

Tapping into the Future: What Drives Generation Z to Adopt Digital Payments?

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Abstract

Research aims:

Gen Z tends to be early adopters of technology, and by understanding what motivates them to adopt digital payments, businesses and financial institutions can innovate and develop products that better cater to their needs and preferences, which can lead to the development of more user-friendly and secure payment solutions. The study aims to empirically test the factors determining intention to adopt digital payment among Zillennial or Generation Z who use e-wallet

Design/Methodology/Approach:

Using a convenience sampling technique, an online survey was conducted to collect data from Gen Z living in 15 districts in Pekanbaru, yielding 220 usable responses that were analyzed using Partial Least Square Structural Equation Modelling.

Research findings:

The study findings highlighted that perceived usefulness, perceived ease of use, and trust have a significant positive effect on Gen Z's intention to adopt digital payment. However, social influence does not show a significant impact.

Theoretical Contribution/Originality:

This study's findings contribute to the literature by examining the determinants of intention to adopt digital payment by utilizing the Technology Acceptance Model (TAM) as underpinning theory. Specifically, this study provides new insight into determinants of intention to adopt digital payment among Gen Z, who have a deeply intertwined relationship with technology, characterized by an almost innate understanding and reliance on digital tools and platforms.

Practical/Policy/Social Implications:

Gen Z tends to be early adopters of technology, and by understanding what motivates them to adopt digital payments, businesses and financial institutions can innovate and develop products that better cater to their needs and preferences, which can lead to the development of more user-friendly and secure payment solutions.

Research Limitations/Implications:

The first limitation is this study focus only on Gen Z and left other cohort unexamine. Studies across cohorts could provide more significant insights into determining factors of digital financial services adoption across generations. Furthermore, this cross-sectional study was conducted at a specific time, so the causal relationships could not be established. Hence, researchers in the future may employ a longitudinal strategy to analyze changes in the intention to adopt technology and their effects across time, and might broaden the sample to include different cohorts.

Keywords: *Intention to adopt digital payment, Technology Acceptance Model, perceived usefulness, perceived ease of use, social influence, trust*



INTRODUCTION

The use of digital payments has significant implications for how individuals and businesses conduct financial transactions. Digital payment is the process of transferring funds from one account to another using digital devices, such as smartphones and point-of-sale systems (Gopay, 2023). According to Teoh et al. (2013), digital payment is an electronic payment sent from the payer to the payee through comprehensive electronic channels, enabling the monitoring and management of transactions via the internet. This trend has garnered the attention of businesses and governments in Indonesia, evolving alongside the rise of e-commerce and the shift towards a cashless society (Media, 2023).

The digital payment sector in Indonesia has experienced rapid growth. For the past few years, fintech payment in the form of e-payment and digital wallets (e-wallets) has been commonly used by the young generations. According to the central bank of Indonesia, the value of electronic money transactions reached IDR 457.73 trillion (\$28.6 billion) in 2023 (STATISTA, 2024). Furthermore, research by InsightAsia indicates that 74% of respondents actively use digital wallets for various financial transactions (Wulandari, 2023), and furthermore a study by Visa in 2022 revealed that 67% of Indonesians are ready to abandon cash, with Gen Z dominating at 78% (Visa, 2023).

The significant increase in digital payment usage highlights a substantial market transaction flow in Indonesia and optimism that e-wallets can accelerate digital payment adoption (Kurniawan, 2022). The use of digital wallets in Indonesia is projected to grow by 31.5% by 2025, supported by the development of e-commerce and micro, small, and medium enterprises' transitioning to online platforms (Pahlevi, 2022). Pekanbaru City was chosen as the research object because it is among the seven major cities in Indonesia with the highest e-wallet usage, with electronic money transaction values growing rapidly by 58.6% and transaction volume increasing by 37.49% (Ansam, 2022).

This study utilizes the Technology Acceptance Model (TAM), developed by Davis (1989) to examine the determinants of digital payment adoption. TAM encompasses two primary variables: perceived usefulness and perceived ease of use. Perceived usefulness is the degree to which an individual believes that utilizing the technology would improve performance, whereas perceived ease of use pertains to the simplicity of using the technology with minimal efforts. Previous studies indicate that these two characteristics substantially affect technology adoption (Chawla and Joshi, 2019; Prastiawan, Aisjah and Rofiaty, 2021; To and Trinh, 2021).

Additionally, social influence and trust also play important roles in technology adoption. Social influence refers to the extent to which an individual feels pressured by those around them to use new technology (Venkatesh *et al.*, 2003). Social influence can significantly impact the intention to adopt a particular technology (Luarn and Lin, 2005; Tsu Wei *et al.*, 2009; Hsu, Wang and Lin, 2011; Aboelmaged and Gebba, 2013), through peers or family influence. Peers pressure plays a significant role in shaping young people's attitudes and behavior, including their adoption of digital payment method. If a young people's friends or peers actively use digital payment platform and endorse their benefits, it can motivate them to adopt similar practices to fit in or be seen as modern and tech-savvy. Additionally, family members, particularly parents or siblings may also influence young people's attitudes toward



digital payment. If a family member encourages or models the use of digital payment methods for convenience, security, or budgeting purposes, it can positively influence the youth's intention to adopt similar practices.

Furthermore, trust is a critical factor that influences Gen Z's intention to adopt digital payment method (Nuryasman and Warningsih, 2021; Saif *et al.*, 2022). Gen Z is highly concerned about the security of their personal and financial information online. They also value privacy and is wary of companies and platforms that may misuse their personal information. Gen Z expects digital payment systems to be reliable, seamless, and available whenever and wherever they need to make transactions. By addressing their concern about security, privacy, reliability, and user experience, digital payment providers can build trust and encourage Gen Z to embrace cashless transactions. This study aims to analyze the factors that influence Gen Z's intention to adopt igital payments in Pekanbaru City, using the TAM model which is equipped with social influence and trust variables. This paper makes significant contributions to the ody of literature by looking into trust and social influence as the external variables in the TAM model and analyzes its impact on the intention to adopt digital payment.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Technology Acceptance Model (TAM)

TAM is an [information systems](#) theory that models how users come to accept and use a technology, where the *actual system use* is the end-point where people use the technology. *Behavioral intention* is a factor that leads people to use technology. Behavioral intention (BI) is influenced by the *attitude* (A) which is the general impression of technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, namely: 1) *Perceived usefulness* (PU) – This was defined by Davis as "the degree to which a person believes that using a particular system would enhance their [job performance](#)". It means whether or not someone perceives that technology to be useful for what they want to do; 2) *Perceived ease-of-use* (PEOU) – Davis defined this as "the degree to which a person believes that using a particular system would be free from effort". If the technology is easy to use, then the barrier is conquered. If it's not easy to use and the interface is complicated, no one has a positive attitude towards it. *External variables* such as social influence is an important factor to determine the attitude, and *Social Influence* is defined as "the degree to which an individual observes the significant of others believe that she or he should consider for the innovative system" (Venkatesh *et al.*, 2003). When these things (TAM) are in place, people will have the attitude and intention to use the technology.

