International Journal of Business and Technology Studies and Research

ISSN: 2665-7716

http://www.ijbtsr.org

Volume 7, Issue 1-2025

THE ROLE OF APPLICATION DESIGN QUALITY ON E-WALLET ADOPTION IN INDONESIA WITH GENDER AS A MODERATING VARIABLE

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Abstract: *The increasingly rapid development of technology in the digital era has given rise to innovation in the financial industry which is marked by the presence of financial technology (fintech). E-wallet is a type of fintech that is used as one of the most popular payment methods by Indonesian people. This research aims to determine the role of application design quality on e-wallet adoption in Indonesia using the TAM model moderated by gender. The design of this research is cross-sectional quantitative. The data were collected through questionnaires and distributed from February to May 2025. The sampling technique used a purposive sampling method involving 380 e-wallet user respondents who were at least 18 years old. Data were analyzed using SEM-LISREL software version 8.80. The research results show that the application design quality has a positive and significant effect on perceived ease of use and perceived usefulness, then these two constructs have a positive and significant effect on behavioral intention to use, and behavioral intention to use has a significant positive effect on e-wallet adoption. The moderating analysis confirmed that gender moderates the relationship between perceived ease of use and perceived usefulness on intention to use e-wallets, with men being more influenced by ease of use, while women are more influenced by perceived usefulness. The managerial implication in this research is to increase ease of use and perceived usefulness so that e-wallet service providers are able to maintain market share and retention of e-wallet users based on a gender perspective in order to support financial inclusion in the technology-based economic sector.*

Key Words*: *TAM Model, Application Design Quality, Ease of Use, Perceived Usefulness, Behavioral Intention to Use, E-wallet Adoption, Gender

Cite this Article as: *Sulistiati, L.D., MS, Mahrinasari, & Fihartini, Y. (2025). The Role of Application Design Quality on E-Wallet Adoption in Indonesia with Gender as A Moderating Variable. International Journal of Business and Technology Studies and Research, v.7, n. 1, 10 pages, ISSN 2665-7716.*

1.INTRODUCTION

The technological innovation occurring in the digital finance industry is exemplified by the emergence of financial technology, commonly known as fintech. It has enabled customers to access financial services more efficiently and faster than traditional business, especially during the COVID-19 pandemic due to health protocols, including restrictions on physical contact (Nathan et al., 2022). The digitalization of society has led to a significant shift from traditional cash-based financial systems to digital payments via smartphones and internet-connected applications. Internet experience and being digital savvy would improve the use of fintech tools (Savitha & Hawaldar, 2022).

E-wallets have become a popular fintech solution in Indonesia, widely adopted by the public for various digital transactions such as online shopping, money transfers, mobile credit top-ups, transactions history, delivery services, bill payments, offline purchases and Payloader feature. This comprehensive functionality positions e-wallets as versatile payment tools in Indonesia's digital economy (Insight Asia, 2023).

In Indonesia, e-wallets have become the leading payment method, surpassing traditional cash transactions. According to a 2024 survey by Populix in Lintang (2024), the most widely used e-wallet applications among Indonesians are GoPay, Dana, OVO, ShopeePay, and LinkAja. Although the popularity of e-wallets, some developing countries including Indonesia, are still in the early stages of adoption. A study by Nawi et al. (2024) indicates that many communities remain hesitant to adopt e-wallet. This highlights the need for increased efforts to promote digital payment methods and build a cashless society, enhancing transaction efficiency and effectiveness.

In this study, the Technology Acceptance Model (TAM) proposed by Davis (1989) is utilized to understand how and why consumers accept and use technology, specifically e-wallets. TAM explains technology adoption through two main variables: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), along with external variables that potentially influence these primary factors. TAM is extended by incorporating gender as a moderating variable to examine its influence on the relationship between Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) in the adoption of e-wallets. Gender differences play a crucial role in shaping technology adoption behaviors, as they can affect how individuals perceive and interact with technology (Venkatesh & Morris, 2000).

