



Cashless Behavior And E-Wallets In Gen Z's Financial Management

Jennifer Audreylia Djiwono¹

Tiffany Evelyn Kondana²

Reyna Reng Suy Laulyta³

Olivia Yantho⁴

Yuyun Karystin Meilisa Suade^{5*}

¹Sekolah Tinggi Ilmu Ekonomi Ciputra Makassar

Email : jaudreylia@student.ciputra.ac.id

²Sekolah Tinggi Ilmu Ekonomi Ciputra Makassar

Email : tkondana@student.ciputra.ac.id

³Sekolah Tinggi Ilmu Ekonomi Ciputra Makassar

Email : rrengsuy@student.ciputra.ac.id

⁴Sekolah Tinggi Ilmu Ekonomi Ciputra Makassar

Email : oyantho01@student.ciputra.ac.id

⁵Sekolah Tinggi Ilmu Ekonomi Ciputra Makassar

Email : yuyun.suade@ciputra.ac.id

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Abstract

This study investigates the influence of cashless payments and digital wallets on the financial management of Generation Z in Makassar, focusing on key issues such as impulsive spending, low financial literacy, and data security. Although this generation is known to be technologically literate, many still lack the skills to manage their finances wisely. The study employed a quantitative approach with an explanatory design and involved 120 respondents aged 17 to 26 who actively use e-wallets in their daily financial activities. Data were analyzed using multiple linear regression with SPSS version 26. Statistical results showed that cashless payment behavior had a positive and significant effect on personal financial management ($\beta = 0.421$, $p < 0.01$), as did the use of digital wallets ($\beta = 0.388$, $p < 0.01$), contributing to greater efficiency and accuracy in financial management. The R^2 value of 0.56 indicates that both independent variables collectively explain 56% of the variance in personal financial management. Features such as automatic transaction recording, spending notifications, and payment reminders play a role in enhancing financial literacy and discipline. This study concludes that the careful adoption of digital financial technology can serve as a strategic tool for fostering healthy, structured, and sustainable financial behavior among Generation Z.

Keywords : Digitalization, Cashless Payment Behavior, Digital Wallet Usage, Personal Financial Management, Generation Z.

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh pembayaran nontunai dan dompet digital terhadap manajemen keuangan Generasi Z di Makassar, dengan isu pokok seperti konsumsi impulsif, literasi keuangan rendah, dan keamanan data. Generasi ini dikenal sebagai generasi yang melek teknologi, namun belum sepenuhnya memiliki kecakapan dalam mengelola keuangan secara bijak. Penelitian ini menggunakan pendekatan kuantitatif dengan desain eksplanatori, serta melibatkan 120 responden berusia 17 hingga 26 tahun yang aktif menggunakan e-wallet dalam aktivitas keuangan sehari-hari. Teknik analisis data dilakukan menggunakan regresi linier berganda dengan bantuan software SPSS versi 26. Hasil uji statistik menunjukkan bahwa perilaku pembayaran nontunai berpengaruh positif dan signifikan terhadap manajemen keuangan pribadi ($\beta = 0,421$, $p < 0,01$), demikian pula penggunaan dompet digital ($\beta = 0,388$, $p < 0,01$), yang berkontribusi pada peningkatan efisiensi dan ketepatan pengelolaan keuangan. Nilai R^2 sebesar 0,56 mengindikasikan bahwa kedua variabel independen secara bersama-sama menjelaskan 56% variasi dalam manajemen keuangan pribadi. Fitur-fitur seperti pencatatan transaksi otomatis, notifikasi pengeluaran, dan pengingat pembayaran turut berperan dalam meningkatkan literasi serta kedisiplinan finansial. Penelitian ini menyimpulkan bahwa adopsi teknologi keuangan digital secara cermat mampu menjadi sarana strategis dalam membentuk perilaku keuangan yang sehat, terstruktur, dan berkelanjutan di kalangan Generasi Z.

Keywords : Digitalisasi, Perilaku Pembayaran Non-tunai, Penggunaan Dompet Digital, Manajemen Keuangan Pribadi, Generasi Z.

INTRODUCTION

Personal Financial Management serves as a fundamental pillar in fostering individual and household economic stability, particularly within the increasingly complex landscape of the digital economy (Mirsa Jamilah, 2024). The ability to effectively manage income streams, consumption patterns, savings, investments, and debt obligations constitutes the foundation of financial resilience, especially amidst rising global economic uncertainty (Chelvarayan et al., 2022). From a microeconomic perspective, efficient personal financial management not only enhances individual welfare but also generates systemic implications for financial inclusion and broader social stability (Ismamudi et al., 2023).