The TAM has been continuously studied and expanded—the two major upgrades being the TAM 2 and the [unified theory of acceptance and use of technology](#) (or UTAUT). A TAM 3 has



also been proposed in the context of [e-commerce](#), including the effects of trust and perceived risk on system use. The original TAM framework proposed by (Davis, 1989) can be seen in Figure 1.

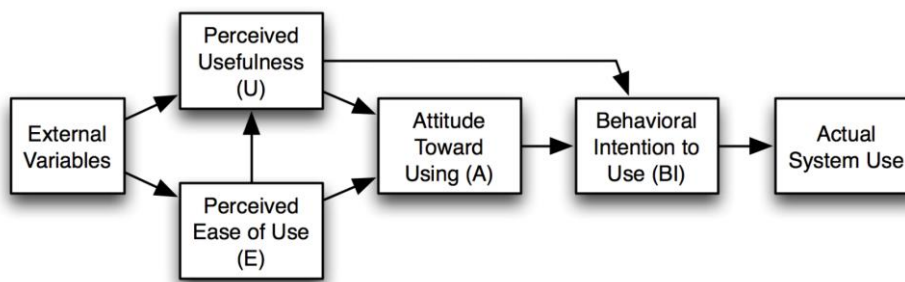


Figure 1 Technology Acceptance Model (Davis, 1989)

Digital Payment

Digital payment, also referred to as electronic payment, encompasses all forms of payment that are initiated, processed, and received by electronic means (Hartman, 2006). Mobile payment, peer-to-peer payment, and e-wallet/digital wallet are sub-categories of digital payment. They involve the use of a mobile phone to initiate and confirm the transfer of monies in exchange for a good or service (Gomber, Koch and Siering, 2017). According to Gomber et al. (2017), who introduced the Digital Finance Cube, digital payment is one part of the digital finance business function (Refer to Figure 2). The Digital Finance Cube encompasses three key aspects of digital finance: 1) the business activities of digital finance, 2) the pertinent technology and technological concepts, and 3) the institutions that offer digital finance solutions. Mobile payment is a type of digital payment where funds are transferred in exchange for an item or service, and the cell phone is used to both initiate and complete the payment (de Bel and Gâza, 2011). Recently, not only financial institutions engaged in new mobile payment structures but also big internet companies like Google or Amazon (Contini *et al.*, 2011).

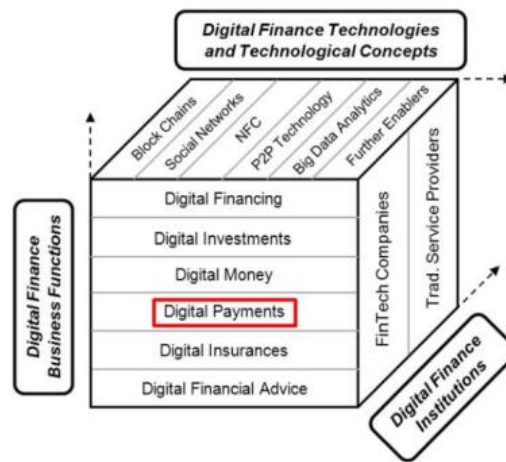


Figure 2. Digital Finance Cube (Gomber, Koch and Siering, 2017)

Perceived Usefulness

Perceived usefulness has been extensively studied in the field of technology adoption (Chong, Chan and Ooi, 2012). PU is known as “the extent to which a person believes about the usage a specific system would increase her/his work performance” (Davis, 1989). Past studies have confirmed the relationship between PU and the intention to adopt specific technology. Past studies confirmed that PU has a significant relationship on the intention to adopt mobile banking applications (Luarn and Lin, 2005; Akhtar *et al.*, 2019), and m-commerce (Faqih and Jaradat, 2015). Previous empirical evidence also show the connection between PU and intention to use credit card (Nguyen and Cassidy, 2018). Related to mobile payment, Lisana (2022) and Rahardja *et al.* (2023) reveal that PU has a significant relationship on intention to adopt m-payment.

Therefore, from the discussion, the study proposes that.

H1: PU positively impacts Gen Zs’ intention to adopt digital payment.

Perceived Ease of Use

Similar to PU, PEOU is one of the original variables found in the TAM model. PEOU is defined as the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). A study carried out on the usage of m-banking services found out that PEOU had significant effect on users' attitude hence affecting the intention to adopt m-banking (Chitungo and Munongo, 2013). Other study also reveals that PEOU was positively associated with the intention to use m-banking services (Milly *et al.*, 2021). Many researchers found similar result that PEOU has a significant relationship with intention to adopt a specific system (Luarn and Lin, 2005; Tsu Wei *et al.*, 2009; Hanafizadeh *et al.*, 2014; Faqih and Jaradat, 2015; Nguyen and Cassidy, 2018; Singh and Srivastava,

2018).

Therefore, from the discussion, the study proposes that.

H2: PEOU positively impacts Gen Zs' intention to adopt digital payment.

Social Influence

SI was defined as "the degree to which an individual observes the significant of others believe that she or he should consider for the innovative system" as introduced by Venkatesh et al. (2003). They investigated whether the effect of SI on adoption intention was due to compliance, particularly in the early stages of experience. Previous empirical evidence has noted that SI had a significant relationship with intention to adopt m-banking (Akhtar *et al.*, 2019). Another study also confirmed that SI influence intention to adopt m-payment significantly (Lisana, 2022). Several studies also support this connection (Luarn and Lin, 2005; Tsu Wei *et al.*, 2009; Hsu, Wang and Lin, 2011; Aboelmaged and Gebba, 2013), because of relatives and friendship relationship usually acts as strong reference points to individuals, increasing observance and aspiration to accept information system.

Therefore, from the discussion, the study proposes that.

H3: SI positively impact Gen Zs' intention to adopt digital payment.