This study focuses on the five most popular e-wallets in Indonesia—GoPay, Dana, OVO, ShopeePay, and LinkAja. Using the Technology Acceptance Model (TAM) as a framework, the research examines that external variables, such as the quality of application design influences two key constructs: PEOU and PU. These constructs, in turn, affect users' BI to use e-wallets, leading to actual adoption. Gender is considered as a moderating variable that may influence the strength of these relationships.

2. LITERATURE REVIEW

2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), proposed by Davis in 1989, is a framework that explains how individuals come to accept and use technology. It posits that two key beliefs—Perceived Usefulness (PU) and Perceived Ease of Use (PEOU)—influence users' attitudes toward technology, which in turn affect their behavioral intentions and actual usage. These constructs are influenced by external variables such as system design. Understanding these relationships helps in designing technologies that are more likely to be accepted and used by individuals.

2.2 Application Design Quality

Application design refers to the extent to which users perceive an application as user-friendly during online shopping. A user-friendly design that is easy to read and visually guides customers through simple steps can enhance a satisfying shopping experience. This approach is particularly important in e-commerce, where the design of the application significantly influences user satisfaction and retention (Savitha & Hawaldar, 2022).

The quality of application design significantly impacts both PEOU and PU in technology adoption. Zhou et al. (2009) Highlight that consumers expect a website to have high quality when shopping online. Similarly, Di Fatta et al., (2016) conclude that application design quality positively influences PU. Therefore, we hypothesize the following:

H_1: Application design quality has a positive significantly influence on perceived ease of use in e-wallet.

H_2: Application design quality has a positive significantly influence on perceived usefulness in e-wallet

2.3 Perceived Ease of Use (PEOU)

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Several studies have demonstrated PEOU significantly influences behavioral intentions to adopt and continue using e-wallet. Singh et al., (2020) found that ease of use has significant effect on user's intention, which further influenced recommendation to use mobile wallet services. More over perceived usefulness and perceived ease of use are salient predictors of users' intention to adopt mobile banking (Agyei et al., 2020). In their study, Liu & Tai (2016) emphasized that a key factor influencing customers' adoption of mobile payment services is the perceived ease of use. They found that when a technology is easy to learn and use, it is more likely to attract new users. If the technology is easy to use, then user's intentions are more positive towards it (Mizher & Alwreikat, 2023). Therefore, we hypothesize the following:

H_3: Perceived ease of use has a positive significantly influence on behavioral intention to use e-wallet.

2.4 Perceived Usefulness (PU)

Perceived usefulness refers to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). Several studies have expressed that there is a positive correlation between PU and consumers' intention to adopt technology. According to Daragmeh et al. (2021), perceived usefulness significantly influences Hungarian Generation X's behavioral intentions to use mobile payment services. Similarly, Mizher & Alwreikat, (2023) found that PU has a significant effect on intentions to use e-books. In addition, a study by Nawi et al., (2024), reported that perceived usefulness positively and significantly influenced users' intention to use e-wallets in Indonesia. Therefore, we hypothesize the following:

H_4: Perceived usefulness has a positive significantly influence on behavioral intention to use e-wallet.

2.5 Behavioral Intention to Use (BI)

According to Venkatesh et al. (2003), behavioral intention refers to an individual's subjective probability of performing a specific behavior. User behavioral intention refers to the likelihood that potential users will do a particular activity, such as adopting new technology. The study by Oliveira et al., (2016) validates that behavioral intention significantly influences the likelihood of recommending mobile payment technology. Nikou & Economides, (2017) found a positive effect of behavioral intention on e-wallet adoption. Therefore, we hypothesize the following:

H_5: Behavioral intention to use has a positive significantly influence on adoption e-wallet.

2.6 Adoption

In the context of the Technology Acceptance Model (TAM), technology adoption refers to the actual use of a technology, which is influenced by individuals' behavioral intentions to use it (Davis, 1989). This is the final stage where the technology is actually used by the individual. In their 2024 study, Nawi et al. examined the factors influencing the adoption of e-wallets in Indonesia, highlighting the pivotal role of behavioral intention in actual technology adoption. Behavioral intention is an important antecedent of consumer behavior and actual technology usage or adoption (Venkatesh et al., 2012).