Generation Z, encompassing the demographic cohort born between the mid-1990s and early 2010s, exhibits distinctive characteristics that differentiate them from preceding generations, particularly regarding financial decision-making paradigms. Having matured within an accelerated digital epoch characterized by pervasive technological integration, Generation Z demonstrates pronounced preferences for financial technology adoption and digitally-mediated financial instruments (Ermalina Rumbik et al., 2024). This cohort demonstrates a propensity to seamlessly integrate digital applications into quotidian activities, encompassing consumption behaviors and financial management practices. Nevertheless, empirical evidence suggests that despite their technological proficiency, this generation has not yet fully developed the financial literacy requisite for sustaining optimal financial behaviors (Fitri Wahyuni et al., 2024).

This dynamic is particularly salient in Indonesia, where non-cash payment usage has surged. Bank Indonesia reported a remarkable 175.2% year-on-year growth in QRIS transaction volume during 2024, reaching approximately 34.5 billion transactions in total (Warjiyo, 2025). Additionally, electronic money grew by 35.3% YoY, with QRIS user base reaching nearly 49.8 million and 32.7 million merchants onboarded as of late 2024 (Wikipedia contributors, 2025a, 2025b).

From a behavioral finance perspective, such financial behaviors are best analyzed through conceptual frameworks that account for cognitive biases, self-control, as well as psychological and social influences on financial decision-making (Chelvarayan et al., 2022). The use of e-wallets is not merely driven by considerations of efficiency and accessibility but also shaped by psychological and social factors such as impulsiveness and the pursuit of instant gratification. These factors may contribute to uncontrolled financial behavior, particularly in the absence of robust personal financial management skills.

The 2024 National Survey on Financial Literacy and Inclusion (SNLK) by Indonesia's Financial Services Authority (OJK) reports that the financial literacy rate among Generation Z (aged 18–25) stands at 70.19%, slightly above the national average of 65.43% (OJK, 2025). However, this literacy level has not yet translated consistently into prudent financial behavior, especially in urban areas experiencing rapid digital economic development, such as Makassar.

As the economic hub of Eastern Indonesia, Makassar has seen rapid growth in fintech adoption, including widespread use of e-wallets such as OVO, GoPay, DANA, and ShopeePay for daily transactions. However, there remains a scarcity of academic literature specifically addressing the relationship between cashless payment behavior and personal financial management among Generation Z in the Makassar context. This creates a notable research gap, given the unique sociocultural characteristics of the city and its role as a digital social laboratory in the eastern region of Indonesia.

Previous studies have highlighted the negative consequences of e-wallet usage, including increased consumerism and diminished spending discipline (Anwar et al., 2022; Nikita Sari et al., 2020). Nevertheless, most of these studies focus on large cities in Western and Central Indonesia and have not extensively employed behavioral finance frameworks. Furthermore, the interconnected roles of e-wallet usage, cashless behavior, self-control, and financial literacy in shaping personal financial management remain underexplored in a unified, empirical model.

LITERATURE REVIEW

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA), introduced by (Ajzen, 1991), which incorporates perceived behavioral control as an additional determinant of both intention and actual behavior. TPB posits that an individual's behavior is influenced

by three core components: attitude toward the behavior, subjective norms, and perceived behavioral control. These constructs together shape an individual's behavioral intention and eventual actions, offering a robust framework to explain why people engage or abstain from specific behaviors under certain conditions. In the context of this study, TPB is used to explain how Generation Z individuals form their intentions to adopt cashless payment systems such as digital wallets, and how those intentions translate into actual financial behavior. The theory justifies the inclusion of constructs like attitudes toward e-wallets, social influences from peers or family, and perceived competence in using financial technologies. TPB's predictive power in various financial contexts, such as consumption behavior and financial technology usage, makes it a theoretically sound basis for exploring financial decision-making in a digitally-driven generation (Suade et al., 2024).

Personal Financial Management

Personal financial management refers to the process by which individuals plan, organize, direct, and control their financial activities to achieve economic stability and long-term financial well-being. It includes setting financial goals, budgeting, managing expenses, saving, investing, and handling debts responsibly. Effective financial management allows individuals to make informed decisions, avoid overspending, and prepare for future financial needs or emergencies (Chhillar & Arora, 2022; Suade et al., 2024). In today's digital economy, managing personal finances has become increasingly complex, especially for Generation Z who are constantly exposed to digital financial platforms. Their ability to manage finances is not only influenced by income levels but also by their awareness, discipline, and financial literacy. Digital transactions and instant payment systems often require stronger cognitive control and budgeting skills, making personal financial management a critical competency for maintaining financial health in a technology-integrated lifestyle.