Trust

Some people are ready to be vulnerable to the actions of another person because they believe that person will do something important for them, even if they can't watch or control that person. This is called trust according to Mayer et al. (1995). In the case of an online transaction, McKnight et al. (2002) define trust as the belief that lets customers freely put their trust in online vendors for the service they expect, after carefully considering the characteristic of the vendors. Trust is fundamental to any payment method and is essential for the acceptance of new payment methods. Trust among individuals is essential for the validation of any established monetary system. As payment methods evolve from paper-based to electronic systems, fostering consumer trust has become essential for the success of organizations in the payment industry. A study conducted on the use of m-banking services found that trust had a positive influence on the intention to adopt mobile wallet services (Alswaigh & Aloud, 2021). Apart from that, research by Mondego & Gide (2018) revealed that trust has a significant influence on the adoption of mobile payment system. Many researchers have found similar results that trust has a significant relationship with the intention to adopt a particular system (Shankar and Datta, 2018; Najib and Fahma, 2020; Nuryasman and Warningsih, 2021)

Based on the description above, the following hypothesis is proposed

H4: Trust positively impacts Gen Zs' intention to adopt digital payment.



The conceptual framework illustrated in Figure 3 was inferred from the literature review on the factors influencing intention to adopt digital payment.

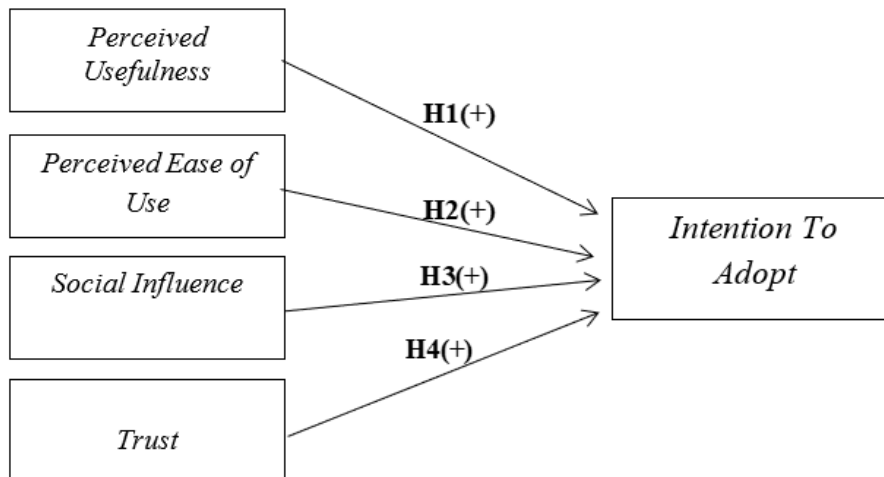


Figure 3 Conceptual Framework of the Study

METHOD

The objective of this study was to investigate the relationship between PU, PEOU, social influence, and trust in connection to the intention to adopt digital payment among Gen Z who use e-wallet. Based on the study's objectives, it is not an interpreting study, but rather empirical research that needs the data that can be statistically examined to identify the underlying issues. Therefore, the positivist approach was suitable for the study's purpose of using the quantitative method. The research procedure entailed the identification of the population, examination of the sample, and execution of a statistical analysis on the variables. This research paradigm has been extensively utilized by esteemed scholars in the field of social sciences. It enables researchers to evaluate theories and hypotheses using objective measures of data, hence providing support for the obtained conclusions.

This study utilized the survey research method to gather standardized information that could be used to analyze the relationship between the constructs. The cost-efficient survey methodology enables prompt responses and greater control over the participants (Malhotra, 2010). Over time, surveys have been often used by many market researchers to accurately depict the population and elucidate behavior with a strong level of validity (Lazar, Feng and Hochheiser, 2017). Survey research is the preferred way for measuring individuals' attitudes, actions, opinions, and beliefs (Christensen, Johnson and Turner, 2015).

The sample for this study consists of Gen Z e-wallet users aged 12 to 27 in 2024, from all areas in Pekanbaru, encompassing the 15 districts as per BPS data from 2023. Compared to other regions in Riau Province, Pekanbaru, the province's capital, is one of the city surveyed by InsightAsia as the city with a considerable amount of Gen Z e-wallet users (Ansam, 2022); thus, Pekanbaru was chosen as the

study context. Data collection is conducted through a survey questionnaire distributed via Google Forms. The number of respondents in this study is 220, which are further analysis using Statistical Product and Service Solutions (SPSS).

Operational Definition and Data Collection Technique

The study's instrument was a self-administered questionnaire with six sections, i.e., the respondents' sociodemographic information, and the variables examined in this study. Table 1 provides a summary of the questionnaire's section details.

Table 1 Summary of Sections in the Questionnaire

Section	No of Items	Definition/Types of Questions	Measurement	Adapted from
Demographics	9	Gender, year of birth, employment status, income, religion, education, types of e-wallets used, and frequency using e-wallet.	-	-
Intention to adopt digital payment	4	Four questions on the intention to adopt digital payment, the willingness to continue using, the plan to use digital payment more frequently, and the willingness to know more about the digital payment platform.	5-point Likert scale	Akhtar et al. (2019)
Perceived usefulness	5	Questions related to the extent a person believes that the adoption of digital payment system would increase her/his work performance, such as the benefit of usage, increased productivity and opportunity, and time efficiency.	5-point Likert scale	Akhtar et al. (2019)
Perceived ease of use	3	Three questions on the degree to which a person believes that using a particular system would be free of effort	5-point Likert scale	Akhtar et al. (2019)
Social influence	4	Questions on how an individual observes the significant of others believe that she or he should consider adopting the digital payment system.	5-point Likert scale	Akhtar et al. (2019)
Trust	6	Questions related to willingness to accept a certain risk related to digital payment adoption	5-point Likert scale	Chawla & Joshi (2019)

Online questionnaires which are distributed in the first half of 2024 are utilized as the data collection approach in this study. The questionnaires were shared through some enumerators who are working in the targeted universities using social media platforms such as WhatsApp and Facebook. Although online survey may experience some methodological constraints, such as biased respondents selecting themselves into the sample (Andrade, 2020), it has become quite popular due to its simplicity and low cost of data collection.



RESULTS AND DISCUSSION

A. Results

Descriptive Analysis of Respondents

The demographic details of respondents which amounted to 220 individuals are highlighted in Table 2. In term of gender, the majority of respondents are female (71%). All the respondents belong to Generation Z and most of them are still studying at the university. Concerning the monthly income category, more than half of the respondents have no permanent income. In addition, 54% of the respondents are senior high school graduates, and around 30% hold a college degree. Based on the types of e-wallets used for digital payment, DANA is the most popular among Gen Z living in Pekanbaru City.

