

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Abstract. This study investigates factors driving Generation Z students' adoption of digital banking in Indonesia, given their financial literacy needs and openness to digital financial services. Drawing on technology acceptance models, a questionnaire was administered to 131 university students aged 17-28 who used digital banking platforms. Data analysis conducted through SmartPLS revealed that firm reputation and trust significantly influence intentions to use digital banking. However, economic value, convenience, rewards, and social influence were found to not significantly affect intentions. The research also found that social influence, trust and intentions strongly predict actual system usage behaviors. These findings imply that developing positive brand beliefs and emphasizing security safeguards should be priorities for digital banking providers targeting Generation Z segments. As digital services evolve, this study contributes insights into designing offerings aligned with youth's expectations.

Keywords: Digital Banking, Generation Z, Intention to Use, Actual Usage

1. Introduction

Digital banking, commonly referred to as electronic banking or e-banking, involves using electronic and telecommunication networks to supply a diverse range of value-added products and services to bank customers (Kurniawan et al., 2023). This form of banking surpasses semi-digital and electronic banking, offering a fully digital experience that serves as a digital wallet, runs virtually without physical branches, and supplies a comprehensive range of services. Accessible through digital or mobile channels, digital banking eases transactions, trading, historical analysis, and occasional advisory services. In contrast, digital management and payment services, often provided by FinTech, include features like investment opportunities, financial goal setting, payment functionalities, and performance visualizations (Neves et al., 2023).

This modern mode of banking has appeared as a transformative way to conduct various financial transactions, including money deposits, transfers, withdrawals, current and savings account management, loan management, bill payment, and applying for financial products and account services through electronic platforms (Ananda et al., 2020). Notably, digital banks offer more financial and psychological benefits than traditional banks, marking a change in basic assumptions in the banking industry and providing customers with unparalleled convenience and a superior user experience (Windasari et al., 2022). Aria et al., (2023) emphasize the relevance of this experience, particularly in the valuation of innovative technology. The adoption of digital banking has the potential to lower transaction costs for both financial institutions and customers, helping the establishment and maintenance of channels through which customers can access services (Harahap et al., 2020).

Indonesia has witnessed substantial growth in digital banking services, as Perry Warjiyo, the Governor of Bank Indonesia, projected a 22.13% annual increase in digital transactions in 2023. Surpassing expectations, the actual growth reached 28.72%, underscoring the rapid acceptance and growing trust in digital banking services within the Indonesian population (Irwin et al., 2023). In a survey conducted by finder.com among 41,654 people in 30 countries worldwide in 2021, owners of digital banking accounts in Indonesia ranked second with a total of 47,722,913 individuals, equivalent to approximately 25% of the population having digital banking accounts in 2021. The survey covered several major cities in Indonesia. Based on the findings, finder.com also predicts that in 2022, the number of digital banking users in Indonesia is expected to reach 31% or 59,969,877 people and is projected to continue increasing to 39% or 74,785,062 by 2026. The expansion of digital banking in Indonesia, evidenced by the January 2023 surpassing of 4.9 trillion Rupiah in digital banking transactions—a 27.96% surge from the previous year (as reported by Kompas), not only indicates significant economic growth but also aligns with Generation Z that has the largest population in Indonesia being the first cohort to integrate the internet into their daily lives from an early age, given its mainstream presence during their upbringing (Irwin et al., 2023).

Gen Z (born between 1995 and 2013) has matured in tandem with technological advancements, fostering an innate familiarity with technology. Their intrinsic understanding of technological progress allows them to navigate applications with minimal guidance. This demographic emerges as a significant clientele for financial institutions, initiating their financial pursuits earlier than preceding generations. Diverging from their older counterparts, Gen Z exhibits an early proclivity towards establishing savings accounts rather than prioritizing mortgages, loans, or insurance (Kaabachi et al., 2022). Indriyarti et al., (2023) expound on the shift from traditional to digital banking services, highlighting the dominance of digital banks, surpassing 80% among Gen Z. Consequently, Gen Z emerges as a pivotal demographic influencing the proliferation and acceptance of digital banking services.

Furthermore, we are acutely aware that digital banking in this new era offers a plethora of benefits that are particularly vital for students in college lifes. Beyond its user-friendly features and accessibility, digital banking presents a wealth of promotional offers, discounts, rewards, and loyalty points that can significantly reduce costs and aid students in saving money, especially in the face of uncertain economic

environments. This combination of convenience and financial advantages makes digital banking an indispensable tool for Generation Z students striving to navigate the complexities of their financial lives. Referring to internet banking services provided by banks, the student should be able to use and maximize the service. But there are still many students who did financial transactions by going to the bank or ATM mainly to make payments like tuition and other non-cash transactions. Though they have a lot of potential to use these services considering the internet network they have (Danurdoro & Wulandari, 2016). Despite the prevalence of digital banking, there is a lack of comprehensive examinations, especially among Generation Z students in Jakarta. Therefore, this study addresses this gap by exploring the factors shaping students' intentions to use digital banking services.