Cashless Payment Behavior

Cashless payment behavior refers to an individual's habitual use of non-cash instruments such as bank transfers, debit/credit cards, QRIS, and mobile banking to complete financial transactions. This behavior reflects the transition from traditional cash-based systems to more efficient, traceable, and secure electronic payment methods. It is increasingly prevalent due to innovations in financial technology and the widespread adoption of digital platforms (Yang et al., 2021a). Among Generation Z, who are digital natives, cashless payment behavior aligns with their preference for speed and convenience. However, this ease of transaction can also lead to impulsive spending if not accompanied by strong financial literacy. Therefore, examining cashless payment behavior provides valuable insight into how digital financial practices influence the quality of personal financial management in the context of growing digitalization (Anggraeni & Ganarsih, 2025).

Digital Wallet Usage

Digital wallet usage refers to the extent to which individuals engage with mobile-based applications for conducting financial transactions, such as payments, fund transfers, top-ups, and even savings. E-wallets like GoPay, OVO, Dana, and ShopeePay offer convenience through features like instant payments, transaction history, spending analytics, and reward systems. These platforms are widely embraced by Generation Z, particularly in urban areas where digital services are integrated into daily life (Anwar et al., 2022; Chelvarayan et al., 2022). Despite their advantages, digital wallets also pose risks to financial discipline. The seamless nature of e-wallet transactions can diminish users' awareness of real-time spending, leading to budget mismanagement. As such, digital wallet usage is not only a reflection of technology adoption but also an influential factor in shaping individuals' financial planning and decision-making behavior, especially among the youth in the digital age.

HYPOTHESIS DEVELOPMENT

Cashless Payment Behavior and Personal Financial Management

The hypothesis regarding the influence of cashless payment behavior on personal financial management is grounded in both theoretical constructs and prior empirical evidence. From a theoretical standpoint, this relationship is supported by the *Technology Acceptance Model* (TAM) and *Theory of Planned Behavior* (TPB), which emphasize that individuals are more likely to adopt technological

systems when they perceive them as useful and easy to use, leading to improved behavioral outcomes, including financial decisions (Ajzen, 2020; Davis, 1989).

Cashless payment systems, such as QRIS, mobile banking, and digital transfers—enhance financial transparency, reduce transactional friction, and provide real-time data that facilitate users' ability to manage expenditures, monitor financial flows, and maintain digital records. These digital footprints allow for reflective evaluation and better budgeting, aligning with principles of behavioral finance and rational choice theory.

Empirical studies have demonstrated that cashless payment behavior contributes positively to financial awareness, expenditure control, and long-term financial planning. For example (Anggraeni & Ganarsih, 2025) found that the use of cashless systems increased financial discipline among young adults in Indonesia. Similarly, (Chhillar & Arora, 2022) and (Madini et al., 2023) reported that digital transaction tools improved individuals' ability to track spending and manage budgets.

Additional supporting studies include (Eka Saputra et al., 2024), who showed that digital payments enhance financial inclusion and awareness among students, and (Medina & Gunawan, 2024), who highlighted the link between cashless behavior and responsible financial conduct. Based on this theoretical foundation and empirical evidence, the first hypothesis is formulated as follows:

H1: Cashless Payment Behavior positively influences personal financial management

Digital Wallet (E-Wallet) Usage and Personal Financial Management

The hypothesis regarding the influence of digital wallet (e-wallet) usage on personal financial management is constructed based on established theories and reinforced by empirical studies. From a theoretical lens, this relationship is underpinned by *Information Processing Theory* and *Self-Regulation Theory*, which argue that increased access to timely and structured information enhances decision-making quality and behavior control (Baumeister, 2004; Payne, 2011).

Digital wallets offer users not only a convenient method of payment but also embedded tools such as automatic transaction logging, expenditure categorization, alerts, reminders, and budget limit settings. These features promote self-monitoring, reinforce behavioral feedback loops, and foster financial discipline—particularly relevant for Generation Z, who are digital natives and frequently engaged in mobile transactions.

Previous studies consistently show that e-wallet usage improves financial outcomes. Anindito et al., (2024) reported that e-wallet usage enhances budgeting accuracy among students. Anwar et al., (2022) and Gita Safitri et al., (2022) found positive correlations between e-wallet functionality and improved spending habits. Nikita Sari et al., (2020) emphasized that the availability of transaction history increased financial literacy and goal tracking.

Additional literature by Yang et al., (2021b) highlights how e-wallets foster behavioral awareness and financial control. Likewise, Chelvarayan et al., (2022) confirmed that digital wallet adoption supports better financial planning, particularly among younger users. Based on this comprehensive theoretical foundation and supporting empirical evidence, the second hypothesis is formulated as follows:

H2: Digital wallet (e-wallet) usage positively influences personal financial management

METHOD

This study employed a quantitative research methodology with an explanatory design aimed at investigating the causal relationships between cashless payment behavior, digital wallet utilization, and personal financial management practices among Generation Z in Makassar, Indonesia. The research model is grounded in theoretical frameworks from behavioral finance and digital payment adoption literature, allowing for the development of an empirically testable model that reflects the behavioral underpinnings of financial decision-making in the digital economy.

