

How Perceived Usefulness, Ease of Use, and Quality Affect E-Wallet Intention in Gen Y and Z: A TAM Perspective

Shafiq Haedar¹, Endy Gunanto Marsasi*²

^{1, 2} Universitas Islam Indonesia, Indonesia

Article Info

Article history:

Received, 08-04-2025

Revised, 17-04-2025

Accepted, 21-04-2025

Keywords:

E-Wallet, Perceived Ease Of Use, Perceived Usefulness, Quality, Intention To Use

ABSTRACT

This study aims to evaluate the effect of perceived ease of use, perceived usefulness, and quality on intention to use e-wallets among generations Y and Z. The method used was quantitative, and questionnaires were distributed to 236 respondents in several cities in Java. The study used Structural Equation Modeling with IBM SPSS 29 software and AMOS Graphic 26 to test the proposed hypothesis. The results showed that both subjective norms significantly positively influence perceived ease of use, increasing perceived usefulness. Quality also contributes positively to perceived usefulness and perceived trust. However, the relationship between perceived trust and intention to use was not significantly proven. These findings provide important insights for e-wallet service providers to develop interface design and service quality to encourage wider adoption among young users. The Technology Acceptance Model theory serves as the foundation for this study, which analyses the factors that influence technology acceptance by contributing to developing more effective marketing strategies and product designs for increasing e-wallet usage among the younger generation.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding Author:

Endy Gunanto Marsasi

Faculty of Economics and Business, Universitas Islam Indonesia

Jl. Prawiro Kuat, Ngringin, Condongcatur, Kec. Depok, Sleman Regency, Yogyakarta Special Region

Email: *183111301@uii.ac.id

Introduction

In the modern digital age, e-wallets have become one of the most preferred payment solutions thanks to their ease of transaction-making. According to [1], users of digital wallet applications believe that transaction activities through e-wallets simplify their daily routine and increase work efficiency. Projections show that by 2027, the global transaction value of e-wallets will reach more than \$25 trillion, accounting for 49% of all online and Point of Sale sales [2]. Rapid advances in digital financial technology have led to the emergence of e-wallets as an important instrument for speeding up and simplifying financial transactions. Individual convictions that using technology may boost output and performance are the advantages that result [3].

Users with strong usage intentions are driven by positive perceptions of ease of access, transaction security, and the ability of e-wallets to facilitate financial needs. The e-wallet has become a digital payment solution that is increasingly in demand by the public. Intention describes an individual's subjective willingness to use certain services in the future. [4]. This study aims to explore the factors influencing users' intention to adopt e-wallets, focusing on perceived usefulness, perceived ease of use, and quality as the main variables influencing intention to use. The theory used in this research is the Technology Acceptance Model. Its three main elements are attitudes toward technology, perceived utility, and perceived ease of use [5]. The three main elements describe how users accept new technology.

Including quality characteristics is one aspect of this study that is novelty or fresh. The quality of e-wallets is an essential factor influencing users' decisions to adopt and use digital wallets on an ongoing basis, especially in terms of security, speed, and system reliability. Quality arguments predict perceived ease of use, and these perceptions significantly impact perceived usefulness [6].

Tabel 1. Research Gap

Correlation	To & Trinh	Qi et al	Al-Rahmi et al	Baki et al
Perceived ease of use - Intention to use	Significant			
Perceived ease of use - Intention to use		Insignificant		
Perceived ease of use - Perceived usefulness			Significant	
Perceived ease of use - Perceived usefulness				Insignificant

Source: Primary data, processed 2025

Studies on how perceived ease of use affects intention to use were carried out by [7]. The results of this research show that perceived ease of use has a significant impact on intention to use. Studies conducted by [8] on the relationship between perceived ease of use and intention to use show that perceived ease does not affect intention to use. This shows that perceived ease of use does not always significantly impact the intention to use in every situation. A study conducted by [9] regarding the effect of Perceived ease of use on Perceived usefulness showed satisfactory results. The results show that perceived ease of use has a direct positive impact on perceived benefits. Users will tend to feel the benefits of a service if they find it easy in the adoption process. However, research conducted by [10] on the effect of Perceived ease of use with Perceived usefulness shows different results. The study's results showed a lack of significant impact of Perceived ease of use on Perceived usefulness. Perceived ease of use is not always the main factor in determining the perceived benefits of a service in various contexts.

In this study, Perceived ease of use is how someone feels that e-wallets can be used easily without requiring significant effort. Perceived ease of use is the extent to which a person believes using a service is simple and uncomplicated [11]. This perception refers to the time and effort required for users to become proficient in using a service [12]. The easier and more intuitive a service is, the more likely users will accept and adopt it in their activities. According to [13] Perceived ease of use is the extent to which users believe that

the effort required to learn and use a service is minimal. Subjective norms in this study refer to social influences that encourage a person to act according to the expectations of the surrounding environment. The pressure generally comes from the closest environment, such as family, friends, or coworkers, which can influence individual decisions. Subjective norms are the perceived social pressure for an action [14]. Based on the user's beliefs and involvement in a particular matter where others agree or disagree [15]. This social pressure often plays a significant role in shaping individual behavior, where the beliefs of others can reinforce or inhibit the decision to take specific actions. Subjective norms refer to user perceptions, perceived pressures, and forces imposed and influenced by others, such as family media peers and authority figures, directly or indirectly affect consumer decisions [16].

Perceived security plays a vital role in building user trust in e-wallets, reflecting the extent to which individuals realize and assess the security of the service. Perceived security refers to the level of service provision, website system construction, and system requirements [17]. High levels of perceived security can build user trust and encourage service usage. This perception also refers to protecting and ensuring, as well as preventing hackers from invading customer information and privacy [18], [19]. In this study, the definition of perceived usefulness is how much someone feels that e-wallets can improve performance. Perceived usefulness is based on the extent to which a person believes that using a particular system can improve their performance [20], [21]. The greater an individual's belief that a system can improve their efficiency or effectiveness, the more likely they are to adopt it. This perception is an extension of the concept of usability, which refers to the level of satisfaction obtained from using a service [22].

Quality reflects the ability of e-wallet service providers to meet customer needs effectively and efficiently and provide a memorable experience at every point of interaction. Quality is essential for service providers who want to attract and retain customers [23]. It also compares user expectations and perceptions received from the service [24]. The difference between requirements and customer expectations regarding service performance

also describes the quality [25]. Service quality will be apparent when the service received matches or even exceeds customer expectations, which in turn will increase their loyalty. Perceived trust in this study reflects the extent to which users feel confident in the accuracy and integrity of the information provided by the e-wallet. Regarding the extent to which consumers trust the information conveyed in the service [26]. Trust is also defined by [27] as any form of words or actions that users trust in a service. Trust forms the basis of user confidence in the feasibility and credibility of the services provided. [28] explains that the user's overall perception of the feasibility of a service is an overview of trust.