2. Literature Review and Hypothesis Development

The adoption of digital banking among Generation Z students in Indonesia is a complex process influenced by a dynamic interplay of factors. The most frequently used technology acceptance research models are the technology acceptance model (TAM) and the unified theory of acceptance and use of technology (UTAUT). According to the TAM model, users' motivations and intentions to adopt innovative technology are influenced by three factors: perceived ease of use, perceived usefulness, and attitude toward using the technology (Davis, 1989). UTAUT, a general model of technology adoption, includes four factors: performance expectancy (PE), effort expectancy (EE), social influence (SI), and helping conditions that contribute to the adoption process (Venkatesh et al., n.d.). Many studies have been conducted using the above two frameworks, but research models have changed with the development of information technology. Regarding the research on digital banking, the majority has focused on the general Generation Z demographic. As comparison with other generation, Bui & Luong (2023) addresses the challenges of financial inclusion among the elderly in Thailand, a nation that formally entered an aging society in 2005 and is predicted to transition into a super-aged society soon. Despite notable advancements in financial inclusion, particularly in the era of digitalization, the research reveals that a considerable proportion of the elderly population, especially those without bank accounts, experiences low levels of financial inclusivity. Positive correlations are found between workforce participation, income, education, and financial inclusion scores, while age shows a negative influence. Primary obstacles for the elderly accessing digital financial services include limited internet and smartphone usage. Despite the increasing adoption of information and communication technology in Thailand, it is crucial for policies to ensure that innovations in financial inclusion do not leave behind vulnerable segments of society, particularly in aging communities.

However, this paper aims to narrow its focus to Generation Z students, who, notably, grapple with a multitude of commitments and diverse needs during the transition from student life to integration into broader society, all within the context of their busy lifestyles. The scale employed in this research is derived from Windasari et al., (2022) explanatory study, encompassing eight variables identified as predictors of the intention to use digital banking among the Generation Z. Following the exclusion of two variables found to be statistically insignificant predictors, six variables are kept for adoption in our study.

Within the digital banking sphere, users commonly experience uncertainty on platform reliability and transaction outcomes. (Sarmah et al., 2020) posits trust as a crucial precursor influencing the intention to use a digital wallet, highlighting its pivotal role in shaping users' willingness to engage with digital banking services. The trust variable has also been further developed, drawing inspiration from the TAM2 and UTAUT 2 frameworks. Therefore, based on earlier literature considering key independent variables such as Economic Value, Convenience, Firm Reputation, Features, Reward, Social Influence, and Trust that might be the factor to influence Generation Z to use digital bank and with the aspect of social influence and trust together with intention to use, researcher want to see how the actual usage is.

2.1 The Relationship Between Economic Value and Student's Intention to Use Digital Banking

Previous literature is talking about economic value in perspective of perceived value in millennial generation or Generation Z. This time the researcher wants to seek the impact especially from generation Z who are students which we know, student is a moment where people have big change in life. Those change not only specified into their environment, but also how they in charge on their own money management.

"Price Value" refers to an individual's cognitive exchange analysis to compare perceived benefits with the monetary costs of using a particular innovative service (Brown & Venkatesh, 2005; Dodds, 1991). The way prices and costs are structured significantly affects technology adoption by consumers. For instance, in marketing research, to assess the perceived value of a product or service, cost/price analysis is generally considered in relation to product or service quality (Zeithaml, 1988). In situations where the perceived value exceeds the monetary cost, there is a higher tendency for users to adopt innovative technology (Owusu Kwateng et al., 2019). For financial services, customers are more inclined to choose services that supply monetary benefits for growing their funds, making economic value a significant predictor of intention to use digital banking (Windasari et al., 2022). Recent studies emphasize the significance of Economic Value in Generation Z's decision-making about digital banking. A study that Generation Z students are motivated to adopt digital banking due to the cost-effectiveness and savings offered by these platforms (J. Li et al., 2019). The belief of financial gain positively influences both the intention to use and actual usage of digital banking services among Generation Z (Cao et al., 2022)

Hypothesis 1: economic value has a significant and positive impact on the intention of Generation Z to use digital banking in Greater Jakarta.

2.2 The Relationship Between Convenience and Student's Intention to Use Digital Banking

Perceived ease of use is a primary factor influencing the intention to use e-banking (Anouze & Alamro, 2020). With the surge in offline digital payment usage, convenience, and the opportunity to access offers, cashbacks, and discounts are increasingly appealing (Shah et al., 2016). Perceived Usefulness (PU) stands for users' belief that digital banking services are beneficial to them (Ahmed & Sur, 2023). Customers tend to prefer services that are simple and easy to learn and use. The adoption of mobile banking technology increases when it's user-friendly and accessible. The accessibility of new banking technology influences customers' first interest in adopting it. Perceived Ease of Use (PEU) helps the use of mobile banking services (Ahmed & Sur, 2023). Ease of Use (EOU) in digital banking positively affects customers' intentions to use digital banking. If digital banking is straightforward, convenient, and easy to navigate, it makes it easier for customers to become familiar with it and be willing to use it (Windasari et al., 2022). In this study, PU and PEU are combined into the convenience part, as they both reflect the ease of use of services for customers. Customers are simultaneously decision-makers in transactions, and transaction costs involve more than just money. Essentially, time-consuming, labor-intensive, unreliable, and inconvenient factors increase transaction costs, whereas timesaving, effort-saving, reliable, and convenient factors reduce transaction costs. Customers will assess whether the total transaction costs are perfected to figure out whether to adopt or change their trading behavior. Therefore, an increase in transaction costs negatively affects customers, while a reduction in transaction costs has a positive impact on customers (Lu & Wung, 2021). In the contemporary context, Convenience is still a central driver for Generation Z's engagement with digital banking. Moreover, as the pace of life accelerates, the convenience factor exerts a strong positive influence on actual usage behaviors (Wu et al., 2018).

Hypothesis 2: convenience has positive and significant impact on the intention of Generation Z in Greater Jakarta to use digital banking.