The study targeted university students aged 17 to 26 years residing in Makassar, who actively engage with digital wallet platforms for daily transactional purposes. This demographic alignment with the Generation Z cohort ensures homogeneity in terms of digital literacy, technology adoption, and emerging financial behavior patterns. A purposive sampling technique was employed to ensure the inclusion of participants who met the following eligibility criteria: (1) currently enrolled as a student in

a higher education institution in Makassar, (2) regular user of digital wallets (minimum of three transactions per week), and (3) capable of independently managing their personal finances.

Sample size determination adhered to the methodological guidelines proposed by (Hair et al., 2021), utilizing an indicator-to-respondent ratio between 5:1 and 10:1. Given the number of latent constructs and measurement items, a minimum of 112 and a maximum of 140 responses were deemed sufficient to ensure the statistical power required for Structural Equation Modeling with Partial Least Squares (SEM-PLS).

The variables in this study were operationalized using previously validated theoretical constructs. The independent variables included cashless payment behavior, which refers to behavioral tendencies related to the use of non-cash transaction methods, specifically e-wallets. This construct was measured through indicators reflecting usage frequency, convenience, user preference, and perceived usefulness. Digital wallet utilization, the second independent variable, encompassed transaction diversity, usage intensity, motivations for adoption, and frequency of feature engagement. The dependent variable, personal financial management, was conceptualized as a multidimensional construct encompassing three core dimensions: expenditure management, which relates to respondents' ability to monitor and control spending; savings behavior, referring to the consistency and discipline in saving money; and financial planning, which captures the extent to which individuals set financial goals and manage their budgets over time. All items were measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree," allowing for nuanced interval-level analysis.

The research instrument was developed through a structured process of adapting validated scales from prior peer-reviewed studies. Items measuring cashless payment behavior were adapted from framework (Suade et al., 2024), digital wallet utilization was informed by the work of Palinggi et al. (2023), and personal financial management indicators were based on Thi et al. (2022), incorporating relevant elements from financial literacy and behavioral finance frameworks. Prior to full-scale data collection, a pilot test involving 30 participants was conducted to assess the instrument's clarity, coherence, and psychometric robustness. These participants shared demographic similarities with the intended research population. Feedback from the pilot study informed semantic refinements and adjustments to item phrasing. Exploratory Factor Analysis (EFA) was performed to assess underlying factor structures, while internal reliability was confirmed through Cronbach's Alpha, with all constructs exceeding the acceptable threshold of 0.70, thus demonstrating satisfactory internal consistency.

Primary data collection was conducted using an online questionnaire disseminated via the Google Forms platform. An informed consent statement was included at the beginning of the form, clearly communicating the voluntary nature of participation, the anonymity of responses, and assurances regarding data confidentiality in accordance with research ethics protocols. To ensure data integrity, a series of data cleaning procedures was applied. These included filtering out responses that failed to meet a minimum completion time, detecting straight-lining behavior, and identifying statistical outliers. Only validated and complete responses were retained for analysis.

Data analysis was performed using SEM-PLS via WarpPLS 8.0 software. This analytical technique was selected for its capacity to handle complex structural models and its suitability for smaller sample sizes while allowing for both formative and reflective constructs. The analysis proceeded through several key phases: assessment of model fit using standard indices such as the Average Path Coefficient (APC), Average R-squared (ARS), and Average Variance Inflation Factor (AVIF); evaluation of construct reliability using Composite Reliability (CR), Average Variance Extracted (AVE), and Cronbach's Alpha; verification of convergent and discriminant validity using the Fornell-Larcker criterion and cross-loadings; and hypothesis testing via bootstrapped path coefficients and significance levels.

To mitigate potential sources of bias, several procedural and design-based strategies were adopted. Selection bias was minimized through the use of clear and consistent inclusion criteria during purposive sampling. Social desirability and response bias were reduced by ensuring anonymity and carefully wording all questionnaire items to remain neutral and non-leading. Non-response bias was monitored by comparing early and late respondents, and common method bias was addressed through procedural remedies such as separating independent and dependent variable items and randomizing item order throughout the questionnaire.

Finally, the study adhered strictly to ethical research standards. Participation was fully voluntary, and all respondents were provided with detailed information regarding the purpose of the study, their right to withdraw at any time, and the confidentiality of their responses. No personally identifiable information was collected. All data were securely stored and used solely for academic purposes, in line with institutional ethical approval protocols.