A person's conscious desire or internal drive to try and utilise a service, namely an e-wallet, is the definition of intention to use in this study. Intention to Use is influenced by intention, utilitarian motivation, ideal self-image, and service trust [29] This is known as the user's deliberate intention or desire to utilize the service, which includes perceived perceptions regarding the level of one's willingness to try to utilise the service [30], [31]. Users' motivation and trust strongly influence their decision to try or continue using the service. Users' knowledge of new aspects, their use, preferred qualities, and other users' perspectives [32].

Method

This research uses a quantitative approach, which requires large amounts of data. This approach tests hypotheses based on theory and uses the data to determine whether the results are accepted or rejected [33]. Research with a quantitative approach can be considered research that tests objective theories involving relationships between variables. In this approach, research questions or hypotheses are formulated based on dependent and independent variables [33]. When choosing the sample size, many criteria must be considered, including the measurement model's complexity, the number of model constructs, observed variables, and similarity.

Thus, the sample size was determined as 236 respondents spread across five major cities in Java: Jakarta, Yogyakarta, Surabaya, Bandung, and Semarang. The sample refers to

the part of the population that is used as respondents in the research. Based on research by [34], there are two types of sampling designs: nonprobability sampling and probability sampling. Probability sampling allows each population element to be selected, while nonprobability sampling does not. This research uses nonprobability sampling with a purposive sampling technique, which selects individuals or groups based on rational considerations and criteria set by the researcher to obtain necessary information.

The Likert Scale is used in this study's data gathering procedure, a common method of completing survey questionnaires. Using the Likert Scale, which ranges from extremely positive to extremely negative attitudes, the respondents indicated how much they agreed or disagreed with the statements. Based on research by [34], the Likert Scale is used to measure the extent to which respondents agree or disagree through the five points available on the scale. Specifically, the numbers 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree are used to gauge how respondents feel and respond to the different assertions that were submitted.

The methodology used to analyse the data in this study is Structural Equation Modeling (SEM), which examines the relationship between observed and latent variables in complex systems. This research uses AMOS software to analyse relatively large data. A number of testing phases were conducted, including reliability and validity assessments, outlier and normalcy tests, goodness of fit assessments, structural modeling, and hypothesis testing. The purpose of this test is to ensure the suitability between variable indicators and latent constructs. Data were analyzed using Confirmatory Factor Analysis (CFA) in the SEM testing stage.

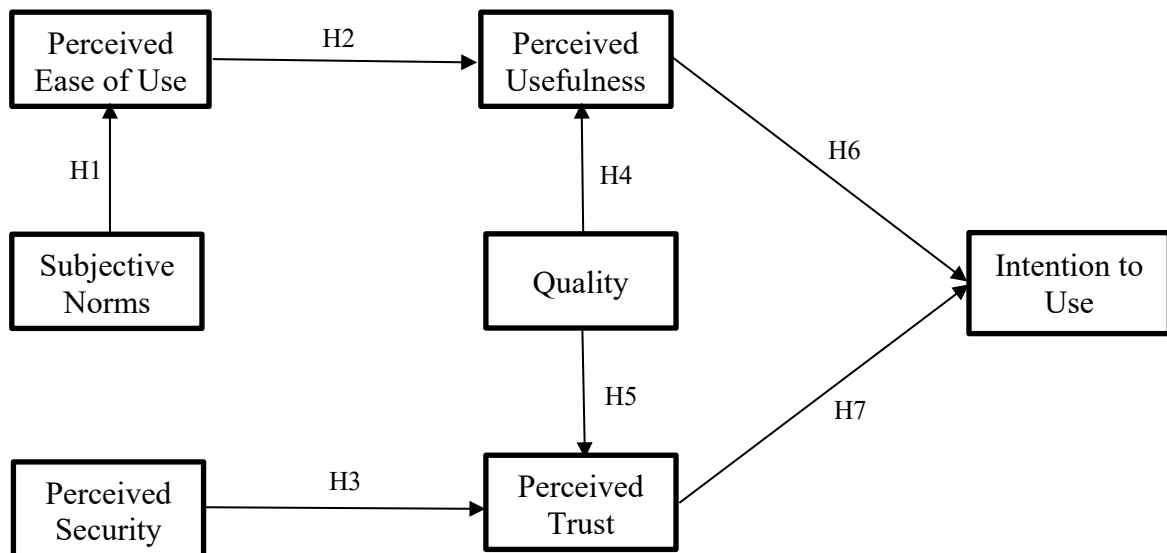


Figure 1. Research Model

Result and Discussion

Respondent Profile

A total of 236 respondents who met the parameters in the screening questions were involved in this study. The respondents came from five predetermined regions, namely Jakarta with 50 respondents (21%), Yogyakarta with 51 respondents (22%), Bandung with 50 respondents (21%), Surabaya with 40 respondents (19%), and Semarang with 40 respondents (17%). Respondents have an age range between 15 to more than 50 years old and are familiar with this application. Researchers conducted this study using the Pearson correlation size and significance level. The item is declared valid if the Pearson correlation value is ≥ 0.5 and the significance level value is <0.05 . The data analyzed came from 236 respondents obtained through questionnaire distribution. For the validity test, the researcher utilized IBM SPSS 29 software as an analysis tool.

Table 2. Validity Test

Variables	Indicator	Pearson Correlation	Description
Perceived Ease of Use	I find it easy to access this e-wallet because the menu displayed is simple.	.683**	Valid
	It took me a short time to top up my balance in this e-wallet.	.740**	Valid
	I find it easy to use this e-wallet because it can be accessed 24 hours.	.704**	Valid
	I feel that I can use this e-wallet easily anywhere.	.603**	Valid
	I get smooth access to this e-wallet customer service feature when needed.	.761**	Valid
	I find it easy to use this e-wallet to pay electricity and water bills.	.668**	Valid
	I was encouraged by my friends to use this e-wallet because it offers few promotions.	.737**	Valid
	I was recommended by my closest friends to use this e-wallet because the service response is fast.	.640**	Valid
Subjective Norms	I was recommended by friends in one community to transact through this e-wallet because it is free of admin fees.	.614**	Valid
	I was recommended by relatives to make online payments through this e-wallet because I could get cashback.	.650**	Valid
	I was recommended by my closest friends to use this e-wallet because it is easy to make payments.	.706**	Valid
	I am supported by my closest family to use this e-wallet because it helps reduce the use of paper money.	.610**	Valid
Perceive Security	I believe payment through this e-wallet is safe because the security is guaranteed.	.676**	Valid