2.7 Gender

Gender refers to the differences in values, behaviors, and perceptions between men and women when adopting technology. Venkatesh and Morris (2000) explored how gender influences technology acceptance and usage behavior. Their study found that men are more driven by PU while women are more motivated by PEOU. Gender moderates the relationship between PEOU and PU in TAM. Research by Setiawan et al., (2023) found that the moderation analysis reveals that men PU as more important for fintech adoption and PEOU for women. Therefore, we hypothesize the following:

H_6: Gender moderates the relationship between perceived ease of use and behavioral intention to use e-wallets.

H_7: Gender moderates the relationship between perceived usefulness and behavioral intention to use e-wallets.

The conceptual framework in this study is depicted in figure 1.

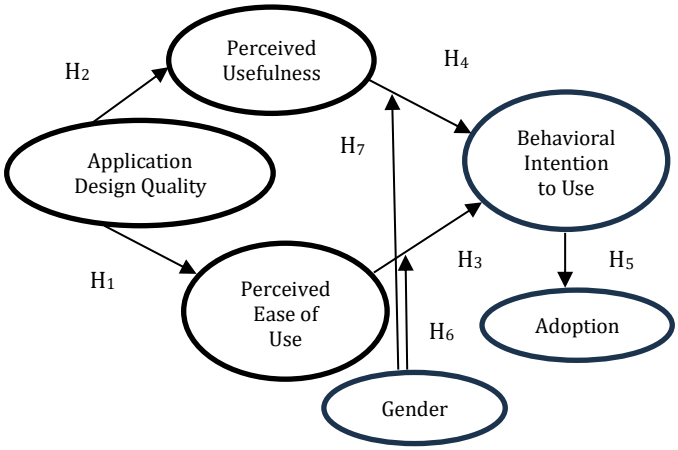

Fig -1: Conceptual Framework

3. METHODOLOGY

This study employs a quantitative research method which involves measuring data and applying various statistical analyses to generalize findings from a sample to the larger population (Malhotra, 2020). A cross-sectional research design was utilized. The data collection and distribution process were conducted from February to May 2025. Collecting data from 380 respondents through an online survey in the form of questionnaire distributed via a Google Forms link shared through WhatsApp.

The population for this study consists of e-wallet users in Indonesia who possess one or more of the following e-wallet applications: GoPay, OVO, DANA, ShopeePay, and LinkAja. The sampling technique employed is nonprobability sampling using the purposive sampling method. Given the vast and unspecified population size in this study, determining an appropriate sample size is crucial. According to Roscoe (1975), as cited in Sekaran & Bougie (2016), a sample size larger than 30 and less than 500 is suitable for most research. In this study, with 380 respondents, the sample size falls within the recommended range, allowing for meaningful analysis and generalization of findings to the broader population of e-wallet users in Indonesia. The sample for this study includes Indonesian residents aged 18 years and above, who have an account with at least one of the five e-wallet applications mentioned above and have conducted at least one transaction using any of these e-wallets.

Data collection was conducted using a Likert scale ranging from 1 to 5 to measure latent variables such as application design quality, perceived ease of use, perceived usefulness,

behavioral intention to use, and e-wallet adoption. Data analysis was performed using SEM-LISREL version 8.80 software, encompassing measurement model analysis, including validity and reliability tests, as well as structural model analysis, which involved determining the model fit, coefficient of determination, and hypothesis testing. The moderating effect of gender on the relationship between perceived ease of use and perceived usefulness toward the behavioral intention to use e-wallets was tested.

4. RESULT AND DISCUSSION

4.1 Respondent Characteristics

The first section of the questionnaire is designed to collect demographic information, including gender, age, educational background, occupation, and frequency of e-wallet usage. This section aims to comprehensively understand the characteristics of the respondents.