RESULT AND DISCUSSION

Result

Demographic Profile of Respondents

Table 1 presents the descriptive statistical distribution of demographic characteristics among study participants, focusing specifically on Generation Z individuals residing in Makassar City. The sample exhibited a pronounced gender asymmetry, with female participants constituting 89% of the respondent pool, while male participants represented 11%. This distributional pattern reflects documented trends in digital financial participation, wherein women demonstrate accelerated adoption rates of financial technology solutions, particularly in e-wallet applications for routine transactional purposes. This phenomenon aligns with findings from [Palinggi et al. \(2023\)](#) and [Mubyl et al. \(2021\)](#), who documented similar gender-based adoption patterns in digital payment technologies among young adult populations.

The age distribution revealed a concentration within the 17-20 years bracket, comprising 59.3% of participants, followed by the 21-24 years cohort. This demographic segment represents the formative years of Generation Z, characterized by concurrent processes of financial identity formation and behavioral pattern establishment ([Elsalonika & Ida, 2025](#)). The selection of this age range proves instrumental for investigating technology-mediated financial behaviors and non-cash decision-making processes that are increasingly internalized within this demographic's habitual frameworks.

The majority of participants (74.6%) were identified as active students, reflecting the transitional financial status characteristic of Generation Z individuals. This demographic typically exhibits partial dependency on external income sources while maintaining autonomous spending decision-making capabilities, rendering them particularly relevant for digital-based personal financial management analysis. Research by [Thi et al. \(2022\)](#) demonstrates that exposure to digital payment systems and electronic wallets within this population tends to cultivate novel financial habits characterized by impulsive tendencies and instant gratification orientations, carrying significant implications for long-term financial behavioral patterns.

Regarding educational attainment, 60.2% of participants were pursuing or had completed undergraduate (S1) level education. This educational profile suggests that the majority of respondents possess foundational to intermediate financial literacy capabilities, enabling comprehension of digital financial instrument features and associated risk factors. Within behavioral economics frameworks, such literacy levels play crucial roles in shaping cognitive heuristics and decision-making biases relevant to e-wallet utilization as components of personal financial management strategies ([Witono, 2023](#)).

Table 1. Demographic Profile of Respondents

Demography Profile	Frequency	%
<i>Gender</i>		
Male	13	11%
Female	105	89%
Total	118	100%
<i>Age</i>		
< 17 years	3	2.5%
17 – 20 years	70	59.3%
21 – 23 years	41	34.7%
24 – 26 years	4	3.4%
Total	118	100%
<i>Status</i>		

Student	88	74.6%
Working Student	18	15.3%
Fresh Graduate	3	2.5%
Full-Time Worker	9	7.6%
Total	118	100%
<i>Latest or Current Educational Attainment</i>		
Senior High School (SMA/SMK)	43	36.4%
Diploma (D1-D3)	3	2.5%
Bachelor's Degree (S1)	71	60.2%
Postgraduate (S2/S3)	1	0.8%
Total	118	100%

Source: Processed data from questionnaire responses, 2025

Goodness of Fit Test

The data analysis conducted using WarpPLS 8.0 software yielded model quality indicators demonstrating the adequacy and appropriateness of the structural model constructed for this investigation. The Average Path Coefficient (APC) value of 0.220 with statistical significance at $p=0.003$ indicates that the mean path relationships among variables within the model exhibit moderate strength with statistical significance. Furthermore, the Average R-squared (ARS) value of 0.157 ($p=0.020$) and Average Adjusted R-squared (AARS) value of 0.142 ($p=0.028$) demonstrate that the independent variables examined collectively explain approximately 14.2%–15.7% of the variance in the dependent variable, namely personal financial management among Generation Z cohorts in Makassar City.

Regarding multicollinearity assessment, the model demonstrates satisfactory stability with Average block VIF (AVIF) of 1.565 and Average full collinearity VIF (AFVIF) of 1.799, both remaining within acceptable thresholds (≤ 5.0) and approaching ideal values (≤ 3.3), indicating the absence of collinearity issues among indicators. The Tenenhaus Goodness-of-Fit (GoF) value of 0.309 suggests that the model exhibits medium-level fit adequacy, surpassing the threshold of 0.25 and approaching the large category criterion (≥ 0.36).

Additionally, the model satisfies various critical diagnostic criteria: Simpson's Paradox Ratio (SPR), R-squared Contribution Ratio (RSCR), Statistical Suppression Ratio (SSR), and Nonlinear Bivariate Causality Direction Ratio (NLBCDR) all demonstrate values of 1.000, reflecting the absence of statistical paradoxes, optimal variance contribution, absence of suppression effects, and stable nonlinear causal relationships among variables. These findings collectively demonstrate that the conceptual model constructed and the measurement instruments employed possess adequate levels of validity, reliability, and explanatory power suitable for further analysis (Hair et al., 2022), as presented in Table 2.