	I feel safe using this e-wallet because the transaction history is complete.	.701**	Valid
	I feel secure when shopping with this e-wallet because the security is reliable.	.757**	Valid
	I feel secure with the privacy offered when using QR through this e-wallet.	.694**	Valid
	I find it convenient that these e-wallets reduce the need to carry large amounts of cash.	.601**	Valid
	I feel that this e-wallet helps my work because of the organised financial management system.	.764**	Valid
	I can increase my productivity with the household bills feature of this e-wallet.	.783**	Valid
	I utilize the points earned from this e-wallet to earn rewards.	.659**	Valid
Perceived Usefulness	I feel that this e-wallet provides convenience in making payments for online transportation.	.766**	Valid
	I prefer to use this e-wallet because of the easy account registration process.	.699**	Valid
	I find it easy to use this e-wallet because of the QR feature available.	.778**	Valid
	I am satisfied with this e-wallet because of the easy top-up instructions.	.770**	Valid
	I find this e-wallet financial management system easy to use.	.674**	Valid
Quality	I can easily access this e-wallet anywhere because of the responsive service.	.701**	Valid
	I find this e-wallet transaction easy to do anywhere because the payment system works well.	.776**	Valid
	I believe this e-wallet can guarantee the security of personal data.	.729**	Valid
Perceived Trust	I find this e-wallet reliable because there is a transaction tracking system that is easy to understand.	.779**	Valid

	I feel comfortable with this e-wallet customer service because the information provided is clear and precise.	.676**	Valid
	I believe this e-wallet can help cooperate with merchant businesses in making transactions.	.658**	Valid
	I trust this e-wallet because only the user knows the password and OTP code.	.808**	Valid
	I feel that this e-wallet is trustworthy because it reduces the risk of counterfeit money.	.763**	Valid
	I believe that with this e-wallet, online transportation payments will become easier.	.718**	Valid
	I intend to use this e-wallet because the operational system is easy to understand.	.750**	Valid
Intention to Use	I am interested in using this e-wallet because it offers many promos and discounts.	.718**	Valid
	I am interested in using this e-wallet because the registration process is fast and easy.	.719**	Valid

Source: Primary Data, processed 2025

The validity test results show that 37 indicators are considered valid and can be used as an evaluation tool in this study. Furthermore, a reliability assessment was carried out to assess the consistency and dependence between items in the questionnaire and ensure that respondents gave consistent answers to each question item. If a variable's Cronbach's Alpha value is greater than 0.70, it is deemed dependable. The following table displays the test's findings.

Table 3. Reliability Test

No.	Variables	Cronbach's Alpha	Description
1	Perceived Ease of Use	0.779	Reliable
2	Subjective Norms	0.760	Reliable
3	Perceived Security	0.767	Reliable
4	Perceived Usefulness	0.835	Reliable
5	Quality	0.773	Reliable

6	Perceived Trust	0.850	Reliable
7	Intention to Use	0.706	Reliable

Source: Primary Data, processed 2025

Measurement Test

The data in this study were analyzed using the AMOS 26 program, a commonly used software for statistical analysis. At this point, the correlation between the variables involved was measured using Confirmatory Factor Analysis (CFA). CFA is used to verify the extent to which the proposed model fits the existing data. The relationships between variables are visually depicted in a path diagram, where each relationship is represented by a curved arrow with two arrows indicating the direction of influence between variables in the research model. Figure 2 shows that of the 37 indicators tested, all have a value of more than 0.5, indicating that the indicators are valid. This result was obtained after eliminating several instruments that did not meet the criteria in the previous test.

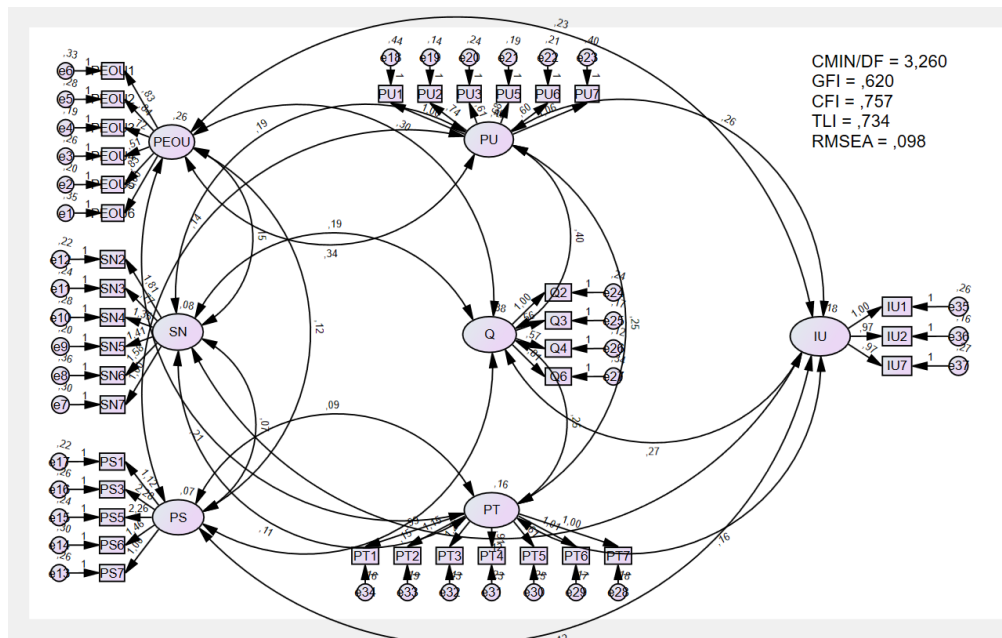


Figure 2. Measurement Test

Goodness of Fit Test

The researcher made modifications to the AMOS 26 software to improve the inadequate Goodness of Fit index results and weak relationships in the hypothesis results. In this model, a flowchart will be formed to facilitate researchers' identification of the relationship between variables to be tested. The relationship between these variables is depicted with two-way arrows in the AMOS 26 software.