2.3 The Relationship Between Firm Reputation and Student's Intention to Use Digital Banking

In the context of service providers, reputation plays a more significant role for exclusive online service providers, such as digital banking services, compared to providers running through various channels. Consumers who use multiple channels form service expectations based on their offline interaction experiences or knowledge. Gaining customer trust as a new brand is not an easy task, especially for financial institutions that lack physical offices as a tangible representation (Windasari et al., 2022). The importance of Firm Reputation persists as a critical factor shaping Generation Z's attitudes toward digital banking. A positive reputation significantly enhances actual usage as it instills confidence and trust in the platform (Y. Li et al., 2020).

Hypothesis 3: firm reputation has a positive and significant impact on Generation Z's student intention to use digital banking.

2.4 The Relationship Between Features and Student's Intention to Use Digital Banking

Product features encompass basic financial solutions and more value-added solutions that meet customer demands and are seen as other value. Individual beliefs of value that meet and exceed expectations will later influence customer usage behavior (Windasari et al., 2022). The inclusion of innovative features in digital banking platforms continues to attract Generation Z students. Recent research by Wang et al., (2022) shows that the presence of advanced features, such as AI-driven financial insights and budgeting tools, strongly influences Generation Z's intention to use digital banking.

Hypothesis 4: features have positive and significant impact on the intention of Generation Z students in Greater Jakarta to use digital banking in Greater Jakarta.

2.5 The Relationship Between Rewards and Student's Intention to Use Digital Banking

Rewards, such as cashback and other monetary benefits, directly from service providers lead to customer satisfaction and behavioral intentions (Windasari et al., 2022). Findings from research (Anouze & Alamro, 2020) reveal that reasonable pricing has a significant impact on the intention to use e-banking services. Predictions of technology acceptance span from technological aspects to economic aspects (Anggraeni et al., 2021). Reward mechanisms have evolved as potent incentives for Generation Z's engagement with digital banking.

Hypothesis 5: rewards have positive and significant impact on generation Z student intention to use digital banking in Greater Jakarta.

2.6 The Relationship Between Social Influence and Student's Intention to Use Digital Banking

Based on research by (Aria et al., 2023), considering the influence of social influence may not necessarily be crucial for customer satisfaction. Researchers assume that customer satisfaction indeed stems from the user experience, but it does not rule out the possibility that social influence can affect the intention to use digital banking. Social Influence stays a powerful determinant of Generation Z's adoption of digital banking services.

Hypothesis 6: social influence has positive and significant impact on Generation Z the intention to use digital banking in Greater Jakarta.

2.7 The Relationship Between Trust and Student's Intention to Use Digital Banking

Customers who have already built trust in digital banking services tend to feel less insecure when using these services, and vice versa (Ghani et al., 2022). Prominent levels of trust support the inclination to use digital banking services. Empirical findings support the positive and significant impact of trust on the adoption behavior of digital banking services (Nguyen et al., 2020). The study also discovered that the positive and significant relationship between Vietnamese customers' habits and the adoption of digital banking services is rational. The following hypotheses are developed to figure out the

relationship between trust in Generation Z student customers and digital banking, which will influence their intention to use digital banking. Trust is still a cornerstone of digital banking adoption in recent studies. As highlighted by (Chu et al., 2023), Generation Z students prioritize trustworthiness in their banking relationships. A powerful sense of trust significantly influences their intention to use digital banking, and this trust extends to their actual usage behaviors, underlining the enduring importance of trust in the digital banking context.

Hypothesis 7: trust has a positive and significant impact on   the intention of Generation Z to use digital bank in Greater Jakarta.

2.8 The Relationship Between Social Influence and Student's Actual Usage of Digital Banking

The relationship between social influence and the actual usage of digital banking among Generation Z (Generation Z) students has been a subject of interest in recent literature. Numerous studies highlight the significant impact of social influence on technology adoption, particularly within the context of digital banking. A study by (Samartha et al., 2022), conducted to understand the factors influencing the adoption of digital wallets, emphasized that social influence showed the strongest relationship with the desire to use such technologies. The findings suggest that the recommendations and opinions of close relationships, including peers and influential individuals, play a pivotal role in shaping the intentions and behaviors of Generation Z towards digital banking.

In a similar vein, research by (Aria et al., 2023) investigated the influence of social factors on the adoption of digital banking services, specifically focusing on the Generation Z. The study affirmed that social influence, as a key construct within the Unified Theory of Acceptance and Use of Technology (UTAUT), significantly contributes to shaping the behavioral intentions and actual usage patterns of Generation Z students in the realm of digital banking. The researchers employed a comprehensive analysis, considering the beliefs and recommendations from social networks as influential factors in the decision-making process of Generation Z students on the adoption of digital banking services. These studies collectively underscore the intricate connection between social influence and the actual use of digital banking services among Generation Z students, providing valuable insights for understanding and enhancing their engagement with these technologies.

Hypothesis 8: social influence has positive and significant impact on the intention of Generation Z students to use digital bank in Greater Jakarta.

2.9 The Relationship Between Trust and Student's Actual Usage of Digital Banking

The relationship between trust and Generation Z students' actual usage of digital banking has been a focal point in recent academic research, shedding light on the critical role of trust in influencing the adoption of digital banking services among this demographic. Studies, such as those by Aria et al., (2023); Samartha et al., (2022) emphasize the significance of trust as a determinant factor in the behavioral intentions and actual usage patterns of Generation Z individuals when it comes to digital banking platforms. These scholars contend that Generation Z students, being early adopters of technology and digital solutions, place a high premium on the trustworthiness of the digital banking systems they engage with. The works of Samartha et al., (2022) further underscore that the perceived reliability and security of digital banking platforms significantly affect the trust Generation Z students place in these services, so influencing their actual usage behavior. The findings from these international journal studies contribute to a deeper understanding of the dynamics between trust and the adoption of digital banking services among Generation Z students, offering valuable insights for both academia and the digital banking industry.