Table -1: General Characteristics of Respondents

Characteristics Demographics	Category	Amount	Percentage
Gender	Female	206	54.2%
	Male	174	45.8%
Age	18-21 years	37	9.7%
	22-30 years	85	22.4%
	31-40 years	127	33.4%
	41-50 years	101	26.6%
	> 50 years	30	7.9%
Education	High school	65	17.1%
	D3 (Diplma)	14	3.7%
	S1 (Bachelor)	190	50%
	S2 (Master)	104	27.4%
	S3 (Doctor)	7	1.8%
Occupation	Employees	124	32.6%
	Civil Servants	126	33.2%
	Self-employed	36	9.5%
	Students	62	16.3%
	Housewife	25	6.6%
	Other	7	1.8%
E-wallet usage in the past six months	1-4 times	67	17.6%
	5-7 times	36	9.5%
	8-10 times	32	8.4%
	> 10 times	245	64.5%

As presented in Table 1, the gender distribution among respondents is nearly balanced, with 174 males (45.8%) and 206 females (54.2%). We will further investigate the gender moderation effect on the relationship between perceived ease of use and perceived usefulness on behavioral intention to use e-wallets. This analysis aims to determine whether gender influences how these factors affect users' intentions to adopt e-wallet technology.

The predominant age group is 31–40 years, representing 33.4% of the respondents. Regarding educational background, the majority hold a Bachelor's degree (50%). Occupationally, respondents are diverse, with the largest group being Civil Servants/Indonesian National Army/Police (33.2%). In the past six months, e-wallet usage was dominated by 245 users who made more than 10 transactions (64.5%).

Chart 1 illustrates the percentage usage of various e-wallets among respondents.

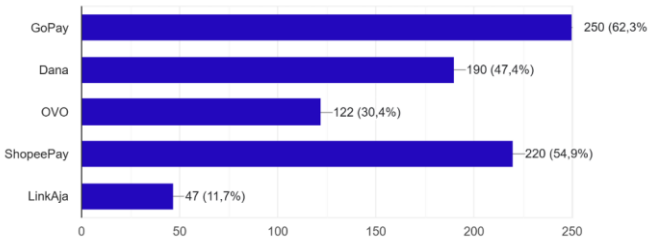

Chart -1: Percentage Usage of Various E-wallets

Based on the survey results, GoPay leads the market as the most popular e-wallet, with 250 respondents (62.3%) indicating its use. ShopeePay is used by 220 respondents, Dana by 190 respondents, OVO by 122 respondents, and LinkAja by 47 respondents. These findings highlight GoPay's dominance in the e-wallet market, reflecting its widespread adoption among users. ShopeePay and Dana also show significant user bases, while OVO and LinkAja have comparatively fewer users in this survey.

4.2 Validity and Reliability Test Results

As illustrated in Figure 2, the measurement and structural models were developed and analyzed using LISREL version 8.80 after modification indices.

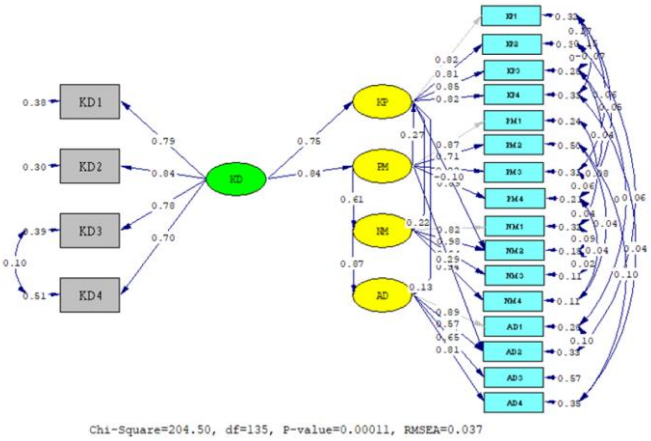

Fig –2: Measurement and Structural Model Results

In this study, the latent variables include application design quality, perceived ease of use, perceived usefulness, behavioral intention to use, and e-wallet adoption.
The validity and reliability of the measurement model were assessed as follows: (Hair et al., 2019)

1. Convergent Validity
   This was evaluated using factor loadings and Average Variance Extracted (AVE). A factor loading of ≥ 0.50 and an AVE of ≥ 0.50 indicate good convergent validity.
2. Reliability
   Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR). The values of ≥ 0.70 for both Cronbach's Alpha and CR indicate acceptable reliability.

As shown in Table 2, all indicators met these criteria, confirming the convergent validity of the constructs.