Tabel 2. Goodness of Fit Test Results

Indikator GoF	Condition	Value
Average path coefficient (APC)	$P < 0.05$	0.220, $P < 0.001$
Average R-squared (ARS)	$P < 0.05$	0.157, $P < 0.001$
Average adjusted R-squared (AARS)	$P < 0.05$	0.142, $P < 0.001$
Average block VIF (AVIF)	acceptable if ≤ 5 , ideally ≤ 3.3	1.565
Average full collinearity VIF (AFVIF)	acceptable if ≤ 5 , ideally ≤ 3.3	1.799

Tenenhaus GoF (GoF)	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	0.309
Simpson's paradox ratio (SPR)	SPR ≥ 0.7	1.000
R-squared contribution ratio (RSCR)	RSCR ≥ 0.9	1.000
Statistical suppression ratio (SSR)	SSR ≥ 0.7	1.000
Nonlinear bivariate causality direction ratio (NLBCDR)	NLBCDR ≥ 0.7	1.000

Source: Author's Data Analysis, 2025

Validity Test

Following the Partial Least Squares Structural Equation Modeling (PLS-SEM) analytical approach, construct validity testing in this study was conducted through convergent and discriminant validity evaluation, as recommended by [Hair et al. \(2022\)](#). Convergent validity was assessed through three primary indicators: factor loading values, Average Variance Extracted (AVE), and statistical significance of each indicator relative to its measured construct. The analysis results demonstrate that all constructs within the model exhibit AVE values exceeding the 0.50 threshold, indicating that more than 50% of the variance captured by indicators can be substantially explained by their respective constructs. Furthermore, all measurement items within the model demonstrate loading values above 0.60 with significance at $p < 0.001$, confirming that each indicator provides strong and consistent contribution in representing its measured construct. These findings provide empirical evidence that convergent validity across all constructs has been adequately satisfied and can be utilized in subsequent analytical stages.

Within the PLS-SEM framework, indicators with loading factor values below 0.60 are generally considered insufficient for reliable construct representation ([Hair et al., 2022](#)). Consequently, elimination of indicators with low loadings is necessary to enhance convergent validity and overall measurement model quality. The presence of weak indicators can compromise model statistical power and introduce bias in latent variable relationship estimation. Through elimination of such indicators, the model becomes more parsimonious and focuses on theoretically and empirically relevant indicators. In this investigation, three indicators were removed: PPN1, PDD4, and MKP1.

Discriminant validity testing was conducted through cross-loading analysis, comparing indicator loadings on their original constructs against loadings on alternative constructs. An indicator satisfies discriminant validity criteria when it consistently exhibits the highest loading value on its designated construct. Testing results demonstrate that indicators PPN1 through PPN3 exclusively exhibit highest loadings on the PPN construct compared to PDD or MKP constructs. Similarly, indicators PDD1 through PDD4 demonstrate higher loading values on the PDD construct, and indicators MKP1 through MKP5 exhibit highest loading values on the MKP construct relative to other constructs. No indicators were identified with cross-loadings exceeding their original construct loadings, indicating absence of ambiguity or conceptual overlap among model constructs. Consequently, all constructs satisfy discriminant validity criteria and can explain their theoretical dimensions separately and distinctly. Complete convergent and discriminant validity testing results are presented in Table 3.

Table 3. Validity Test Results

Variable	Indicator	Loading Factor	P-Value	Cross-Loadings			AVE
				PPN	PDD	MKP	
Cashless Payment Behavior Behavior (NCPB) – <i>Perilaku Pembayaran Nontunai (PPN)</i>							
PPN2	I feel more comfortable using debit cards for transactions compared to using cash.	0.687	<0.001	0	0.117	- 0.050	0.621
PPN3	I am accustomed to using contactless payment methods such as card tapping or QR code scanning.	0.848	<0.001	0	- 0.239	0.063	

PPN4	I frequently use digital wallet (e-wallet) applications to pay for goods and services.	0.855	<0.001	0	0.234	-	0.072
PPN5	I perceive digital payments as essential for supporting my daily financial activities.	0.830	<0.001	0	-	0.009	0.044
Digital Wallet Usage (DWU) – <i>Penggunaan Dompet Digital (PPD)</i>							
PDD1	I frequently use e-wallets to manage my financial accounts.	0.843	<0.001	-	0	0.139	0.644
				0.128			
PDD2	I regularly use e-wallets to transfer or send money to others.	0.698	<0.001	-	0	-	0.164
				0.456			
PDD3	I often use e-wallets to pay for various daily necessities.	0.857	<0.001	0.497	0	-	0.003
Personal Financial Management (PFM) – <i>Manajemen Keuangan Pribadi (MKP)</i>							
MKP2	I understand the risks and benefits associated with various types of investments, such as mutual funds, stocks, or pension funds.	0.845	<0.001	-	0.373	0	0.559
				0.345			
MKP3	I have a consistent habit of saving regularly for future needs.	0.858	<0.001	0.096	-	0	
					0.109		
MKP4	I am capable of making sound financial decisions during emergencies or crises.	0.841	<0.001	0.156	-	0	
					0.079		
MKP5	I actively seek information or participate in educational programs related to financial literacy and financial planning.	0.846	<0.001	0.032	-	0	
					0.123		