Hypothesis 9: trust has positive and significant impact on the intention of Generation Z students to use digital bank in Greater Jakarta.

2.10 The Relationship Between Intention to Use and Student's Actual Usage of Digital Banking

The relationship between the intention to use and the actual usage of digital banking among Generation Z students is a critical aspect explored in contemporary literature. Several studies have delved into understanding the factors influencing the adoption and usage behavior of digital banking services among this tech-savvy generation. For instance, research by Indriyarti et al., (2023) shows that Generation Z, born after 1995, shows a proclivity for experimenting with innovative technologies, particularly in the realm of digital banking. This cohort, characterized by its openness to alternative service providers if traditional ones do not meet their needs, shows distinct financial expectations and needs Kaabachi et al., (2022). Notably, the study conducted by Aria et al., (2023) emphasizes the centrality of the "Intention to Consume" concept in investigating the potential correlation between satisfaction derived from mobile banking services and the inclination to engage in online consumption. The literature also suggests that social influence, trust, and the intention to use significantly impact the actual usage of digital banking among Gen Z students (Samartha et al., 2022). Moreover, the research underscores the importance of factors such as firm reputation and trust in shaping the intention to use digital banking services (Windasari et al., 2022). This body of work not only contributes to the development of a nuanced model tailored to the Generation Z's context but also provides empirical evidence shedding light on the multifaceted factors influencing the adoption of digital banking services among Gen Z students across diverse international contexts.

Hypothesis 10: intention to use has positive and significant impact on the intention of Generation Z students to use digital bank in Greater Jakarta.

2.11 Research Framework

The research framework revolves around understanding the factors influencing the intention and usage behavior of Generation Z students in adopting digital banking in Indonesia. The study is grounded in the context of the rapid expansion of the digital banking industry, driven by technological advancements, and the evolving behaviors of Gen Z, who are known for their openness to experimenting with innovative technologies. The framework integrates various dimensions, including the definition and characteristics of digital banking, the acceptance of technology using the Technology Acceptance Model (TAM), The Unified Theory of Acceptance and Use of Technology (UTAUT), the unique attributes of Generation Z and university students, and key factors influencing their intention to use digital banking.

At the core of the research framework is the exploration of digital banking, highlighting its evolution from traditional banking and emphasizing the significance of digital infrastructure in facilitating various transactions. The Technology Acceptance Model (TAM) is employed to measure the acceptance of technology, considering key variables such as perceived usefulness and perceived ease of use. The framework acknowledges the distinctive characteristics of Generation Z, recognizing them as early adopters of technology, particularly in the realm of digital banking. The study also considers the influence of social factors on Gen Z students, emphasizing the importance of social influence and trust in shaping their intention and actual usage of digital banking. Additionally, the framework incorporates economic value, convenience, rewards, and firm reputation as crucial elements affecting the intention and behavior of Gen Z students in adopting digital banking. Overall, the research framework supplies a comprehensive structure for investigating the multifaceted aspects of digital banking adoption among Generation Z students in Indonesia. Figure 1 shows the theoretical framework used for a total of 10 Variables, consisting of Economic Value (EV), Convenience (C), Firm Reputation (FR), Features (F), Rewards (R), Social Influence (SI), Trust (T), Intention to use (IU), dan Actual Usage (AU).
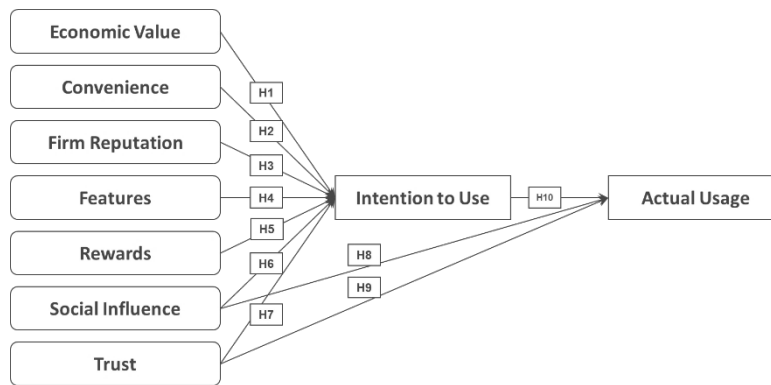
Fig. 1: Theoretical Framework

3. Methods

This research employed a quantitative approach. Generation Z students were selected as the target population considering the behaviour of Generation Z appears to be different from that of earlier generations which may lead to changes in consumer behaviour (Casalegno et al., 2022; Jha et al., n.d.). This generation is familiar with technology, risk-taking, and access internet more often than other generations (Kurniawan et al., 2023). Another reason to choose Generation Z students is because in the current era of the pandemic, characterized by financial uncertainties, individuals, particularly Generation Z students, face challenges in managing their finances. The advent of digital banking is tailored to align with the preferences of Generation Z and serves as a valuable tool in addressing their financial literacy needs. This research employs a purposive sampling technique, targeting individuals who fulfill the following criteria: 1) Active users of digital banking services; 2) Aged between 17 and 28 years old; 3) Enrolled in a university located in Greater Jakarta (specifically Jakarta, Bogor, Depok, Tangerang, and Bekasi); 4) With a minimum of six months of registration as a digital banking customer.

The data used in this study is primary data. For research purpose, 51 items contained in the questionnaire to measured instruments and adopted the model utilized in the previous study (Abu-Taieh et al., 2022; Lu & Wung, 2021; Nguyen et al., 2020; Sarmah et al., 2020; Silanoi et al., 2023; Sivathanu, 2019; Windasari et al., 2022; Yin & Lin, 2022) The questionnaire was structured into two sections. The first section aimed to collect demographic data from the respondents, encompassing information about digital bank account ownership, age, university affiliation, and individual opinions about existing digital banks. The second section of the questionnaire was dedicated to the exploration of intention to use digital bank with seven influencing factors: economic value (EV), convenience (C), firm reputation (FR), features (F), reward (R), social influence (SI), and trust (T). Additionally, we investigated the role of actual usage as a continuation effect.