Table 2 Respondent Profile (n=220)

Variables	Frequency	Percentage
Gender		
Male	63	28,6%
Female	157	71,4%
Age		
12 - 15 Years	12	5,5%
16 – 19 Years	33	15,0%
20 – 23 Years	126	57,3%
24 – 27 Years	49	22,3%
Occupation		
College Student	154	70,0%
Private sector employee	40	18,2%
Government employee	11	5,0%
Entrepreneur	7	3,2%
Unemployed	8	3,6%
Average monthly income		
< Rp 3.000.000	53	24,1%
Between Rp 3.000.000 -7.000.000	33	15,0%
Between 7.000.000-10.000.000	5	2,3%
Between 10.000.000-15.000.000	3	1,4%
Between 15.000.000-20.000.000	1	0,5%
More than 20.000.000	1	0,5%
No income	124	56,4%
Religion		
Islam	212	96%
Christian	8	4%
Highest Education Attained		
Elementary School	4	1,4%
Junior High School	18	8,2%
Senior High School	119	54,1%



Bachelor's Degree	67	30,5%
Master's Degree	5	2,3%
Diploma/Degree in Specific Field	7	3,2 %
E-wallets Used		
DANA	109	49,5%
GOPAY	30	13,6%
SHOPEEPAY	72	32,7%
OVO	9	4,1%
Frequency of Usage		
1-5 times	110	50,0%
5-10 times	46	20,9%
10-15 times	17	7,7%
More than 15 times	47	21,4%

Descriptive Analysis of Variables

The descriptive statistics of variables tested in the model are shown in Table 3. Regarding the standard deviation, the variable which was relatively volatile compared to other variables was intention to adopt digital payment, with a mean score 4.06 out of 5. Another highly volatile variable was social influence, with a mean score of 3.98.

Table 3 Descriptive Statistic of Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
PU	220	1.50	5.00	4.3523	.66706	-1.389	.164	2.317	.327
PEOU	220	2.50	5.00	4.1636	.59338	-.492	.164	-.134	.327
SI	220	1.50	5.00	3.9818	.74462	-.431	.164	-.369	.327
TR	220	1.50	5.00	4.0977	.69784	-.883	.164	.936	.327
INT	220	1.50	5.00	4.0682	.75240	-.689	.164	.036	.327

Common Method Variance

Partial least squares (PLS) using the SmartPLS 4.1.0.5 version (Ringle, Wende and Becker, 2022) was utilized as the statistical tool to examine the measurement and structural model because it does not require normality assumption, and survey research is not normally distributed (Chin, Marcolin and Newsted, 2003). Since data were obtained from one source only, the potential of Common Method Bias was first examined by analyzing the full collinearity as recommended by Kock & Lynn (2012) and Kock (2015). With this approach, each variable was regressed against a common variable, and if the VIF value is less than 3.3, there is no bias resulting from using only a single source. Because the VIF result yielded a VIF value of less than 3.3, single-source bias was not a serious issue with this study's data. See Table 4.



Table 4. Full Collinearity Testing

Variables	VIF
Perceived Usefulness	1.323
Perceived Ease of Use	1.325
Social Influence	1.460
Trust	1.745
Intention to adopt	1.673

Measurement Model

The authors followed and tested the model using a two-step approach recommended by Anderson & Gerbing (1988). Following the recommendation of Hair et al. (2019) and Ramayah et al. (2018), the authors first tested the measurement model to test the validity and reliability of the instruments used and proceeded to run the structural model to test the hypothesis developed. The loadings, average variance extracted (AVE), and composite reliability (CR) for the measurement model were assessed. The loadings values should be ≥ 0.5 , the AVE should be ≥ 0.5 , and the CR should be ≥ 0.7 . As shown in Table 5, the AVEs were higher than 0.5, and the CRs were higher than 0.7. The loadings were also acceptable, with values of more than 0.5 (Hair et al., 2019). In addition, the items with loading below 0.5 were deleted (PU1, PEOU1, SI1 and TR1). The path for measurement model can be seen in Figure 4.

Table 5. Results Summary for Measurement Model

Constructs	Items	Indicator Reliability	Convergent Validity	Internal Consistency Reliability	
		Outer Loadings	AVE	Composite Reliability	Cronbach's Alpha
		>0.50	>0.50	>0.7	>0.6
Perceived Usefulness	PU2	0.746	0.614	0.864	0.713
	PU3	0.823			
	PU4	0.795			
	PU5	0.769			
Perceived Ease of Use	PEOU2	0.844	0.717	0.835	0.709
	PEOU3	0.850			
Social Influence	SI2	0.734	0.687	0.867	
	SI3	0.869			
	SI4	0.876			
Trust	TR2	0.771	0.684	0.915	0.797
	TR3	0.812			
	TR4	0.876			
	TR5	0.825			
	TR6	0.847			
Intention to adopt	INT1	0.636	0.594	0.853	0.896
	INT2	0.806			
	INT3	0.838			
	INT4	0.788			



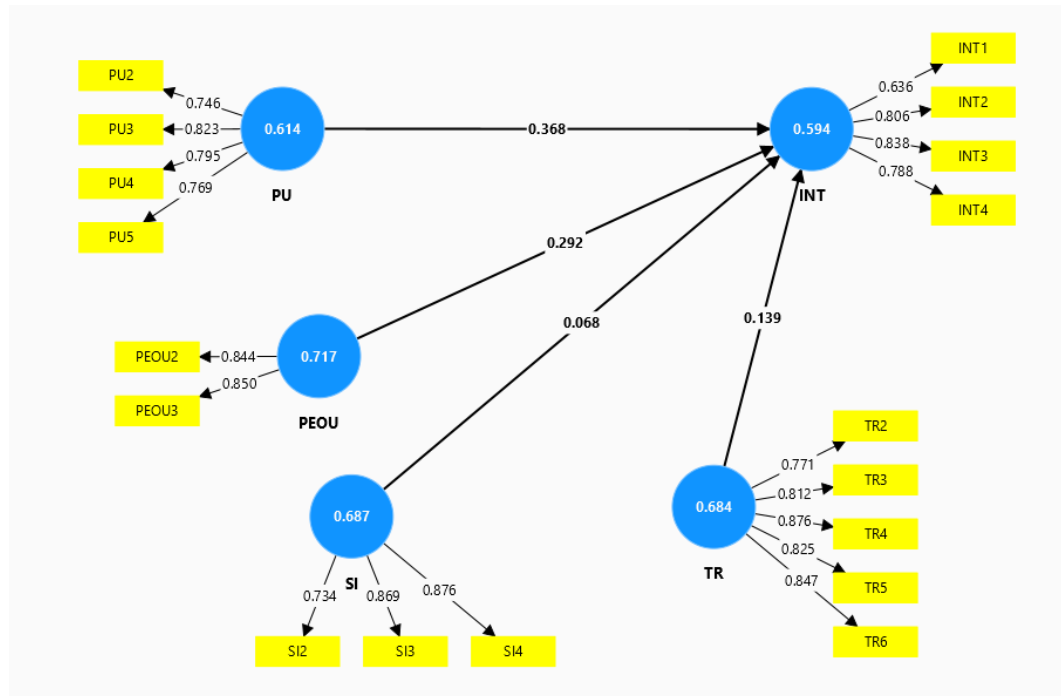


Figure 4.
PLS SEM

Path Model

Note: PU=Perceived usefulness, PEOU=Perceived ease of use, SI=Social influence, TR=Trust, INT=Intention to adopt.