Table -2: Validity Test Results

Latent Variable	Indicator	SLF	AVE	Result
Application Design Quality (ADQ)	ADQ1	0.79	0.61	Valid
	ADQ2	0.84		Valid
	ADQ3	0.78		Valid
	ADQ4	0.70		Valid
Perceived Ease of Use (PEOU)	PEOU1	0.82	0.68	Valid
	PEOU2	0.81		Valid
	PEOU3	0.85		Valid
	PEOU4	0.82		Valid
Perceived Usefulness (PU)	PU1	0.87	0.69	Valid
	PU2	0.71		Valid
	PU3	0.83		Valid
	PU4	0.89		Valid
Behavioral Intention to Use (BI)	BI1	0.82	0.83	Valid
	BI2	0.98		Valid
	BI3	0.94		Valid
	BI4	0.94		Valid
Adoption (AD)	AD1	0.89	0.60	Valid
	AD2	0.57		Valid
	AD3	0.65		Valid
	AD4	0.81		Valid

All indicators have standardized loading factor (SLF) ≥ 0.50, indicating a strong contribution of each indicator to its latent variable. The Average Variance Extracted (AVE) values for each latent variable are above 0.5, meaning each latent variable explains more than half of the variance in its indicators (Ghozali, 2016). Therefore, it can be concluded that all indicators meet convergent validity.

The results in Table 3 demonstrate that all constructs confirming the reliability of the measurement instruments.

Table -3: Reliability Test Results

Latent Variable	Cronbach's Alpha	CR	Result
Application Design Quality (ADQ)	0,865	0,860	Reliabel
Perceived Ease of Use (PEOU)	0,917	0,896	Reliabel
Perceived Usefulness (PU)	0,894	0,896	Reliabel
Behavioral Intention to Use (BI)	0,952	0,950	Reliabel
Adoption (AD)	0,870	0,855	Reliabel

When both Cronbach's alpha and composite reliability (CR) values exceed 0.70, it indicates that the measurement model demonstrates acceptable to good internal consistency. This suggests that the indicators (items) effectively measure the same underlying latent construct, providing confidence in the reliability of the instrument (Hair, et al., 2019).
These findings ensure that the measurement model is both valid and reliable, providing a solid foundation for subsequent structural analysis.

4.3 Determination Test Result (R^2)

The R^2 value ranges from 0 to 1($0 < R^2 < 1$), where a value closer to 1 indicates that the independent variables explain a higher proportion of the variance in the dependent variable. In behavioral intention research, $R^2$of 0.20 or higher is considered substantial (Hair, et al. 2019). The results of the R^2 measurement can be seen in Table 4.

Table -4: Determination Test Result

Independent Variable	Dependent Variable	R^2
ADQ	PU	$R_1^2 = 0.77$
PEOU and PU	BI	$R_2^2 = 0.66$
PEOU and BI	AD	$R_3^2 = 0.96$

The R^2 value of 0.96 indicates that 96% of the variability in the dependent variable (e-wallet adoption) is explained by the independent variables (perceived ease of use and behavioral intention). This suggests a strong model fit. However, it's important to note that R^2 alone doesn't confirm the model's accuracy or appropriateness; other factors should also be considered, 4% is explained by other variables that are not measured in this study.

4.4 Overall Model Fit

The model fit evaluation in this study utilized various goodness-of-fit (GoF) indices to assess the adequacy of the measurement and structural models (Malhotra, 2020). The threshold values for model fit indices in Structural Equation Modelling (SEM) are general guidelines and can vary depending on the research context and sample size.

As presented in Table 5, all indices met the recommended criteria, indicating a good fit between model and data

Table -5: Model Fit Results

Index	Result	CRITERIA (Hooper et al., 2008)	Decision
Absolute Fit Measures			
RMSEA	0.037	< 0.08	Good Fit
GFI	0.95	≥ 0.90	Good Fit
RMR	0.018	< 0.08	Good Fit
SRMR	0.023	< 0.08	Good Fit
Incremental Fit Measures			
NFI	0.99	≥ 0.90	Good Fit
NNFI / TLI	1.00	≥ 0.90	Good Fit
CFI	1.00	≥ 0.90	Good Fit
Parsimonious Fit Measures			
NCS (χ^2/ df)	1.51 (204.50 /135)	$1 \leq \chi 2/ df \leq 3$	Good Fit
PGFI	0.61	≥ 0.5	Good Fit
PNFI	0.71	≥ 0.6	Good Fit