The questionnaire was designed to measure factors influencing digital banking behavior usage using the Likert scale to figure out the respondent's perspectives and to measure the attitudes, opinions, and feelings of a person or group of people about a social phenomenon (Latan & Ghozali, 2015). Respondents supplied their feedback using a Likert scale ranging from 1 to 7, where 1 shown 'strongly disagree' and 7 shown 'strongly agree.' The data collection process involved the distribution of questionnaires to Gen Z students, that is digital banking customers who met the specified criteria. An online survey questionnaire, adapted from prior studies, was used for the research. The data collection was conducted through the dissemination of online questionnaires via Google Forms, utilizing various social media platforms such as Line, WhatsApp, Tiktok, Telegram, and Instagram. To determine the number of samples in this study, we refer to Uma Sekaran & Roger Bougie (2016), who recommended that sample sizes higher than 30 and lower than 500 are suficient for most studies. In addition, G* Power software can be applied to calculate the minimum sample size. With a confidence level of 95% at 0.80 power estimates and minimum sample size is 108. The survey was conducted in October 2023. In total, 150 questionnaires were distributed, and 131 valid responses were received for further analysis.

To analyze the data, this research used partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0 as the chosen analysis tool. To ensure the relevance and representativeness of the study, specific eligibility criteria were set up for the questionnaire respondents. The first process is to test the validity and reliability of each construct's indicator. Validity test using convergent validity, Average Variance Extracted (AVE), and discriminant validity (Al-Okaily et al., 2020). Then, the reliability test uses Cronbach's Alpha and composite reliability which is then continued with hypothesis testing by bootstrapping test (Hair et al., 2019).

4. Results and Discussion

Respondents in this questionnaire obtained 30 respondents with zero missing values by following Roscoe rules and SmartPLS processing (Al-Okaily et al., 2020) from students in Greater Jakarta area. The respondent data obtained consists of several aspects, which are found in Table 2, and detailed operational variables are listed in Table 3.

Table 2: Demographic Data of the Respondents

		N	%
Age	15-17	13	10%
	17-20	44	34%
	21-24	51	39%
	25-28	23	18%
University Origin	IPB University, Bogor	25	19%
	Universitas Bina Nusantara, Jakarta	28	21%
	Universitas Gunadarma, Depok	16	12%
	Universitas Indonesia, Depok	20	15%
	Universitas Mercu Buana, Jakarta	15	11%
	Universitas Tarumanagara, Jakarta	5	4%
	Others	22	17%
Frequency of daily digital banking usage	1-3 times a day	92	70%
	4-6 times a day	29	22%
	7-10 times a day	5	4%
	More than 10 times a day	5	4%
Reasons for using Digital Bank	Bank's reputation	13	10%
	Many features	27	20%
	Many promotions	29	22%
	Many rewards	20	16%
	Convenience	41	31%
	Others	1	1%
The most commonly used features	Investment	11	8%
	Payment	40	31%
	Savings	31	23%
	Transfer	49	38%
Frequently used digital bank	Bank Jago	29	22%
	Blu by BCA Digital	32	25%
	Jenius	6	4%

Seabank	52	40%
TMRW	5	4%
Other	6	5%

Table 3: Operational Variable

No.	Variable	Label	Indicator	References
1	Economic Value	EV1	The Digital bank that I use offer advantages not offered by traditional banking services	(Santos & Ponchio, 2021)
2		EV2	The digital bank that I use minimises transaction time	(Lu & Wung, 2021)
3		EV3	The digital bank that I use minimises the cost of transactions	(Windasari et al., 2022)
4		EV4	I like to use bank digital because it has discount	(Lu & Wung, 2021)
5		EV5	I like to use bank digital because it has cashback	(Lu & Wung, 2021)
6		EV6	I think using bank digital services is expensive.	(Nguyen et al., 2020)
7	Convenience	C1	The digital bank that I use minimises queue time	(Windasari et al., 2022)
8		C2	I use bank digital because counting bills when making a transaction is troublesome.	(Lu & Wung, 2021)
9		C3	I use bank digital because it is inconvenient to count the change when making a transaction	(Lu & Wung, 2021)
10		C4	I believe digital bank can be alternatives for me to go out without cash.	(Lu & Wung, 2021)
11		C5	I believe it is convenient that only a cell phone is needed for using bank digital to complete transactions.	(Lu & Wung, 2021)
12		C6	Using bank digital services is convenient.	(Nguyen et al., 2020)
13		C7	Learning to use bank digital will be easy.	(Windasari et al., 2022)
14		C8	I found that steps on bank digital is easy to proceed with	(Silanoi et al., 2023)
15		C9	bank digital allows me to find the services and information I want more quickly.	(Yin & Lin, 2022)
16		C10	Using a bank digital would increase my efficiency	(Sarmah et al., 2020)
17	Firm Reputation	FR1	I believe that the digital bank that I use has a good reputation	(Windasari et al., 2022)
18		FR2	I believe that the digital bank that I use is recognised widely	(Windasari et al., 2022)
19		FR3	I believe that the digital bank that I use offers good services	(Windasari et al., 2022)
20	Features	F1	I like to use bank digital because it supplies many useful features.	(Windasari et al., 2022)