The Fornell-Larcker criterion was used to assess discriminant validity in this study, by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlations between that construct and all other constructs in the model (Ramayah *et al.*, 2018). According to the criterion, a latent variable should explain better the variance on its own indicators than the variance of other latent variables. The square root of the AVE of a construct should be greater than the correlations between that construct and all other constructs in the model. This ensures that a construct shares more variance with its own items (as indicated by AVE) than with items from other constructs (Refer to Table 6). Taken together both these validity tests have shown that the measurement items were both valid and reliable.

Table 6 Discriminant Validity (Fornell-Larcker criterion)

	INT	PEOU	PU	SI	TR
INT	0.771				
PEOU	0.662	0.847			
PU	0.691	0.686	0.784		
SI	0.492	0.492	0.549	0.829	
TR	0.580	0.604	0.615	0.564	0.827



Structural Model

As Hair et al. (2017) and Cain et al. (2016) suggested, the authors assessed the multivariate Skewness and Kurtosis. The cut-off value for Skewness is ± 3 , and Kurtosis is ± 20 . The results showed that the data the authors collected were not multivariate normal, with Mardia's multivariate Skewness ($\beta = 4.431$, $p < 0.01$) and Mardia's multivariate Kurtosis ($\beta = 41.33$, $p < 0.01$). These numbers were all greater than the cut-off value, so it can be concluded that the data were not multivariate normal. Since the data were not multivariate normal, when the authors ran the analysis later for the structural model, the bootstrapping procedure would be run to correct the standard errors, as Hair et al. (2019) recommended. Using a 5,000-sample re-sample bootstrapping approach, the authors presented the path coefficients, the standard errors, t-values, and p-values for the structural model (Ramayah *et al.*, 2018). It is also based on Hahn & Ang (2017) argument that p-values are a poor criterion for determining the significance of a hypothesis and that a combination of p-values, confidence intervals, and effect sizes should be used instead. The overview of the criteria the authors utilized to assess the developed hypotheses may be seen in Table 7.

Table 7. Hypotheses Testing

Hypotheses	Relationship	Path coefficient	Std Error	t-value	p-value	f-square	BCI LL	BCI UL	Decision
H1	PU -> INT	0.368	0.076	4.862	0.000	0.136	0.246	0.494	Supported
H2	PEOU -> INT	0.292	0.074	3.925	0.000	0.092	0.173	0.419	Supported
H3	SI -> INT	0.068	0.066	1.037	0.150	0.007	-0.043	0.173	Not supported
H4	TR -> INT	0.139	0.067	2.068	0.019	0.022	0.024	0.245	Supported

Note: PU=Perceived usefulness, PEOU=Perceived ease of use, SI=Social influence, TR=Trust, INT=Intention to adopt. The authors used a 95% confidence interval with a bootstrapping of 5,000

B. Discussion

We tested the effect of four predictors on the intention to adopt digital payment, and the R^2 was 0.561, showing that all four predictors explained 56.1% of the variance in the intention to adopt digital payment. PU ($\beta = 0.368$, $p < 0.01$), PEOU ($\beta = 0.292$, $p < 0.01$), and trust ($\beta = 0.139$, $p < 0.05$) were all positively related to intention to adopt digital payment; thus, H1, H2 and H4 were supported. The relationship between social influence ($\beta = 0.068$, $p > 0.05$) was not statistically proven; hence, H3 was not supported.

The perceived usefulness of products or services directly influences the inclination to adopt it. Users are more likely to use a system when they perceive it as advantageous for their work or enhancing their performance. This is a fundamental concept in the TAM which suggests that perceived usefulness is a highly reliable indicator of both the intention to use and the actual usage of a technology. A study conducted in Saudi Arabia revealed that the primary determinant influencing the intention to adopt e-payment is the PU (Alswaigh dan Aloud, 2021). These findings align with the results of other studies on the adoption of technology-based payment methods (Patel and Patel, 2018; Yang *et al.*, 2021; Ullah *et*



al., 2022). In this research, Gen-Z in Pekanbaru City perceived that utilizing digital payment tools, such as e-wallets, facilitated their task and enhanced their efficiency in conducting payment transactions.

This study also confirmed the significant relationship between perceived ease of use and intention to adopt digital payment. This study's result is in line with Shankar & Datta (2018), whose examined the intention to adopt digital payment in Indian context. The findings of this study also consistent with findings from many technology-based payment adoption studies (Patel and Patel, 2018; Liébana-Cabanillas *et al.*, 2020; To and Trinh, 2021; Ullah *et al.*, 2022) The findings of this study demonstrate a positive correlation between the level of user-friendliness and the inclination to utilize an e-payment system. When a system is viewed as being effortless to navigate, people are more inclined to embrace it. The reason for this is that the simplicity of operation diminishes the obstacles to initiating the usage of novel technology.

The third significant determinant of the intention to adopt digital payment in this study is trust. Trust in technology is a multifaceted concept that encompasses users' beliefs, perceptions, and attitudes towards the reliability, security, usability, and ethical implications of technological systems. Users trust technology that consistently performs as expected without unexpected failures or errors. Consumer trust is a crucial factor when adopting technology-based services, because consumer trust reduces the risk perceived by customers leading to adoption (Shankar and Datta, 2018). The more consumers believe that technology is reliable, the greater their interest in using it. This finding is consistent with findings from many technology-based payment adoption studies (Alswaigh & Aloud, 2021; Liébana-Cabanillas *et al.*, 2020; Najib & Fahma, 2020; Yang *et al.*, 2021).

Among the four determinants of intention to adopt digital payment examined in this study, social influence was not a significant construct. This social influence variable has a positive influence but does not have a significant effect on the intention to adopt digital payments among Gen-Z e-wallet users in Pekanbaru City. The results of this research are in line with research conducted by Nisa & Solekah (2022) which states that social influence shows how much other people influence a person in their social environment, does not have a direct influence on the intention to use e-wallet. One reason social influence does not have a significant effect may be because Gen Zs prefer to decide on their own financial planning rather than consulting friends (Singh dan Srivastava, 2018). Another possible explanation is that the majority of Gen Z participants in this survey were college students who had not yet established a permanent source of income. Their continued reliance on financial assistance from parents or family members hinders their willingness to embrace digital payment methods.