Table 4. Goodness of Fit Result

No.	Index	Criteria	Results	Description
1	CMIN/DF	$CMIN/DF \leq 3,0$	1,792	Good Fit
2	GFI	GFI 0,8 – 0,9	0,811	Marginal Fit
3	CFI	CFI 0,8 - 0,9	0,929	Good Fit
4	TLI	TLI 0,8 – 0,9	0,914	Good Fit
5	RMSEA	$RMSEA \leq 0,08$	0,056	Good Fit

Source: Primary Data, processed 2025

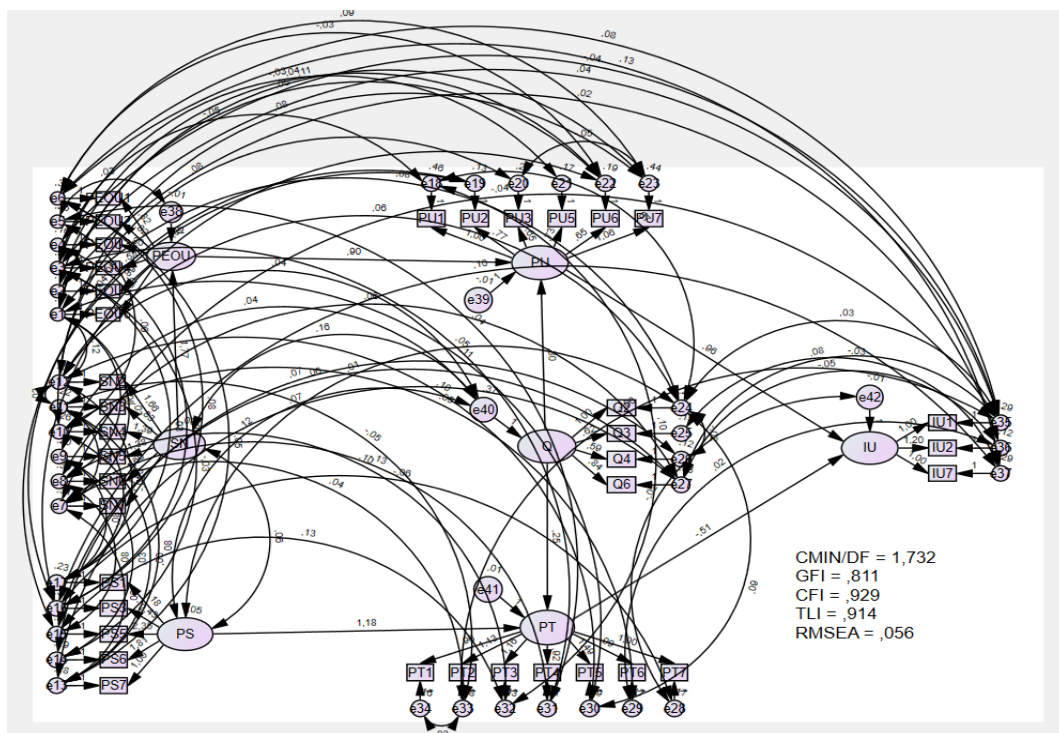


Figure 3. Structural Model

Hypothesis Test

After all model fit tests have fulfilled the requirements, hypothesis testing is carried out using AMOS 26 software.

Table 5. Hypothesis Test

Hypothesis	Path	Std Estimation	C.R.	P	Std Reg Weight	Description
H1	SN - PEOU	0,257	6,901	***	1,013	Supported
H2	PEOU - PU	0,131	6,874	***	0,731	Supported
H3	PS - PT	0,279	4,217	***	0,633	Supported
H4	Q - PU	0,080	3,708	***	0,297	Supported
H5	Q - PT	0,074	3,421	***	0,379	Supported
H6	PU - IU	0,246	3,896	***	1,590	Supported
H7	PT - IU	0,345	-1,480	0,663	-0,565	Rejected

Source: Primary Data, processed 2025

Table 5 in the hypothesis test shows the standardized estimation results, which illustrate the impact between variables as well as the relationship proposed in this study. The results in the table indicate that all six hypotheses, namely H1, H2, H3, H4, H5, and H6, show a positive and statistically significant relationship. However, the relationship in H7 is said to be insignificant because the P value is greater than 0.050, in accordance with the provisions described by [35]

Hypothesis Development

Research by [36] examined the effect of Subjective Norms on Perceived Ease of Use, with results showing a significant relationship between the two. The study by [37] also found that social influences, such as social pressure, play a role in increasing perceived ease of use. It can be assumed that social influence plays an important role in strengthening the perceived ease of use of services, considering that pressure from the surrounding environment is often the main driving factor in decision making. The study of [38] supports these findings, focusing on how subjective norms influence the perceived ease of use of an online service.

H1: Subjective Norms have a positive effect on Perceived Ease of Use

Previous research shows that Perceived Ease of Use has a positive effect on Perceived Usefulness in online teaching services. [39], [40]. It is considered that the easier the service is to use, the greater the benefits felt by users. The following study [41] supports these findings, suggesting that easy-to-use services are considered more useful in the context of metaverse technologies for education. A service that tends to be easy, the greater the benefits felt by users.

H2: Perceived Ease of Use has a positive effect on Perceived Usefulness

The study of [42] found a positive relationship between Perceived Security and Perceived Trust in the context of Facebook services, where good security perceptions increase user trust. Research [43] also shows that high security perceptions strengthen user trust in e-wallets. Security factors play an important role in building trust relationships with users. [44] emphasized that perceived security plays an important role in building trust during online transactions, especially for payments via mobile devices.

H3: Perceived Security has a positive effect on Perceived Trust

Research by [45] found that service quality, such as information quality and user interface, has a positive effect on Perceived Usefulness. Users tend to find the service more useful when the information provided is clear and the interface used is easy to understand. High service quality, such as system reliability and ease of access, strengthens perceived usefulness in a service [46], [47]. The better the quality of service provided, the greater the user's positive perception of the perceived benefits of the service.

H4: Quality has a positive effect on Perceived Usefulness

A study by [48] showed that quality, including information and system quality, has a positive effect on Perceived Trust in the context of cloud-based accounting systems. [49] also found that high service quality increases user trust in the service. [49] adds that the quality of information in online brand communities can strengthen user trust in services. User trust is strongly influenced by the extent to which service quality can meet expectations and provide security in its use.

H5: Quality has a positive effect on Perceived Trust

Research by [50] shows that Perceived Usefulness has a positive effect on Intention to Use in the context of Bitcoin services, where perceived usefulness affects users' intention to adopt it. Research by [51] also shows that Perceived Usefulness has a positive effect on Intention to Use in the context of Bitcoin services, where perceived usefulness affects users' intention to adopt it. The greater the benefits perceived by users of a service, the higher the likelihood that they will continue to use it. [52] also found that Perceived Usefulness affects users' intention to use mobile shopping services.

H6: Perceived Usefulness has a positive effect on Intention to Use

The study by [53] shows that Perceived Trust has a positive effect on Intention to Use in the context of travel agent services, where trust strengthens users' intention to continue using the service. Research [54] also found that perceived trust in a conversational banking assistant service influences users' intention to reuse it. The degree of user trust in a service strongly influences their decision to continue to interact and use the service. [55] also shows that high trust strengthens users' intention to adopt services in the future. Based on these findings, perceived trust is seen as an important factor that encourages users' intention to use a service.