21		F2	The digital bank that I use supplies features that I need	(Windasari et al., 2022)
22		F3	The digital bank that I use supplies features that ease my personal monetary management.	(Windasari et al., 2022)
23		F4	The bank digital services that I use have features not offered by traditional banking services	(Kaabachi et al., 2022)
24		R1	I like to use bank digital because it gives me many rewards.	(Windasari et al., 2022)
25	Rewards	R2	I like to use bank digital because it has bonus points	(Lu & Wung, 2021)
26		R3	I like to use bank digital because I feel that I have save money from the rewards.	(Windasari et al., 2022)
27		R4	Using bank digital is very profitable for me.	(Windasari et al., 2022)
28		SI1	People who are important to me think that I should use bank digital services.	(Nguyen et al., 2020)
29	Social Influence	SI2	People in my environment think that I should use bank digital services.	(Nguyen et al., 2020)
30		SI3	People whose opinions I respect prefer that I use mobile banking	(Abu-Taieh et al., 2022)
31		SI4	I get professional image in society due to the use of digital payment systems	(Sivathanu, 2019)
32		T1	I trust that my personal information will be secured when using bank digital services.	(Nguyen et al., 2020)
33		T2	I trust the service provided by digital bank	(Sarmah et al., 2020)
34		T3	I trust that technical problems of bank digital services will be rarely happened	(Nguyen et al., 2020)
35	Trust	T4	I trust that bank digital provider will keep terms and commitments strictly.	(Silanoi et al., 2023)
36		T5	I trust the procedure of settling transactions of bank digital	(Nguyen et al., 2020)
37		T6	I trust that my digital bank notifies me immediately if anything goes wrong with any of my transactions.	(Abu-Taieh et al., 2022)
38		T7	Overall, I think bank digital service is trustworthy.	(Purwandari et al., 2022; Sivathanu, 2019)
39		IU1	I will use bank digital as a usual payment tool.	(Lu & Wung, 2021)
40		IU2	I will continue using bank digital services in the future.	(Windasari et al., 2022)
41	Intention to Use	IU3	During the next six (6) months, I intend to use bank digital.	(Windasari et al., 2022)
42		IU4	Five (5) years from now, I intend to be using bank digital.	(Windasari et al., 2022)
43		IU5	I encourage others to use bank digital.	(Windasari et al., 2022)

44		AU1	I like using bank digital	(Samartha et al., 2022)
45		AU2	I use bank digital to transfer money	(Nguyen et al., 2020)
46		AU3	I use bank digital for online saving	(Sivathanu, 2019)
47	Actual Usage	AU4	I have few saving account in bank digital	(Sivathanu, 2019)
48		AU5	I use bank digital for Bill payments	(Nguyen et al., 2020)
49		AU6	I use bank digital for Online loans	(Nguyen et al., 2020)
50		AU7	I use bank digital for Insurance and investment	(Nguyen et al., 2020)
51		AU8	I use bank digital for financial management	(Nguyen et al., 2020)

The data collected through the distribution of questionnaires underwent processing using SmartPLS version 4. This involved employing a calculation pattern that stands for the test results for the research hypotheses. The purpose of utilizing SmartPLS 4 in this research analysis aligns with the SEM (Structured Equation Model) approach, encompassing various assessments such as convergent validity, discriminant validity, Fornell-Lacker test, and hypothesis testing (Latan & Ghozali, 2015). The structural model of the study is illustrated in the figure below.
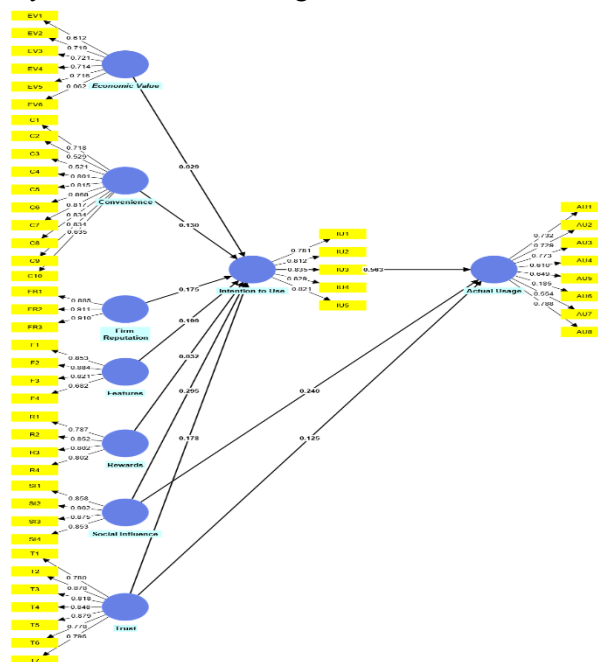

Fig. 2: Structural Model

Based on figure 2 represented above, presents the structural model of the study by eliminating some indicators (EV1, EV6, C2, C3, C10, F4, AU4, AU5, AU6, AU7) since the values of the loading factors obtained are < 0.70 because it is recommended that the measurement indicators of a construct reach >0.70, which illustrates the high validity of the data obtained in the study, in order to increase the results of the data analysis in the relevant and appropriate information to support the investigation (Hair et al., 2019).

4.1 Validity Analysis

According to Hair et al., (2019) validity testing needs to be implemented to confirm correct and competent data for further use in the next testing stage. To find out valid data, convergent validity aims to test the readability of data, research indicators, and relationships between latent variables arranged in the research model, which can be seen in table 4 below.