The measurement results yielded an RMSEA value of 0.037, indicating that the model exhibits a good fit with minimal error in predicting the data. Additionally, the GFI value of 0.95 suggests a good fit, as values above 0.90 are generally considered acceptable. The RMR value of 0.018 and SRMR value of 0.023 both fall below the threshold of 0.08, further confirming that the model demonstrates a good fit.
The incremental fit measures overall yielded values above 0.95, meeting the criteria for good fit: NFI (0.99), NNFI/TLI (1.00), CFI (1.00). Parsimonious Fit Measures, NCS index value is obtained from the results of dividing Chi-Square (χ^2) by the degree of freedom (df) of 1.51 which is the recommended value indicating good fit. The PGFI and PNFI values each 0.61 and 0.71 which are above the threshold of 0.5 and 0.6, thus meeting the good fit criteria.

4.5 Hypothesis Testing

At a 5% significance level (α = 0.05) or a 95% confidence level, statistical tests typically require the t-statistic to exceed 1.96 for a two-tailed test. This threshold corresponds to the critical value for rejecting the null hypothesis when the observed data falls in the extreme 5% of the probability distribution (Malhotra, 2020).

Alternatively, decision-making can be based on the p-value obtained from the t-test. If the p-value is less than 0.05, the result is considered statistically significant, indicating strong evidence against the null hypothesis (Ghozali, 2016).

In Figure 3, the structural model is presented based on t-statistics derived from data analysis after modification indices using LISREL version 8.80 software.

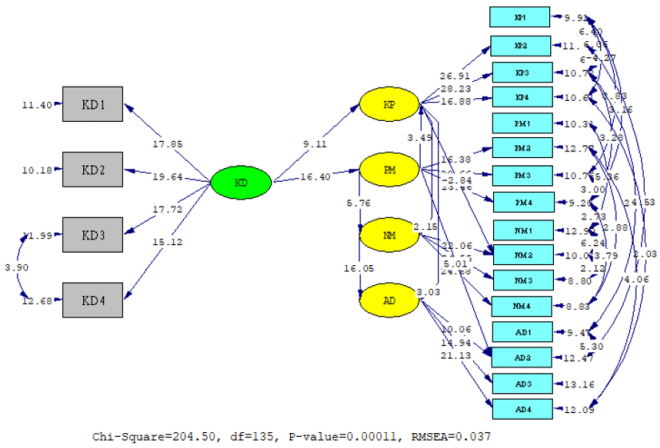

Fig –3: Structural Model Results Based on t-value

Based on Fig- 3, it can be observed that the t-values are consistently greater than 1.96 and positive, with a p-value 0.00011 which is less than 0.05. Statistical significance interpretations were assessed as follows: (Malhotra, 2020)

1. t-value > 1.96
   For a 95% confidence level (α = 0.05), a t-value greater than 1.96 suggests that the null hypothesis (H_0) can be rejected, implying a significant relationship between the variables being tested.
2. p-value < 0.05
   A p-value less than 0.05 indicates that the probability of observing the data, assuming the null hypothesis is true, is very low. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (Ha) is accepted.

The following are the results of hypothesis testing based on the t-statistic test (t-value) at a significance level of 5% (α = 0.05) as presented in Table 6.

Table -6: Hypothesis Testing

Hypothesis		Coefficient	t-table	t-value	Result
H_1	ADQ → PEOU	0.75	1.96	9.11	Accepted
H_2	ADQ → PU	0.84	1.96	16.40	Accepted
H_3	PEOU → BI	0.22	1.96	2.15	Accepted
H_4	PU → BI	0.61	1.96	5.76	Accepted
H_5	BI → AD	0.87	1.96	16.05	Accepted

Based on Table 6, this indicates that the t-test results are statistically significant, leading to the acceptance of hypothesis H_1 through H_5, suggesting that the variables in question have a statistically significant impact on the dependent variable.