Source: Author's Data Analysis, 2025

Reliability Test

Construct reliability testing in this investigation was conducted through internal consistency evaluation using two primary indicators: Cronbach's Alpha and Composite Reliability (CR) values. Following guidelines established in the literature, the minimum acceptable value for demonstrating construct reliability is ≥ 0.60 , while Kock (2020) recommends a more stringent threshold of ≥ 0.70 for variance-based structural modeling contexts such as PLS-SEM. Estimation results using WarpPLS 8.0 demonstrate that all primary constructs within the model, Cashless Payment Behavior Behavior, Digital Wallet Usage, and Personal Financial Management, exhibit Cronbach's Alpha and Composite Reliability values exceeding 0.70, indicating exceptionally strong and stable internal consistency. This reliability strength reflects the ability of constituent items to measure latent concepts consistently, rendering the instruments employed in this investigation suitable for further analysis. Detailed reliability testing results are presented in Table 4.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha (CA)	Composite Reliability (CR)
Cashless Payment Behavior Behavior	0.789	0.865
Digital Wallet Usage	0.720	0.843
Personal Financial Management	0.734	0.834

Source: Author's Data Analysis, 2025

Hypothesis Test

Hypothesis testing in this investigation was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) through WarpPLS version 8.0 software. Evaluation of relationships among latent constructs considered two primary indicators: path coefficient values (β) representing relationship direction and strength, and statistical significance values (p) indicating relationship meaningfulness. Following (Hair et al., 2022) specifications, inter-variable influences are considered statistically significant when p -values fall below the 0.05 threshold at 95% significance level, with positive β values indicating direct relationships. Based on model estimation results, Cashless Payment Behavior (PPNT) demonstrates a positive and significant influence on Personal Financial Management (MKP) with coefficient $\beta = 0.168$ and $p = 0.030$. Subsequently, Digital Wallet Usage (PDD) also exhibits significant influence on MKP with coefficient $\beta = 0.272$ and $p = 0.001$. These results provide empirical evidence that increased intensity in digital payment behaviors and e-wallet utilization corresponds with enhanced individual effectiveness in personal financial management. Consequently, both independent variables prove to be significant determinants in improving personal financial management quality among Generation Z populations in Makassar City.

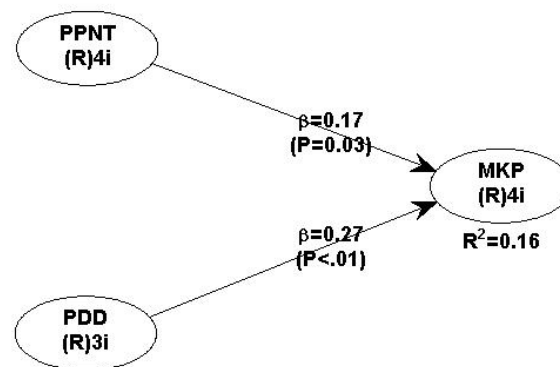


Figure 1. Research Model

Source: Author's Data Analysis, 2025

Table 5. Hypothesis Test

Hypothesis	Result	Decision
H1: Cashless Payment Behavior behavior positively influences personal financial management	($\beta=0.168$, $\rho<0.001$)	Approved
H2: Digital wallet (e-wallet) usage positively influences personal financial management	($\beta=0.272$, $\rho<0.001$)	Approved

Source: Author's Data Analysis, 2025

Discussion

Cashless Payment Behavior and Personal Financial Management

The findings of this study reveal that cashless payment behavior exerts a significantly positive influence on the personal financial management of Generation Z in Makassar City. This outcome suggests that a higher frequency of engagement and greater literacy in utilizing digital payment systems are closely associated with enhanced individual competencies in organizing, controlling, and assessing personal financial conditions (Farrell et al., 2016). Channels such as QRIS, mobile banking transfers, and digital payment platforms facilitate automatic documentation of transaction histories, thereby supporting more structured expenditure tracking, budgeting, and consumption control (Kanungo & Gupta, 2021; Vasile et al., 2021). These dynamics align with the paradigm of technology-enabled financial management, wherein technological advancement reshapes individual financial behavior toward more measured and rational practices. For digital natives such as Generation Z, the convenience and immediacy of cashless systems indirectly foster greater financial discipline. Real-time spending notifications, transaction limits, and integration with budgeting applications serve to strengthen individual control over daily financial decisions (Philippas & Avdoulas, 2020). Moreover, the digital footprints generated through non-cash transactions enhance transparency and accountability in

managing personal finances. Accordingly, these findings underscore that cashless payment behavior functions not merely as a transactional tool, but as an educational and strategic mechanism that reinforces intelligent, forward-looking, and well-structured financial management foundations (Klimontowicz & Harasim, 2022).