Table 4: Convergent validity test

Construct	Item	Outer loadings
Economic Value (EV)	EV2	0.745
	EV3	0.736
	EV4	0.720
	EV5	0.722
Convenience (C)	C1	0.718
	C4	0.817
	C5	0.834
	C6	0.894
	C7	0.825
	C8	0.856
	C9	0.842
Firm Reputation (FR)	FR1	0.885
	FR2	0.911
	FR3	0.910
Features (F)	F1	0.878
	F2	0.889
	F3	0.849
Rewards (R)	R1	0.787
	R2	0.851
	R3	0.802
	R4	0.803
Social Influence (SI)	SI1	0.858
	SI2	0.901
	SI3	0.876
	SI4	0.852
Trust (T)	T1	0.782
	T2	0.878
	T3	0.816
	T4	0.847
	T5	0.880
	T6	0.777
	T7	0.796
Intention to Use (IU)	IU1	0.785
	IU2	0.812
	IU3	0.834
	IU4	0.825
	IU5	0.822
Actual Usage (AU)	AU1	0.830
	AU2	0.800
	AU3	0.769
	AU8	0.803

Following the examination of outer loadings, it was found that 10 indicators, namely EV1, EV6, C2, C3, C10, F4, AU4, AU5, AU6, AU7, did not meet the criteria for eligibility. This determination was made as these indicators fell below the specified validity threshold, which is typically set at >0.70 during convergent validity testing. Thus, ten unqualified indicators will be eliminated. Then to support that each construct is valid and has a qualified discriminant value, through Fornell-Lacker testing can help identify the value of each variable. Table 5 below shows the projection of the Fornell-Lacker test on the questionnaire data and proves that the data is following the requirements on discriminant validity.

Table 5: Fornell-Lacker test

Variable	Actual Usage	Convenience	Economic Value	Features	Firm Reputation	Intention to Use	Rewards	Social Influence	Trust
Actual Usage	0.801	-	-	-	-	-	-	-	-
Convenience	0.588	0.828	-	-	-	-	-	-	-
Economic Value	0.548	0.607	0.731	-	-	-	-	-	-
Features	0.781	0.575	0.552	0.872	-	-	-	-	-
Firm Reputation	0.691	0.544	0.517	0.711	0.902	-	-	-	-
Intention to Use	0.814	0.627	0.544	0.713	0.710	0.816	-	-	-
Rewards	0.567	0.418	0.623	0.532	0.564	0.565	0.811	-	-
Social Influence	0.680	0.542	0.430	0.558	0.592	0.733	0.522	0.872	-
Trust	0.736	0.668	0.431	0.633	0.613	0.733	0.538	0.685	0.826

4.2 Reliability Test

The goal of reliability testing is to prove the credibility of the data used, thereby enhancing the research's overall value (Creswell, 2007).Click or tap here to enter text. According toAl-Okaily et al., (2020), the analysis of data reliability using SmartPLS offers a versatile and efficient means of exposing data for interpreting item results and relationships among relevant variables. In the examination of data reliability, Cronbach's alpha is employed to assess the consistency level of each item. Simultaneously, composite reliability testing is conducted to evaluate data reliability, with criteria set at AVE values >0.50 and CR >0.70. The model formed has been reliable (Yamin & Kurniawan, 2011).

Table 6: Reliability

variable	Cronbach's alpha	(rho_a)	Composite reliability (CR)	Average Variance Extracted (AVE)
Actual Usage	0.814	0.820	0.877	0.641
Intention to Use	0.874	0.874	0.909	0.666

Economic Value	0.716	0.719	0.821	0.534
Convenience	0.923	0.930	0.938	0.686
Firm Reputation	0.886	0.887	0.929	0.814
Features	0.842	0.843	0.905	0.760
Rewards	0.830	0.848	0.885	0.658
Social Influence	0.895	0.895	0.927	0.760
Trust	0.922	0.926	0.938	0.683

4.3 Determinant Coefficient

Determinant coefficient testing seeks to determine the extent to which the existing dependent variables can be elucidated by the relationships with other independent variables (Cleff, 2019). The model's assessment involves examining the coefficient of determination (r-square) to find independent variables' ability to explain the variation in dependent variables. A r-square value of 0.75 indicates a robust model, 0.50 suggests a moderate capability of the model, and 0.25 signifies a weak or feeble model (Latan & Ghozali, 2015).

Table 7: R-square test (R^2)

Construct	R-square	R-square adjusted
Actual Usage	0.708	0.702
Intention to Use	0.731	0.716

As shown in Table 7, the R-square value for Actual usage and Intention to Use respectively 0.708 (R-squared Adj = 0.702), and 0.731 (R-squared Adj = 0.716). This implied EV, C, FR, F, R, SI, T have explained about 70% variance in figuring out Intention to use digital banking. Meanwhile, SI, T, and IU explained about 73% of the variance in figuring out the Actual Usage of digital banking. The remaining percentage is explained by other variables beyond the scope of the research model (Latan & Ghozali, 2015).

4.4 Hypothesis Testing

Following the validation and reliability tests, all gathered data undergo testing to present findings that elucidate the study results, using the framework set up by the research hypothesis. The hypothesis testing employs a two-tailed approach, corresponding to a 95% confidence level and a degree of freedom value of 1.96 (Cleff, 2019). The outcomes of hypothesis testing for each latent variable are displayed in Table 8 as follows.

Table 8: Hypothesis testing (Bootstrapping)

Construct	T statistics	P values	Decision
Economic Value -> Intention to Use	0.907	0.364	H1 Rejected
Convenience -> Intention to Use	0.549	0.583	H2 Rejected
Firm Reputation -> Intention to Use	2.160	0.031	H3 Accepted
Features -> Intention to Use	2.037	0.042	H4 Accepted
Rewards -> Intention to Use	0.251	0.802	H5 Rejected
Social Influence -> Intention to Use	0.921	0.357	H6 Rejected
Trust -> Intention to Use	1.960	0.050	H7 Accepted
Social Influence -> Actual Usage	2.831	0.005	H8 Accepted
Trust -> Actual Usage	3.081	0.002	H9 Accepted
Intention to Use -> Actual Usage	6.026	0.000	H10 Accepted

The hypothesis testing results are presented in table 8.