Finally, besides reporting the p-value, both the substantive significance (effect size) and statistical significance (p-value) are crucial to be reported (Sullivan and Feinn, 2012). A guideline by Cohen (1988) was followed to measure the effect size. Based on Cohen (1988), the values of 0.02, 0.15, and 0.35 represent the small, medium, and large effects, respectively. In this study (refer to Table 7), PU ($f^2 = 0.136$), PEOU ($f^2 = 0.092$), and trust ($f^2 = 0.022$) had a small effect on the intention to adopt digital payment. Preacher & Hayes (2008) suggested examining confidence interval [LL and UL] and suggest a zero should not straddle in between. As seen in Table 7, for the supported hypotheses there are no zero



straddle in between the BCI LL and BCI UL.

CONCLUSION

The study aims to analyze the determinants of the intention to adopt digital payment among Gen Z living in Pekanbaru City, using the *Technology Acceptance Model* as the underpinning theory. The study shows that among four constructs tested in this study, PU, PEOU, and trust have positive significant relationship with intention to adopt digital payment among Gen Z in Pekanbaru. While social influence does not have significant relationship with the intention to adopt digital payment as the main dependent variable in this study.

This research on the intention to adopt digital payment technology in the context of Gen Z is relevant today. Gen Z cohort embodies the forthcoming consumer demographic, whose inclinations and actions in relation to digital payments will profoundly influence the trajectory of financial transactions in the future. Therefore, examining their objectives offers valuable understanding of their perceptions and engagement with financial technologies. Furthermore, Gen Z tends to be early adopters of technology, and by understanding what motivates them to adopt digital payments, businesses and financial institutions can innovate and develop products that better cater to their needs and preferences, which can lead to the development of more user-friendly and secure payment solutions. Finally, in the contemporary digital age, digital payments provide a substantial market potential for businesses to take advantage of. With the entry of Gen Z into the workforce and their increasing purchasing power, their tastes will have a big impact on the rate at which digital payment technologies are adopted.

From a total of 220 respondents, this study found evidence that Gen Z's intention to adopt digital payment was relatively high, at an average of 4.06 out of 5. However, the standard deviation of intention to adopt digital payment was also high, indicating that some respondents had a very low intention to adopt digital payment while others may have a higher level of intention. The study also reveals that three out of four variables tested in this study (PU, PEOU, and trust) positively influence Gen Z's intention to adopt digital payment.

LIMITATION

This paper, like all other studies, has limitations. One limitation is that this study's scope was limited to Gen Z in Pekanbaru. Nevertheless, understanding the intention to adopt digital payment of other cohorts could provide more significant insights into determining factors of digital financial services adoption across generations. Further study could perform a more comprehensive analysis with more respondents. The subsequent limitation is that this cross-sectional investigation was conducted at a singular point in time, precluding the establishment of causal linkages. Consequently, future researchers may utilize a longitudinal approach to examine temporal changes in technology adoption intentions and their impacts, while potentially expanding the sample to encompass diverse cohorts.



REFERENCES

- Aboelmaged, M. and Gebba, T.R. (2013) 'Mobile Banking Adoption: An Examination of Technology Acceptance Model and Theory of Planned Behavior', *International Journal of Business Research and Development*, 2(1). Available at: <https://doi.org/10.24102/ijbrd.v2i1.263>.
- Akhtar, S. et al. (2019) 'Factors influencing individuals' intention to adopt mobile banking in China and Pakistan: The moderating role of cultural values', *Journal of Public Affairs*, 19(1), p. e1884. Available at: <https://doi.org/10.1002/pa.1884>.
- Alswaigh, N. and Aloud, M. (2021) 'Factors Affecting User Adoption of E-Payment Services Available in Mobile Wallets in Saudi Arabia', p. 222. Available at: <https://doi.org/10.22937/IJCSNS.2021.21.6.29>.
- Alswaigh, N.Y. and Aloud, M.E. (2021) 'Factors Affecting User Adoption of E-Payment Services Available in Mobile Wallets in Saudi Arabia', *International Journal of Computer Science & Network Security*, 21(6), pp. 222–230. Available at: <https://doi.org/10.22937/IJCSNS.2021.21.6.29>.
- Anderson, J.C. and Gerbing, D.W. (1988) 'Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach', *Psychological Bulletin*, 103(3), pp. 411–423.
- Andrade, C. (2020) 'The Limitations of Online Surveys', *Indian Journal of Psychological Medicine*, 42(6), pp. 575–576. Available at: <https://doi.org/10.1177/0253717620957496>.
- Ansam, H. (2022) *Hasil Survey di Pekanbaru dan 6 Kota Besar Lainnya, Nilai Transaksi Bulanan Uang Elektronik Capai Rp 35,1 Triliun*, *GoRiau.com*. Available at: <https://www.goriau.com/berita/baca/hasil-survey-di-pekanbaru-dan-6-kota-besar-lainnya-nilai-transaksi-bulanan-uang-elektronik-caai-rp-351-triliun.html> (Accessed: 18 June 2024).
- de Bel, J. and Gâza, M. (2011) *Mobile Payments 2012 – My Mobile, My Wallet?* Amsterdam: Inopay, pp. 1–100.
- Cain, M.K., Zhang, Z. and Yuan, K.-H. (2016) 'Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation', *Behavior Research Methods*, 49(5), pp. 1716–1735. Available at: <https://doi.org/10.3758/s13428-016-0814-1>.
- Chawla, D. and Joshi, H. (2019) 'Consumer attitude and intention to adopt mobile wallet in India – An empirical study', *International Journal of Bank Marketing*, 37(7), pp. 1590–1618. Available at: <https://doi.org/10.1108/IJBM-09-2018-0256>.



Chin, W.W., Marcolin, B.L. and Newsted, P.R. (2003) 'A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study', *Information Systems Research*, 14(2), pp. 189–217. Available at: <https://doi.org/10.1287/isre.14.2.189.16018>.

Chitungo, S.K. and Munongo, S. (2013) 'Extending the Technology Acceptance Model to Mobile Banking Adoption in Rural Zimbabwe', in. Available at: <https://www.semanticscholar.org/paper/Extending-the-Technology-Acceptance-Model-to-Mobile-Chitungo-Munongo/f3a295d88983bba56d9264b96f3197faa8bf7027> (Accessed: 23 November 2023).