Digital Wallet Usage and Personal Financial Management

The findings of this study indicate that digital wallet usage exerts a significantly positive impact on the personal financial management of Generation Z in Makassar City. Interestingly, the results reveal that digital wallet usage exerts a stronger influence on personal financial management compared to cashless payment behavior in general. This can be attributed to the integrated technological features embedded in modern e-wallet applications. Platforms such as GoPay, OVO, Dana, and ShopeePay not only offer payment services but also provide additional tools, including automated expense tracking, bill reminders, daily transaction limits, and personalized budgeting dashboards (Klimontowicz & Harasim, 2022; Moon et al., 2022). This functionality fosters disciplined, transparent, and data-driven financial behavior. For Generation Z who prioritize convenience and mobility e-wallets offer seamless financial organization without the need for manual record-keeping or unstructured cash handling (Ardini et al., 2024). Moreover, this comprehensive functionality allows users to exercise greater control over their financial decision-making processes. Accordingly, the stronger influence of digital wallet usage suggests that it is not merely the frequency of cashless transactions that matters, but rather the extent to which technological features are leveraged to promote structured, informed, and conscious financial behaviors (Tay et al., 2022). This aligns with the concept of *digital financial capability*, which refers to the ability of individuals to effectively manage their finances using digital tools (OECD, 2018).

The results of this study also provide empirical support for the Theory of Planned Behavior (TPB), particularly in the domain of *perceived behavioral control*, which posits that individuals' perception of ease and control over performing a behavior influences their actual intentions and actions (Ajzen, 2020). In this context, the technological capabilities of digital wallets enhance users' sense of control and convenience, which in turn strengthens their commitment to disciplined financial management.

Distinct Characteristics of Generation Z in Makassar

It is also essential to interpret these findings within the local sociocultural context of the research participants. Generation Z in Makassar represents an urban demographic in Eastern Indonesia that is rapidly adapting to digital transformation while maintaining cautious financial attitudes. This contrasts with Generation Z in more developed urban centers like Jakarta or in advanced economies such as South Korea or the United States, where early exposure to formal financial systems and more extensive digital finance infrastructures may shape different behavioral outcomes (Johan, 2020).

Furthermore, Makassar has witnessed significant growth in its digital ecosystem, including increased access to QRIS, mobile payments, and digital financial literacy programs. This unique environment contributes to the formation of financial behavior among youth that is both technology-oriented and financially mindful. Thus, the effectiveness of digital wallets in influencing financial management among Generation Z in Makassar is likely reinforced by these contextual factors, which may not be equally present in other regions or countries.

These findings suggest that while there may be global trends in the adoption of digital financial tools among younger generations, local factors such as digital infrastructure readiness, financial literacy, and cultural norms remain pivotal in shaping how such technologies are utilized. Future research may benefit from comparative and longitudinal approaches to explore these variations across different geographic and cultural settings (OECD, 2020; Suryawirawan, 2025).

CONCLUSION

This study empirically investigated the influence of cashless payment behavior and e-wallet usage on Generation Z's personal financial management in Makassar, Indonesia, revealing a statistically significant positive relationship for both constructs. The findings underscore that while the adoption of digital payment platforms enhances financial accessibility and transactional efficiency, it simultaneously necessitates strengthened internal financial discipline and conscious budgeting habits

among young digital natives. Specially, the ease, convenience, and promotional appeal of e-wallets can inadvertently foster impulsive spending behaviors if not accompanied by adequate financial literacy and self-regulation mechanism. By extending the current literature, this research demonstrates that digital payment behavior, when shaped by behavioral tendencies and contextualized within local socio-cultural dynamics, plays a critical role in shaping personal financial outcomes. However, the study is not without limitations. Its focus on university students within a single urban setting may limit the generalizability of the findings across broader populations with diverse financial literacy levels and socio-economic backgrounds. Future research should consider longitudinal designs, multi-regional sampling, and the inclusion of moderating variables such as emotional spending triggers or digital financial education exposure to deepen understanding of behavioral finance in the digital age.

SUGGESTIONS

Theoretical Recommendation: Future research is encouraged to investigate the moderating role of digital financial literacy and self-regulation in the relationship between technology usage and financial outcomes. Longitudinal studies are also recommended to examine how sustained engagement with digital payment systems influences financial resilience over time, particularly across diverse socioeconomic backgrounds.

Practical Recommendation: Financial technology developers and government stakeholders are advised to collaborate in integrating educational features into digital wallets to promote responsible spending behavior. Such initiatives are essential for enhancing financial literacy and supporting healthier financial management practices, especially among younger users.

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