The Effect Application Desain Quality on Perceived Ease of Use

The positive and significant influence of ADQ on PEOU indicates that H_1 is accepted. This suggests that as customers perceive the friendliness of an e-wallet application's design, they find it easier to use. A well-designed interface not only makes the application visually appealing but also enhances user interaction and satisfaction. This finding aligns with previous research by (Ting & Min, 2024) and Savitha & Hawaldar (2022), which emphasizes that system quality and design significantly impact perceived ease of use.

The Effect Application Desain Quality on Perceived Usefulness

The positive and significant impact of ADQ on PU indicates that H_2 is accepted. This suggests that as users perceive the application design of an e-wallet to be more user-friendly and aesthetically pleasing, they also perceive greater benefits, such as ease of transactions, speed, security, and additional features that enhance the overall user experience. This finding aligns with previous research by Di Fatta et al. (2016) and Ting & Min (2024) found that a well-designed system can enhance users' perceptions of its usefulness, thereby increasing adoption rates.

The Effect Perceived Ease of Use on Behavioral Intention to Use

The positive and significant influence of PEOU on BI indicates that H_3 is accepted. This suggests that the easier users find the e-wallet application to understand and use, the more positive their intention to adopt it becomes. For instance, Singh et al. (2020) found that perceived ease of use positively influences users' intention to adopt mobile wallet technology. Similarly, (Francioni et al., 2022) reported perceived ease of application use significantly influence continuance intention.

The Effect Perceived Usefulness on Behavioral Intention to Use

The positive and significant influence of PU on BI indicates that H4 is accepted. This suggests that the greater the perceived usefulness of using an e-wallet—such as time and cost efficiency, as well as fulfilling financial service needs—the stronger the intention to adopt the technology. This finding aligns with research by Nawi et al. (2024), which identified that perceived usefulness significantly influences users' intention to adopt e-wallets in Indonesia. Similarly, Rambe & Bangsawan (2023) found that perceived usefulness significantly affects users' intention to use Dana.

The Effect Behavioral Intention to Use on Adoption

The positive and significant influence of BI on AD indicates that H_5 is accepted. This suggests that the stronger the intention of users to adopt e-wallets, the higher the likelihood of actual adoption. According to Venkatesh and Morris (2000), BI is a strong predictor of actual technology usage. Further supporting this, Oliveira et al. (2016) found that users' behavioral intentions positively impact their likelihood of recommending mobile wallet services to others. Additionally, Nikou and Economides (2017) identified a positive effect of BI on the adoption of e-wallet.

4.6 Moderating Analysis

In the analysis presented, the measurement model with moderation has been confirmed as valid and reliable. The structural model analysis reveals that the coefficient of determination (R^2) is 0.96 for men and 0.92 for women, indicating a strong explanatory power for both groups. Additionally, all model fit indices meet the acceptable thresholds, confirming that the model fit the data well for both genders.

In the subsequent analysis, gender moderation will be tested between the variables of PEOU and PU on BI (Gundala et al., 2022). This will involve comparing standardized estimates from the structural model (Francioni, et al., 2022) using LISREL 8.80 software, as presented in Table 7.

Table -7: Results of Gender Moderation Test with Standardized Estimation Values (β)

Hypothesis	Men		Women		Result
	β	p -value	β	p -value	
H_6. PEOU →BI	0.30	0.00158	0.29	0.00107	Accepted
H_7. PU →BI	0.52		0.54		Accepted

The estimated values are positive, indicating a positive influence between PEOU and BI ($p < 0.05$), meaning Hypothesis 6 (H_6) is accepted. Gender moderates the relationship between PEOU and BI, with men users exhibiting a stronger influence ($\beta_m = 0.30$; $p < 0.05$) compared to women users ($\beta_w = 0.29$; $p < 0.05$). The relationship between PEOU and BI is stronger in men

compared to women. This indicates that men perceive e-wallets as easier to use than women. The study by (Lutfi et al., 2023) indicates that men find it easier to adopt digital banking technologies compared to women.

The relationship between PU and BI is also positive and statistically significant ($p < 0.05$), supporting the acceptance of Hypothesis 7 (H_7). Conversely, in terms of PU, women demonstrate a more significant positive effect on BI ($\beta_m = 0.52$; $p < 0.05$ and $\beta_w = 0.54$; $p < 0.05$), This suggests that women perceive greater benefits from e-wallets than men. These findings align with the research by Nathan et al. (2022), which indicates that adoption rates are higher among women due to their perception of greater benefits.