H7: Perceived Trust has a positive effect on Intention to Use

Discussion

Effect of Subjective Norms on Perceived Ease of Use

The relationship between the Subjective Norms variable and Perceived Ease of Use shows a P-value of 0.000, which indicates a significant positive effect of Subjective Norms on Perceived Ease of Use. This finding is consistent with the results of previous studies, which state that subjective norms have a significant positive effect on perceived ease of use. [38], [56]. This study's results align with the findings of [57], which confirmed that the effect of subjective norms on perceived ease of use has a significant positive impact on the adoption of a service. This finding suggests that subjective norms play an important role in shaping perceived ease of use, which drives service adoption.

Effect of Perceived Ease of Use on Perceived Usefulness

The P-value of 0.000 in the relationship between Perceived Ease of Use and Perceived Usefulness variables indicates a significant positive effect of Subjective Norms on Perceived Ease of Use. These results are in line with the findings obtained in research conducted [58], which found that perceived ease of use contributes to the perceived usefulness of e-wallets, especially in terms of increasing efficiency and user trust in digital transactions. A study was also conducted by [40] that showed that perceived ease of use significantly impacts perceived usefulness. Perceived ease of use influences perceived usefulness and builds a positive attitude toward using the technology [39]. These results confirm that perceived ease of use increases perceived usefulness and plays a role in building a positive attitude toward service.

Effect of Perceived Security on Perceived Trust

The relationship between Perceived Security and Perceived Trust variables shows that Perceived Security has a significant positive effect on Perceived Trust with a P-value of 0.000. This finding is by the results of previous studies, that there is a positive and significant relationship between perceived security and perceived trust [43], [59]. Another researcher [44] stated that perceived security, in the form of transaction protection and user data security, contributes directly to increasing perceived trust. Users who feel the e-wallet system is secure will likely trust this service for their daily financial needs. This finding indicates that users' sense of security towards the e-wallet system can significantly increase their level of trust in the service.

Effect of Quality on Perceived Usefulness

The relationship between Quality and Perceived Usefulness has a P-value of 0.000. Quality with Perceived Usefulness shows a significant relationship between the two. These results are by research conducted by [45], confirming that the layers of information quality, system quality, and service quality significantly affect perceived usefulness in the use of e-

wallet systems. [46] revealed that system quality, such as reliability and ease of navigation, directly impacts perceived usefulness. [47] also argues that there is a positive and significant relationship between quality and perceived usefulness. These results indicate that the quality of information, systems, and services has an important role in increasing users' perceived usefulness of the e-wallet system.

Effect of Quality on Perceived Trust

The relationship between Quality and Perceived Trust has a significant impact with a P-value of 0.000. This is in line with research conducted by [48], which found that elements of system quality, information quality, and service quality play an important role in building user trust in digital financial systems, including e-wallets. Other studies also highlight that service quality directly impacts increasing trust perceptions [60], [61]. These findings indicate that the quality of a system, including elements of system quality, information quality, and service quality, play an important role in building user trust in digital financial systems, including e-wallets.

Effect of Perceived Usefulness on Intention to Use

The connection between perceived usefulness and intention to use variables shows a P-value of 0.000, indicating that Perceived Usefulness positively influences Intention to Use. These results align with the findings found by [51] that benefits such as ease of transactions and cost savings are the main factors in shaping users' intention to continue using this technology. [50] revealed that users who feel a service is useful in facilitating financial transactions tend to have a higher intention to use it. Research by [62] also adds that perceived usefulness is directly related to the intention to use in the context of e-wallets. These results indicate that the more useful the service is perceived, the greater the user's intention to continue using it.

Effect of Perceived Trust on Intention to Use

The relationship between Perceived Trust and Intention to Use variables shows a P-value of 0.663. This indicates that Perceived Trust does not significantly affect Intention to Use, with negative results. Research conducted by [63] shows that trust has a less significant impact on intention to use when users experience resistance to new technology. This resistance includes discomfort in adopting digital services and a tendency to prefer more traditional methods. Another study [64], revealed that trust in services can have a negative or insignificant impact on intention to use when users perceive a high level of risk. The risk associated with a dominant service can reduce the level of trust, thus not enough to encourage the intention to use the service.

Conclusion

Based on the findings of this study, it can be concluded that variables such as Perceived Ease of Use, Subjective Norms, Perceived Security, Perceived Usefulness, Quality, and Perceived Trust affect the Intention to Use e-wallet. Subjective Norms positively affect Perceived Ease of Use, and Perceived Ease of Use increases the perceived usefulness of e-wallets. Perceived Security significantly affects Perceived Trust, which supports consumer confidence. Service quality, especially regarding systems and security, also strengthens perceived usefulness and trust, but Perceived Trust negatively influences Intention to Use. This research enriches the Technology Acceptance Model (TAM) theory and provides insights for e-wallet developers to focus on improving convenience and security features and utilizing social recommendations.

Suggestions for future research are that the objects studied are more innovative and relevant to current technological developments, such as the integration of e-wallets with other financial services, such as digital credit features or payment systems that are directly connected to digital wallets on various platforms. Future research is also expected to involve respondents with more diverse age groups and backgrounds, so that the research results are more representative and provide an in-depth understanding of e-wallet adoption in various user segments. The use of additional theories, such as the Theory of Planned Behavior, is



also recommended to further understand how attitudes, social norms, and behavioural control affect the intention to use e-wallets. For e-wallet provider companies, it is recommended to develop artificial intelligence (AI)-based features that can provide automatic financial management recommendations and detect suspicious transactions in real-time, as well as consider developing voice and location-based hands-free payment systems that can provide more convenience and security for users. In addition, the company can also improve marketing strategies by cooperating with influential public figures to broaden the appeal of e-wallets, especially among the younger generation through interactive campaigns on social media.