4.5   Discussion

Table 2 shows that most of our participants fell into the 17-20 (34%) and 21-24 (39%) age groups. In terms of university origin, participants stood for a diverse range of educational institutions, with the highest percentage coming from Universitas Bina Nusantara, Jakarta (21%), followed by IPB University, Bogor (19%). The distribution of daily digital banking usage reveals that a considerable proportion of participants (70%) used digital banking services 1-3 times a day. When it comes to the reasons for using digital banks, convenience appeared as the primary motivator, with 31% of participants citing it as a key factor. Additionally, many participants mentioned the appeal of many features (20%) and promotions (22%) offered by digital banks. The features most used by participants were found to be "Transfer" (38%) and "Payment" (31%), showing the importance of transactional capabilities. In terms of the choice of digital banks, "SeaBank" stood out as the most often used digital bank (40%), followed by "Blu by BCA Digital" (25%). The diversity of options among the participants, represented by "Others" (5%), highlights the competitive landscape of digital banking.

Based on the questionnaire distributed, Table 8 displays the results of the model predicting the factors contributing to the intention to use digital banking and actual usage. The results show that firm reputation is the most significant factor that positively affects the intention to use digital banking ($\beta5 = 0.031$, $P < 0.05$), followed by features ($\beta6 = 0.042$, $P < 0.05$), and trust ($\beta1 = 0.050$, $P < 0.05$). this result is in line with Al Tarawneh et al., (2023); Samartha et al., (2022); and Windasari et al., (2022) However, the economic value, convenience, reward, social influence does not have a significant impact on the intention to use digital banking services which is in line with Ananda et al., (2020); Aria et al., (2023); Nguyen et al., (2020). Furthermore, another noteworthy discovery in this study is trust, social influence has significant and positive impact on actual usage. The conclusion drawn from this research shows that the intention to use digital banking significantly and positively influences actual usage.

The overall opinions of the respondents about digital banking and their impressions also collected to convey a comprehensive perspective on the state of digital banking in Indonesia. The collected data reveals a diverse range of views and sentiments toward digital banking services. Respondents appear to hold various opinions, which may include aspects such as user experience, security, accessibility, and the overall impact of digital banking on the financial landscape in Indonesia. This feedback supplies valuable insights into the strengths and areas for improvement within the digital banking sector, offering a nuanced understanding of how these services are perceived by the Indonesian population. Users generally praise digital banks for their convenience, efficiency, and practicality, citing ease of use, real-time transactions, and appealing promotions. Specific feedback on the "Blu by BCA Digital" app highlights positive remarks about promotions and free transfers but suggests improvements in login speed and additional cashback incentives. While users express security concerns, they find digital banking beneficial for managing finances, requesting reduced admin fees and enhanced security features. Gratitude is expressed for the benefits digital banking provides, particularly for students and those engaging in cashless transactions, with a collective hope for continuous improvement and development. Despite concerns about system downtime, users appreciate the efficiency of digital banking in managing transactions, investments, and savings, emphasizing the positive impact on daily life. In conclusion, users value the convenience and features of digital banking but stress the importance of continuous improvement, robust security measures, and efficient customer service in the ever-evolving digital era.

5. Conclusion

In the ever-evolving landscape of the banking industry during the 4.0 era, the advent of digital-only banking has brought about significant transformations. This study delved into understanding the intricacies of factors influencing the intention of Generation Z students in the Greater Jakarta region to engage with digital banking. The development of seven hypotheses focused on economic value, convenience, firm reputation, rewards, social influence, and trust, expecting their positive impacts on

the intention to use and actual usage of digital banking. While firm reputation and trust appeared as significant influencers on the intention to use, factors such as economic value, convenience, rewards, and social influence were found to be insignificantly associated. Methodologically, a quantitative approach was employed, using a comprehensive questionnaire to capture diverse perspectives from the respondents. The findings revealed a discerning awareness among Generation Z students, particularly about security concerns when interacting with digital banking platforms.

The study's limitations, confined to students in universities within the Greater Jakarta area, may pose challenges to generalizability. The exclusive focus on students, while insightful, narrows the dataset's breadth. The scarcity of prior research on the contribution of Gen Z students to the digital banking enterprise underscores the need for continued exploration in this domain. This research makes a valuable contribution to both academic knowledge and professional insights, offering a nuanced understanding of the factors shaping Generation Z students' interactions with digital banking platforms. In conclusion, the study underscores the significant influences of firm reputation and trust on the intention to use digital banking among Generation Z students. Looking ahead, future research should expand into broader aspects of consumer behaviors and satisfaction levels, contributing to a more comprehensive understanding of the dynamic relationship between digital banks and their users as the digital banking landscape continues to evolve.

In conclusion, this study offers empirical insights into Generation Z students' acceptance and usage of digital banking platforms, elucidating the roles of trust and firm reputation as key drivers. However, there remain unexplored nuances across broader geographical contexts and student subgroups. As digital banking providers continue enhancing their youth-centric solutions, focusing innovations on heightening trust and reputation can promote adoption across this demographic known for their technology savviness. Beyond functionality, emphasizing brand legacy, security policies and youth-oriented advisory services can catalyze growth. This research contributes by developing targeted theoretical frameworks and introducing metrics to assess digital banking platforms' appeal among picked Generation Z customers.

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