Research indicates that the influence of PEOU and PU on BI can vary between genders. Cultural norms and societal roles can influence how men and women perceive and adopt technologies.

5. CONCLUSIONS

In this study, the Technology Acceptance Model (TAM) is employed to examine the factors influencing e-wallet adoption. The findings indicate that customer intention to adopt e-wallets is significantly influenced by two primary constructs of TAM: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). Furthermore, these constructs are positively affected by the application's design quality, which serves as an external variable in the TAM framework. Understanding these factors can help in designing strategies to encourage users to adopt and use e-wallet technologies.

The moderation analysis reveals that the relationship between PEOU and BI is stronger in men compared to women. This suggests that men are more influenced by the perceived ease of using e-wallets in forming their behavioral intentions. The effect of PU on BI is more pronounced in women than in men. This indicates that women place greater importance on the perceived usefulness when deciding to adopt e-wallets.

6. MANAGERIAL IMPLICATIONS

This research aims to provide valuable insights for e-wallet service providers, particularly platforms like GoPay, ShopeePay, DANA, OVO, and LinkAja. By examining factors such as application design quality, perceived ease of use, perceived usefulness, and behavioral intention, the study offers guidance for enhancing strategies to maintain market share and influence consumer adoption of these services. Understanding these factors can guide e-wallet service providers in refining their platforms to better meet user expectations and preferences.
These gender differences in technology adoption highlight the importance of considering user demographics when designing and promoting digital financial services. Tailoring strategies to address the distinct preferences and perceptions of different gender groups can enhance the effectiveness of adoption initiatives.

7. LIMITATIONS AND FURTHER STUDIES

Though the study has contributions, it has some limitations too. Our study used the Technology Acceptance Model (TAM) as a conceptual framework to examine factors influencing e-wallet adoption. Future research could consider utilizing alternative models such as the Unified Theory of Acceptance and Use of Technology (UTAUT) or the Theory of Reasoned Action (TRA) to provide a more comprehensive understanding of user behavior in this context. Additionally, future studies could explore different technological domains beyond e-wallets, such as digital banking and delivery services. This approach can contribute to the development of more effective strategies for promoting the adoption of new technologies. Future researcher could incorporate additional demographic factors such as age, income, and occupation as moderating variables to provide a more nuanced understanding of e-wallet adoption across different user segments.

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Appendix Questionnaire:

Items	Reference
Application Design Quality (ADQ) **ADQ1**: Visually, the e-wallet application design appears attractive. **ADQ2**: E-wallet application is easy to navigate. **ADQ3**: The features available in the e-wallet application assist in searching information. **ADQ4**: The e-wallet application provides operator assistance features (Question and Answer).	(Zhou, et al., 2009)
Perceived Ease of Use (PEOU) **PEOU1**: E-wallet application is easy to use. **PEOU2**: E-wallet application is easy to learn. **PEOU3**: E-wallet usage is clear and understandable. **PEOU4**: E-wallet service provides anything that suits my needs.	(Davis, 1989)
Perceived Usefulness (PU) **PU1**: Using an e-wallet can meet my financial service needs (can be used for various transactions, such as purchases, bill payments and investments). **PU2**: Using e-wallet services can enhance cost efficiency (offering benefits such as cashback, discounts, promotions, and loyalty programs). **PU3**: Using e-wallet services can enhance time efficiency. **PU4**: Overall e-wallet services are useful for me.	(Davis, 1989)
Behavioral Intention to Use (BI) **BI1**: I plan to use e-wallet services for the next few months. **BI2**: I plan to use e-wallet frequently. **BI3**: I will try to use e-wallet in my daily life. **BI4**: I intend to continue using e-wallets in the future.	(Venkatesh, et al., 2012)
Adoption (AD) **AD1**: I often use e-wallet in my daily life. **AD2**: I use e-wallet when making online purchases. **AD3**: I use e-wallet when making offline purchases. **AD4**: I will recommend e-wallet to others.	(Venkatesh, et al., 2012)