Reference

- [1] N. A. Abdul-Halim, A. Vafaei-Zadeh, H. Hanifah, A. P. Teoh, and K. Nawaser, "Understanding the determinants of e-wallet continuance usage intention in Malaysia," *Qual Quant*, vol. 56, no. 5, 2022, doi: 10.1007/s11135-021-01276-7.
- [2] "Worldpay," corporate.worldpay.com. Accessed: Oct. 09, 2024. [Online]. Available: <https://corporate.worldpay.com/news-releases/news-release-details/worldpay-global-payments-report-2024-digital-wallet-maturity>
- [3] N. Saskia Aulia and G. Marsasi, "The Role of Perceived Usefulness, Perceived Ease of Use, and Task Technology Fit to Increase Perceived Impact on Learning," 2024.
- [4] E. Gunanto Marsasi, S. Barqiah, and Y. Kurnia Gusti, "Investigation Of The Effects Of Social Capital On Information-Sharing Behavior That Drives Gen Z Purchase Intentions Through Social Commerce," *Media Ekonomi dan Manajemen*, vol. 39, pp. 42–60, 2024.
- [5] H. Baber, "Modelling the acceptance of e-learning during the pandemic of COVID-19-A study of South Korea," *International Journal of Management Education*, vol. 19, no. 2, Jul. 2021, doi: 10.1016/j.ijme.2021.100503.
- [6] M. Hendijani Fard and R. Marvi, "Viral marketing and purchase intentions of mobile applications users," *International Journal of Emerging Markets*, vol. 15, no. 2, pp. 287–301, Mar. 2020, doi: 10.1108/IJOEM-06-2018-0291.
- [7] A. T. To and T. H. M. Trinh, "Understanding behavioral intention to use mobile wallets in vietnam: Extending the tam model with trust and enjoyment," *Cogent Business and Management*, vol. 8, no. 1, 2021, doi: 10.1080/23311975.2021.1891661.
- [8] M. Qi, J. Cui, X. Li, and Y. Han, "Perceived factors influencing the public intention to use E-Consultation: Analysis of web-based survey data," *J Med Internet Res*, vol. 23, no. 1, Jan. 2021, doi: 10.2196/21834.
- [9] W. M. Al-Rahmi, N. Yahaya, M. M. Alamri, I. Y. Alyoussef, A. M. Al-Rahmi, and Y. Bin Kamin, "Integrating innovation diffusion theory with technology acceptance

- model: supporting students' attitude towards using a massive open online courses (MOOCs) systems," *Interactive Learning Environments*, vol. 29, no. 8, pp. 1380–1392, 2021, doi: 10.1080/10494820.2019.1629599.
- [10] R. Baki, B. Birgoren, and A. Aktepe, "Identifying Factors Affecting Intention To Use In Distance Learning Systems," Apr. 2021.
- [11] L. Pham, T. Klaus, and C. Changchit, "Factors Influencing Intention to Use Online Consumer Reviews: The Case of Vietnam," *Journal of Global Information Management*, vol. 31, no. 1, pp. 1–22, 2023, doi: 10.4018/JGIM.321642.
- [12] Y. Wen, X. Yuan, and W. Li, "Social Q&A communities: A multi-factor study of the influence of users' knowledge sharing behaviors," *Front Psychol*, vol. 13, Sep. 2022, doi: 10.3389/fpsyg.2022.967991.
- [13] A. A. Rabaa'i and X. Zhu, "Understanding the determinants of wearable payment adoption: An empirical study," *Interdisciplinary Journal of Information, Knowledge, and Management*, vol. 16, pp. 173–211, Apr. 2021, doi: 10.28945/4746.
- [14] X. Zou, Q. Chen, Y. Zhang, and R. Evans, "Predicting COVID-19 vaccination intentions: the roles of threat appraisal, coping appraisal, subjective norms, and negative affect," *BMC Public Health*, vol. 23, no. 1, Dec. 2023, doi: 10.1186/s12889-023-15169-x.
- [15] Nazmunnahar, M. A. Haque, B. Ahamed, M. Tanbir, F. I. Suhee, and M. R. Islam, "Assessment of risk perception and subjective norms related to Mpox (monkeypox) among adult males in Bangladesh: A cross-sectional study," *Health Sci Rep*, vol. 6, no. 6, Jun. 2023, doi: 10.1002/hsr2.1352.
- [16] A. Hammad, A. Q. Bataineh, M. T. Alshurideh, and H. A. Salhab, "Factors affecting healthcare providers to accept digital marketing: The moderating role of subjective norms," *International Journal of Data and Network Science*, vol. 6, no. 4, pp. 1085–1098, Sep. 2022, doi: 10.5267/j.ijdns.2022.7.011.

- [17] C. S. Kuo, Y. Kang, and H. L. Yang, "Investigating the determinants of continuance intention on cloud ERP systems adoption," *Advances in Mechanical Engineering*, vol. 15, no. 4, Apr. 2023, doi: 10.1177/16878132231165973.
- [18] F. Li, H. Lu, M. Hou, K. Cui, and M. Darbandi, "Customer satisfaction with bank services: The role of cloud services, security, e-learning and service quality," *Technol Soc*, vol. 64, Feb. 2021, doi: 10.1016/j.techsoc.2020.101487.
- [19] R. Wang and M. Peters, "Consumer Intention to Switch from Cash to Mobile Payment in Restaurants During and After Pandemic," *Journal of Quality Assurance in Hospitality and Tourism*, 2023, doi: 10.1080/1528008X.2023.2201696.
- [20] A. Xu, W. Li, Z. Chen, S. Zeng, L. A. Carlos, and Y. Zhu, "A Study of Young Chinese Intentions to Purchase 'Online Paid Knowledge': An Extended Technological Acceptance Model," *Front Psychol*, vol. 12, Jun. 2021, doi: 10.3389/fpsyg.2021.695600.
- [21] K. Gokmenoglu and M. Kaakeh, "An empirical investigation of the extended Technology Acceptance Model to explain mobile banking adoption," *Eastern Journal of European Studies*, vol. 13, no. 2, pp. 204–225, 2022, doi: 10.47743/EJES-2022-0210.
- [22] O. C. Edo, D. Ang, E. E. Etu, I. Tenebe, S. Edo, and O. A. Diekola, "Why do healthcare workers adopt digital health technologies - A cross-sectional study integrating the TAM and UTAUT model in a developing economy," *International Journal of Information Management Data Insights*, vol. 3, no. 2, Nov. 2023, doi: 10.1016/j.jjime.2023.100186.
- [23] V. Sharma, K. Jangir, M. Gupta, and R. Rupeika-Apoga, "Does service quality matter in FinTech payment services? An integrated SERVQUAL and TAM approach," *International Journal of Information Management Data Insights*, vol. 4, no. 2, Nov. 2024, doi: 10.1016/j.jjime.2024.100252.