Chong, A.Y.-L., Chan, F.T.S. and Ooi, K.-B. (2012) 'Predicting Consumer Decisions to Adopt Mobile Commerce: Cross Country Empirical Examination Between China and Malaysia', *Decision Support Systems*, 53(1), pp. 34–43. Available at: <https://doi.org/10.1016/j.dss.2011.12.001>.

Christensen, L.B., Johnson, R.B. and Turner, L.A. (2015) *Research methods, design, and analysis*. 12. ed., global ed. Boston, Munich: Pearson.

Cohen, J. (1988) *Statistical power analysis for the behavioral sciences*. 2nd ed. Hillsdale, N.J: L. Erlbaum Associates.

Contini, D. *et al.* (2011) 'Mobile Payments in the United States: Mapping Out the Road Ahead', p. 57.

Davis, F.D. (1989) 'Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology', *MIS Quarterly*, 13(3), p. 319. Available at: <https://doi.org/10.2307/249008>.

Faqih, K.M.S. and Jaradat, M.-I.R.M. (2015) 'Assessing the moderating effect of gender differences and individualism-collectivism at individual-level on the adoption of mobile commerce technology: TAM3 perspective', *Journal of Retailing and Consumer Services*, 22, pp. 37–52. Available at: <https://doi.org/10.1016/j.jretconser.2014.09.006>.

Gomber, P., Koch, J.-A. and Siering, M. (2017) 'Digital Finance and FinTech: current research and future research directions', *Journal of Business Economics*, 87(5), pp. 537–580. Available at: <https://doi.org/10.1007/s11573-017-0852-x>.

Gopay (2023) *Serba-serbi Sistem Pembayaran Digital untuk Bisnis, GoPay - Aplikasi Ringan untuk Transfer & Bayar*. Available at: <https://gopay.co.id/blog/sistem-pembayaran-digital> (Accessed: 13 January 2025).



Hahn, E.D. and Ang, S.H. (2017) 'From the editors: New directions in the reporting of statistical results in the Journal of World Business', *Journal of World Business*, 52(2), pp. 125–126. Available at: <https://doi.org/10.1016/j.jwb.2016.12.003>.

Hair, J.F. *et al.* (2017) *A primer on partial least squares structural equation modeling (PLS-SEM)*. Second edition. Los Angeles: Thousand Oaks: Sage.

Hair, J.F. *et al.* (2019) 'When to use and how to report the results of PLS-SEM', *European Business Review*, 31(1), pp. 2–24. Available at: <https://doi.org/10.1108/EBR-11-2018-0203>.

Hanafizadeh, P. *et al.* (2014) 'Mobile-banking adoption by Iranian bank clients', *Telematics and Informatics*, 31(1), pp. 62–78. Available at: <https://doi.org/10.1016/j.tele.2012.11.001>.

Hartman, M.E. (2006) 'E-Payments Evolution', in T. Lammer (ed.) *Handbuch E-Money, E-Payment & M-Payment*. Physica-Verlag HD. Available at: https://doi.org.ezproxy.um.edu.my/10.1007/3-7908-1652-3_2 (Accessed: 15 June 2022).

Hsu, C.-L., Wang, C.-F. and Lin, J.C.-C. (2011) 'Investigating customer adoption behaviours in Mobile Financial Services', *International Journal of Mobile Communications*, 9(5), pp. 477–494. Available at: <https://doi.org/10.1504/IJMC.2011.042455>.

Kock, N. (2015) 'Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach', *International Journal of e-Collaboration*, 11(4), pp. 1–10. Available at: <https://doi.org/10.4018/ijec.2015100101>.

Kock, N. and Lynn, G. (2012) 'Lateral Collinearity and Misleading Results in Variance-Based SEM: An Illustration and Recommendations', *Journal of the Association for Information Systems*, 13(7), pp. 546–580. Available at: <https://doi.org/10.17705/1jais.00302>.

Kurniawan, A. (2022) *Website DJKN*. Available at: <https://www.djkn.kemenkeu.go.id/kpknl-semarang/baca-artikel/14974/Hikmah-Pandemi-Covid-19-Dompot-Digital-Naik-Daun.html> (Accessed: 13 January 2025).

Lazar, J., Feng, J.H. and Hochheiser, H. (2017) *Research methods in human computer interaction*. 2nd edition. Cambridge, MA: Elsevier.

Liébana-Cabanillas, F. *et al.* (2020) 'Assessment of mobile technology use in the emerging market: Analyzing intention to use m-payment services in India', *Telecommunications Policy*, 44(9), p. 102009. Available at: <https://doi.org/10.1016/j.telpol.2020.102009>.



Lisana, L. (2022) 'Understanding the key drivers in using mobile payment among Generation Z', *Journal of Science and Technology Policy Management* [Preprint]. Available at: <https://doi.org/10.1108/JSTPM-08-2021-0118>.

Luarn, P. and Lin, H.-H. (2005) 'Toward an Understanding of the Behavioral Intention to Use Mobile Banking', *Computers in Human Behavior*, 21(6), pp. 873–891. Available at: <https://doi.org/10.1016/j.chb.2004.03.003>.

Malhotra, N.K. (2010) *Marketing Research_ An Applied Orientation*. sixth edition. Pearson.

Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995) 'An Integrative Model of Organizational Trust', *Academy of Management Review*, 20(3), pp. 709–734. Available at: <https://journals.aom.org/doi/abs/10.5465/amr.1995.9508080335?journalCode=amr> (Accessed: 14 January 2025).

McKnight, D.H., Choudhury, V. and Kacmar, C. (2002) 'Developing and Validating Trust Measures for e-Commerce: An Integrative Typology | Information Systems Research', *Information Systems Research*, 13(3), pp. 334–359. Available at: <https://doi.org/10.1287/isre.13.3.334.81>.

Media, K.C. (2023) *Survei Visa: 67 Persen Masyarakat Indonesia Bersiap Tinggalkan Uang Tunai*, *KOMPAS.com*. Available at: <https://money.kompas.com/read/2023/04/10/213000026/survei-visa--67-persen-masyarakat-indonesia-bersiap-tinggalkan-uang-tunai> (Accessed: 13 January 2025).

Milly, N. *et al.* (2021) 'Measuring Mobile Banking Adoption in Uganda Using the Technology Acceptance Model (TAM2) and Perceived Risk', *Open Journal of Business and Management*, 09(01), pp. 397–418. Available at: <https://doi.org/10.4236/ojbm.2021.91021>.

Mondego, D. and Gide, E. (2018) 'The Effect of Trust on Mobile Payment Adoption: A Comprehensive Review of Literature', *International Journal of Arts & Sciences*, 11(01), pp. 375–390. Available at: <https://acquire.cqu.edu.au/articles/> (Accessed: 14 January 2025).