- [24] S. Nookhao and S. Kiattisin, "Achieving a successful e-government: Determinants of behavioral intention from Thai citizens' perspective," *Heliyon*, vol. 9, no. 8, Aug. 2023, doi: 10.1016/j.heliyon.2023.e18944.
- [25] A. Kanaan, A. Al-Hawamleh, A. Abulfaraj, H. M. Al-Kaseasbeh, and A. H. Alorfi, "The effect of quality, security and privacy factors on trust and intention to use e-government services," *International Journal of Data and Network Science*, vol. 7, no. 1, pp. 185–198, Dec. 2023, doi: 10.5267/j.ijdns.2022.11.004.
- [26] Q. Shang, H. Ma, C. Wang, and L. Gao, "Effects of Background Fitting of e-Commerce Live Streaming on Consumers' Purchase Intentions: A Cognitive-Affective Perspective," *Psychol Res Behav Manag*, vol. 16, pp. 149–168, 2023, doi: 10.2147/PRBM.S393492.
- [27] A. Panyekar and E. G. Marsasi, "The Role of Brand Equity, Brand Authenticity, Brand Trust to Increase Customer Satisfaction," *JPEK (Jurnal Pendidikan Ekonomi dan Kewirausahaan)*, vol. 8, no. 1, Apr. 2024, doi: 10.29408/jpek.v8i1.25144.
- [28] K. L. Tan, C. M. Leong, and N. F. Richter, "Navigating Trust in Mobile Payments: Using Necessary Condition Analysis to Identify Must-Have Factors for User Acceptance," *Int J Hum Comput Interact*, 2024, doi: 10.1080/10447318.2024.2338319.
- [29] S. Barqiah and E. G. Marsasi, "Influence of Utilitarian Motivation, Ideal Self-Concept, and Perception of Consumers on Intention to Use Islamic Banking Products," *Jurnal Organisasi dan Manajemen*, vol. 18, no. 2, pp. 100–112, Dec. 2022, doi: 10.33830/jom.v18i2.3628.2022.
- [30] N. D. Rossiman, N. H. Rashid, W. A. Ahmad Ramzuna, and M. N. Almunawar, "The perception and usage of google drive among higher education institution students in Brunei darussalam," *International Journal of Asian Business and Information Management*, vol. 12, no. 3, pp. 222–239, 2021, doi: 10.4018/IJABIM.20210701.0a14.

- [31] M. Alotumi, "Factors influencing graduate students' behavioral intention to use Google Classroom: Case study-mixed methods research," *Educ Inf Technol (Dordr)*, vol. 27, no. 7, pp. 10035–10063, Aug. 2022, doi: 10.1007/s10639-022-11051-2.
- [32] H. J. Arfansyah and G. Marsasi, "The Effect of Attitude and Trust on Behavioral Intention In The Modern Market Industry A R T I C L E I N F O," 2023.
- [33] Jhon W. Creswell and J. David Creswell, "Research Design Qualitative, Quantitative, and Mixed Methods Approaches," 2022.
- [34] Uma Sekaran and Roger Bougie, "Research Methods for Business," 2020. [Online]. Available: www.wileypluslearningspace.com
- [35] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, "Multivariate Data Analysis Eighth Edition," 2019. [Online]. Available: www.cengage.com/highered
- [36] C. Q. Chen, C. Y. Wang, X. F. Shan, L. Zhan, and S. J. Chen, "An empirical investigation of reasons influencing pre-service teachers acceptance and rejection of immersive virtual reality usage," *Teach Teach Educ*, vol. 137, Jan. 2024, doi: 10.1016/j.tate.2023.104391.
- [37] V. Milutinović, "Examining the influence of pre-service teachers' digital native traits on their technology acceptance: A Serbian perspective," *Educ Inf Technol (Dordr)*, vol. 27, no. 5, pp. 6483–6511, Jun. 2022, doi: 10.1007/s10639-022-10887-y.
- [38] M. Y. chao Jiang, M. S. yung Jong, W. W. fat Lau, Y. L. Meng, C. S. Chai, and M. Chen, "Validating the General Extended Technology Acceptance Model for E-Learning: Evidence From an Online English as a Foreign Language Course Amid COVID-19," *Front Psychol*, vol. 12, Oct. 2021, doi: 10.3389/fpsyg.2021.671615.
- [39] H. Alshurafat, M. O. Al Shbail, W. M. Masadeh, F. Dahmash, and J. M. Al-Msiedeen, "Factors affecting online accounting education during the COVID-19 pandemic: an integrated perspective of social capital theory, the theory of reasoned action and the technology acceptance model," *Educ Inf Technol (Dordr)*, vol. 26, no. 6, pp. 6995–7013, Nov. 2021, doi: 10.1007/s10639-021-10550-y.

- [40] C. H. Tseng, C. H. Hsu, J. W. Liu, and C. T. Wang, "The impact of online teaching in behavior intention for college students in Taiwan," *Front Psychol*, vol. 13, Aug. 2022, doi: 10.3389/fpsyg.2022.911262.
- [41] A. S. Al-Adwan, N. Li, A. Al-Adwan, G. A. Abbasi, N. A. Albelbisi, and A. Habibi, "Extending the Technology Acceptance Model (TAM) to Predict University Students' Intentions to Use Metaverse-Based Learning Platforms," *Educ Inf Technol (Dordr)*, vol. 28, no. 11, pp. 15381–15413, Nov. 2023, doi: 10.1007/s10639-023-11816-3.
- [42] M. Maqableh, H. Y. Hmoud, M. Jaradat, and R. Masa'deh, "Integrating an information systems success model with perceived privacy, perceived security, and trust: the moderating role of Facebook addiction," *Heliyon*, vol. 7, no. 9, Sep. 2021, doi: 10.1016/j.heliyon.2021.e07899.
- [43] A. Daragmeh, A. Saleem, J. Bárczi, and J. Sági, "Drivers of post-adoption of e-wallet among academics in Palestine: An extension of the expectation confirmation model," *Front Psychol*, vol. 13, Sep. 2022, doi: 10.3389/fpsyg.2022.984931.
- [44] K. A. A. Sleiman, L. Juanli, H. Lei, R. Liu, Y. Ouyang, and W. Rong, "User Trust levels and Adoption of Mobile Payment Systems in China: An Empirical Analysis," *Sage Open*, vol. 11, no. 4, 2021, doi: 10.1177/21582440211056599.
- [45] I. Hidayat Ur Rehman, J. Ali Turi, J. Rosak-Szyrocka, M. N. Alam, and L. Pilař, "The role of awareness in appraising the success of E-government systems," *Cogent Business and Management*, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2023.2186739.
- [46] A. Al-Okaily, M. Al-Okaily, T. Ai Ping, H. Al-Mawali, and H. Zaidan, "An empirical investigation of enterprise system user satisfaction antecedents in Jordanian commercial banks," *Cogent Business and Management*, vol. 8, no. 1, 2021, doi: 10.1080/23311975.2021.1918847.
- [47] Q. Zheng, C. Li, and S. Bai, "Evaluating the couriers' experiences of logistics platform: The extension of expectation confirmation model and technology

- acceptance model,” *Front Psychol*, vol. 13, Sep. 2022, doi: 10.3389/fpsyg.2022.998482.
- [48] Y. Li and J. Wang, “Evaluating the Impact of Information System Quality on Continuance Intention Toward Cloud Financial Information System,” *Front Psychol*, vol. 12, Aug. 2021, doi: 10.3389/fpsyg.2021.713353.
- [49] L. Kim, P. Maijan, T. Jindabot, and W. B. Ali, “How to build trust: Evidence from Thai customers in the latex glove industry,” *Innovative Marketing*, vol. 17, no. 4, pp. 120–131, 2021, doi: 10.21511/im.17(4).2021.11.
- [50] M. A. Nadeem, Z. Liu, A. H. Pitafi, A. Younis, and Y. Xu, “Investigating the Adoption Factors of Cryptocurrencies—A Case of Bitcoin: Empirical Evidence From China,” *Sage Open*, vol. 11, no. 1, 2021, doi: 10.1177/2158244021998704.
- [51] I. K. Mensah, “Understanding the Drivers of Ghanaian Citizens’ Adoption Intentions of Mobile Health Services,” *Front Public Health*, vol. 10, Jun. 2022, doi: 10.3389/fpubh.2022.906106.
- [52] X. Y. Chan, M. K. Rahman, A. Al Mamun, A. A. Salameh, W. M. H. Wan Hussain, and S. S. Alam, “Predicting the Intention and Adoption of Mobile Shopping During the COVID-19 Lockdown in Malaysia,” *Sage Open*, vol. 12, no. 2, Apr. 2022, doi: 10.1177/21582440221095012.
- [53] N. M. Nusairat *et al.*, “Avoiding uncertain buying intentions: Does WebQual matter?,” *International Journal of Data and Network Science*, vol. 7, no. 1, pp. 425–432, 2023, doi: 10.5267/j.ijdns.2022.9.004.
- [54] S. Hasan, E. R. Godhuli, M. S. Rahman, and M. A. Al Mamun, “The adoption of conversational assistants in the banking industry: is the perceived risk a moderator?,” *Heliyon*, vol. 9, no. 9, Sep. 2023, doi: 10.1016/j.heliyon.2023.e20220.
- [55] E. G. Marsasi, A. Albari, and M. Muthohar, “How Utilitarian Motivation and Trust Can Increase Intention to Use Based on Functional Attitude Theory,” *International Journal of Professional Business Review*, vol. 8, no. 12, p. e04086, Dec. 2023, doi: 10.26668/businessreview/2023.v8i12.4086.

- [56] W. D. D. Perez, Y. T. Prasetyo, M. M. L. Cahigas, S. F. Persada, M. N. Young, and R. Nadlifatin, “Factors Influencing Non-Fungible Tokens (NFT) Game Engagement during the COVID-19 pandemic: The Theory of Planned Behavior (TPB) and Hedonic Motivation System Adoption Model (HMSAM) Approach,” *Heliyon*, vol. 9, no. 9, Sep. 2023, doi: 10.1016/j.heliyon.2023.e19847.
- [57] C. Wang *et al.*, “An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce,” *Heliyon*, vol. 9, no. 8, Aug. 2023, doi: 10.1016/j.heliyon.2023.e18349.
- [58] Y. Chen, S. Khalid Khan, N. Shiwakoti, P. Stasinopoulos, and K. Aghabayk, “Analysis of Australian public acceptance of fully automated vehicles by extending technology acceptance model,” *Case Stud Transp Policy*, vol. 14, Dec. 2023, doi: 10.1016/j.cstp.2023.101072.
- [59] I. Alhadid *et al.*, “Evaluating the influence of security considerations on information dissemination via social networks,” *International Journal of Data and Network Science*, vol. 7, no. 4, pp. 1471–1484, Sep. 2023, doi: 10.5267/j.ijdns.2023.8.015.
- [60] L. Kim, P. Maijan, T. Jindabot, and W. B. Ali, “How to build trust: Evidence from Thai customers in the latex glove industry,” *Innovative Marketing*, vol. 17, no. 4, pp. 120–131, 2021, doi: 10.21511/im.17(4).2021.11.
- [61] S. Mousavi and S. Roper, “Enhancing Relationships Through Online Brand Communities: Comparing Posters and Lurkers,” *International Journal of Electronic Commerce*, vol. 27, no. 1, pp. 66–99, 2023, doi: 10.1080/10864415.2022.2158596.
- [62] P. Rao, S. Balasubramanian, N. Vihari, S. Jabeen, V. Shukla, and J. Chanchaichujit, “The e-commerce supply chain and environmental sustainability: An empirical investigation on the online retail sector,” *Cogent Business and Management*, vol. 8, no. 1, 2021, doi: 10.1080/23311975.2021.1938377.
- [63] H. Chemingui and H. Ben Lallouna, “Resistance, motivations, trust and intention to use mobile financial services,” *International Journal of Bank Marketing*, vol. 31, no. 7, pp. 574–592, 2013, doi: 10.1108/IJBM-12-2012-0124.



- [64] M. Z. Hoque and M. N. Alam, “What determines the purchase intention of liquid milk during a food security crisis? The role of perceived trust, knowledge, and risk,” *Sustainability (Switzerland)*, vol. 10, no. 10, Oct. 2018, doi: 10.3390/su10103722.

BIOGRAPHIES OF AUTHORS



Endy Gunanto Marsasi was born in Yogyakarta on March 21, 1972. He is a marketing management lecturer at the Faculty of Business and Economics of the Islamic University of Indonesia (FBE UII). Completed his undergraduate education (UGM) in 1995, and S2 from the Master of Management program FEB Gadjah Mada University in 1998, and completed his Doctoral education in Management with a concentration in marketing at FEB Gadjah Mada University in 2010. Currently, the author teaches for the undergraduate and Master of Management levels at the Faculty of Business and Economics UII for marketing concentration courses. The author also serves as an administrator of the Indonesia Marketing Association (IMA) in the field of certification and academics for the Sleman chapter 2019-2021, 2022-2024, 2024-2027, and has served as a corporate supervisory board member in one of the national-scale companies (2018-2021). The author is trusted as the head of curriculum development and implementation of the Manager School as a supporting program for the Master of Management MM FBE UII with participants from the middle to upper scale MSMEs. The author is actively researching consumer behavior related to the development of market behavior on products and services in the era of Industrial Revolution 4.0. He can be contacted at email: 183111301@uii.ac.id



Shafiq Haedar was born in Banjar on June 5, 2003. He is currently a student at Islamic University of Indonesia. He can be contacted at email: 21311333@students.uui.ac.id