Najib, M. and Fahma, F. (2020) 'Investigating the Adoption of Digital Payment System through an Extended Technology Acceptance Model: an Insight from the Indonesian Small and Medium Enterprises', *International Journal on Advanced Science, Engineering and Information Technology*, 10(4), pp. 1702–1708. Available at: <https://doi.org/10.18517/ijaseit.10.4.11616>.

Nguyen, O.D.Y. and Cassidy, J.F. (2018) 'Consumer intention and credit card adoption in Vietnam', *Asia Pacific Journal of Marketing and Logistics*, 30(4), pp. 779–796. Available at: <https://doi.org/10.1108/APJML-01-2017-0010>.



Nisa, U.K. and Solekah, N.A. (2022) 'The Influence of TAM, Social influence, Security Relationship toward Intention to Use E Wallet through Attitude and Trust', *Iqtishoduna*, 18(1), pp. 35–50. Available at: <https://doi.org/10.18860/iq.v18i1.12916>.

Nuryasman, M. and Warningsih, S. (2021) 'Determining Factors Of Digital Wallet Usage', *Jurnal Manajemen*, 25(2), pp. 271–289. Available at: <https://doi.org/10.24912/jm.v25i2.740>.

Pahlevi, R. (2022) *Pasar E-Wallet Indonesia Diproyeksikan Capai US\$70 Miliar pada 2025* / *Databoks*, <https://databoks.katadata.co.id/>. Available at: <https://databoks.katadata.co.id/teknologi-telekomunikasi/statistik/699ccd21d4e8aa6/pasar-e-wallet-indonesia-diproyeksikan-capai-us70-miliar-pada-2025> (Accessed: 13 January 2025).

Patel, K.J. and Patel, H.J. (2018) 'Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence', *International Journal of Bank Marketing*, 36(1), pp. 147–169. Available at: <https://doi.org/10.1108/IJBM-08-2016-0104>.

Prastiawan, D.I., Aisjah, S. and Rofiaty, R. (2021) 'The Effect of Perceived Usefulness, Perceived Ease of Use, and Social Influence on the Use of Mobile Banking through the Mediation of Attitude Toward Use', *Asia Pacific Management and Business Application*, 009(03), pp. 243–260. Available at: <https://doi.org/10.21776/ub.apmba.2021.009.03.4>.

Preacher, K.J. and Hayes, A.F. (2008) 'Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models', *Behavior Research Methods*, 40(3), pp. 879–891. Available at: <https://doi.org/10.3758/BRM.40.3.879>.

Rahardja, U. *et al.* (2023) 'Technological readiness and its impact on mobile payment usage: A case study of go-pay', *Cogent Engineering*, 10(1), p. 2171566. Available at: <https://doi.org/10.1080/23311916.2023.2171566>.

Ramayah, T. *et al.* (2018) *Partial Least Square Structural Equation Modelling (PLS-SEM) using Smart PLS: An Updated and Practical Guide to Statistical Analysis*. Second Edition. Pearson Malaysia Sdn Bhd.

Ringle, C.M., Wende, S. and Becker, J.-M. (2022) 'SmartPLS 4'. Oststeinbek: SmartPLS GmbH. Available at: <http://www.smartpls.com>.

Saif, M.A.M. *et al.* (2022) 'Determinants of the Intention to Adopt Digital-Only Banks in Malaysia: The Extension of Environmental Concern', *Sustainability*, 14(17), p. 11043. Available at: <https://doi.org/10.3390/su141711043>.



Shankar, A. and Datta, B. (2018) 'Factors Affecting Mobile Payment Adoption Intention: An Indian Perspective', *Global Business Review*, 19(3_suppl), pp. S72–S89. Available at: <https://doi.org/10.1177/0972150918757870>.

Singh, S. and Srivastava, R.K. (2018) 'Predicting the intention to use mobile banking in India', *International Journal of Bank Marketing*, 36(2), pp. 357–378. Available at: <https://doi.org/10.1108/IJBM-12-2016-0186>.

STATISTA (2024) *Indonesia: online transaction value 2023*, Statista. Available at: <https://www.statista.com/statistics/958171/indonesia-online-transaction-value/> (Accessed: 12 June 2024).

Sullivan, G.M. and Feinn, R. (2012) 'Using Effect Size—or Why the p Value Is Not Enough', *Journal of Graduate Medical Education*, 4(3), pp. 279–282. Available at: <https://doi.org/10.4300/JGME-D-12-00156.1>.

Teoh, W.M.-Y. *et al.* (2013) 'Factors affecting consumers' perception of electronic payment: an empirical analysis', *Internet Research*, 23(4), pp. 465–485. Available at: <https://doi.org/10.1108/IntR-09-2012-0199>.

To, A.T. and Trinh, T.H.M. (2021) 'Understanding behavioral intention to use mobile wallets in vietnam: Extending the tam model with trust and enjoyment', *Cogent Business & Management*. Edited by C. Gomez Corona, 8(1), p. 1891661. Available at: <https://doi.org/10.1080/23311975.2021.1891661>.

Tsu Wei, T. *et al.* (2009) 'What drives Malaysian m-commerce adoption? An empirical analysis', *Industrial Management & Data Systems*, 109(3), pp. 370–388. Available at: <https://doi.org/10.1108/02635570910939399>.

Ullah, S. *et al.* (2022) 'Consumers' Intention to Adopt m-payment/m-banking: The Role of Their Financial Skills and Digital Literacy', *Frontiers in Psychology*, 13, p. 873708. Available at: <https://doi.org/10.3389/fpsyg.2022.873708>.

Venkatesh *et al.* (2003) 'User Acceptance of Information Technology: Toward a Unified View', *MIS Quarterly*, 27(3), p. 425. Available at: <https://doi.org/10.2307/30036540>.

Visa (2023) *2 dari 3 orang Indonesia bersiap meninggalkan uang tunai – Survei Visa*. Available at: <https://www.visa.co.id/about-visa/newsroom/press-releases/nr-id-230410.html> (Accessed: 13 January 2025).

Wulandari, C.S. (2023) *Dompot Digital Naik Daun, Membetot Minat Kala Pandemi*, <https://www.bi.go.id/id/bi-institute>. Available at: <https://www.bi.go.id/id/bi-institute/BI->



Epsilon/Pages/Dompet-Digital--Naik-Daun,-Membetot-Minat-Kala-Pandemi.aspx (Accessed: 13 January 2025).

Yang, M. *et al.* (2021) 'Cashless Transactions: A Study on Intention and Adoption of e-Wallets', *Sustainability*, 13(1), pp. 1–18. Available at: <https://www.mdpi.com/2071-1050/13/2/831> (Accessed: 14 January 2025).

