



How to cite this article:

Nusraningrum, D., & Yuniarsih, R. (2024). Are there any differences in the continuous usage intention of e-wallet users?: The case of Seoul and Jakarta. *International Journal of Management Studies*, 31(2), 631-652. <https://doi.org/10.32890/ijms2024.31.2.9>

## **ARE THERE ANY DIFFERENCES IN THE CONTINUOUS USAGE INTENTION OF E-WALLET USERS?: THE CASE OF SEOUL AND JAKARTA**

**<sup>1</sup>Dewi Nusraningrum & <sup>2</sup>Retno Yuniarsih**

Department of Management,  
Universitas Mercu Buana, Indonesia

*<sup>1</sup>Corresponding Author: [dewinusraningrum@mercubuana.ac.id](mailto:dewinusraningrum@mercubuana.ac.id)*

Received: 23/6/2022   Revised: 6/9/2023   Accepted: 7/9/2023   Published: 30/7/2024

### **ABSTRACT =**

The unstoppable use of the Internet, especially in big cities, has led to changes in payment patterns and financial transactions. Originally, wallets have transitioned to electronic wallets, driven by perceived benefits, ease of use, and social influence among e-wallet users. Therefore, it is crucial to investigate the intention to continuously use e-wallets among young people who have become accustomed to Internet usage. The method employed for processing the data collected through questionnaires is SEM-PLS. The research sample consisted of 240 young e-wallet users in Seoul and Jakarta who participated in the study. The results showed a discrepancy in the effect of perceived ease of use on the continuous usage intention of e-wallets among the young users in the two cities. Young users in Seoul found e-wallets easy to use, whereas users in Jakarta perceived the opposite. However, the perceived usefulness and social influence had a positive and significant effect on the continuous usage intention of e-wallets

in both cities. This indicates that Generation Z believes e-wallets will continue to be used due to their benefits and the influence of social factors. This implication underscores the penetration of Internet users and mobile applications associated with e-wallet users. The findings of this research hold significant importance for the rapidly expanding e-wallet industry today, serving as a valuable reference for the development of the e-wallet market.

**Keywords:** E-wallet, perceived usefulness, perceived ease of use, social influence, continuous usage intention.

## INTRODUCTION

Mobile devices have experienced rapid growth in the last twenty years, with adoption rates varying across countries and regions. It has been estimated that more than five billion people own mobile phones, and nearly half of them are connected to the Internet and use smartphones (Silver, 2019). Both in advanced and emerging economies, individuals from middle to upper-class backgrounds are more likely to be digitally connected, frequently accessing the Internet and social media. The saturation of mobile phone users has been one of the fastest growing trends over the past five years in Jakarta, standing at approximately 29.2 percent or around 130 million people of the total population. Meanwhile, in Seoul, mobile phone user penetration has nearly reached the entire population, with nine out of 10 respondents using smartphones, marking the highest level of smartphone ownership globally (Silver, 2019).

The digital era has transformed the lifestyle patterns of people worldwide through access to the Internet and social media, observed in both developed and developing countries. Smartphone and Internet usage are undergoing rapid growth (World, n.d.), with over five billion people utilizing Internet-connected smartphones (Silver, 2019). This reflects the impact of smart technology, facilitating easier access to desired products and services (Pritchard, 2022). Seoul, Korea serves as an example of smartphone usage in major cities of developed countries, boasting the highest level of smartphone users globally, with 9 out of 10 people in Seoul owning a smartphone. In Indonesia, Internet user penetration is dominated by young users, with approximately 64.8 percent of the total population connected to the Internet.

Smartphone users typically benefit from communication services, social media access, games, music, email, and various other applications, including payment devices supported by Internet use. This aligns with the characteristics of Industry 4.0 where economic activities are conducted online (Nusraningrum et al., 2019a). Online payment transactions, used for shopping, bill payments, electricity and water payments, credit purchases, ticket purchases, doctor's fees, and more, contribute to the security and convenience factors in transactions (Jain, 2017).

The evolution of smartphones for payment transactions is known as electronic money or mobile money (Lashitew et al., 2019; Zhang et al., 2020). Types of mobile money include near-field communication (NFC) payments, which establish channels from customer bank to retailer, in-store and remote payments such as e-wallets or quick response (QR) codes (Liebana- Cabanillas et al., 2018), and Internet banking (Sorensen, 2022). The increasing prevalence of digital payment transactions has spurred the use of mobile devices and Internet access, driven by the development of fintech in Seoul (Choon, 2015). However, electronic or digital payment transactions still pose challenges in terms of the risk of misuse of personal data and transaction transparency (Batiz-Lazo et al., 2014; Pritchard, 2022).

The current COVID-19 pandemic has further reinforced the shift in consumer preferences towards digital transactions, such as e-wallet payments, from traditional methods. Previous research results indicate that the social effect has become an important factor in the intention to use technology, along with the convenience of electronic transactions (Kin & Farida, 2016). Another research found that perceived usefulness and perceived ease of use are relevant and significant factors for the continuous use intention of electronic transactions (Alalwan et al., 2017; Oliveira et al., 2016; Suleman et al., 2019). Additionally, other research has shown that hedonistic motivation significantly influences the intention to use electronic wallets (Arahita & Hatammimi, 2015), although this aspect was not included in the current study.

Considering the phenomenon mentioned, research on continuous usage intention of e-wallets among Generation Z residing in major cities such as Seoul and Jakarta is essential to determine whether perceived usefulness, perceived ease of use, and social influence affect the continuous usage intention of e-wallets.

## **LITERATURE REVIEW**

### **E-wallet**

The potential benefits of digitization are considered important in certain processes for saving time, enhancing accessibility, and improving the transparency of information (Adeel et al., 2023; Mufingatun et al., 2020), often using artificial intelligence technologies (Haefner et al., 2021). Electronic money, which integrates with a payment account within a specific application operated by customers via mobile phones, is utilized in various financial transactions (Jack & Suri, 2011). However, electronic money encompasses two types of server-based processes: downloading applications on smartphones, known as e-wallets, and chip-based e-money distributed in the form of physical cards (Widodo et al., 2023). In Jakarta, private companies serve as main operators and collaborate with banks to offer banking-related services (Sitorus et al., 2019), while in Seoul, banks provide mobile money services by obtaining basic technology licenses from telecommunication companies (Gutierrez & Bank, 2014).

The concept of e-wallets is commonly discussed within the framework of the Unified Theory of Acceptance and Use of Technology (UTAUT) (Mufingatun et al., 2020), the Technology Acceptance Model (TAM) (Rizal, 2017), and the Theory of Planned Behavior (Aboelmaged & Gebba, 2013). TAM is often adapted to describe a user's acceptance of a specific technology based on their usage behavior (Agrebi & Jallais, 2015). Perceived usability and perceived ease of use are identified as two important variables in assessing a particular technology (Afira & Yuliati, 2019). Consumer satisfaction comes in the form of continued service utilization and the intention to recommend services to individuals within their social circles, which constitutes the variable of social influence within the expanded TAM and UTAUT models (Dahlberg et al., 2015; Mufingatun et al., 2020).

### **Usage Intention Continuity**

Reuse is defined as the plan or intention of a user who consciously decides to continue using the same system (Silva et al., 2023), and the condition in which the user intentionally makes a repurchase decision based on the experience offered by the system (Afira & Yuliati, 2019).

Similarly, users of fintech mobile services, who have experience using e-wallets, aim to reuse them (Dahlberg et al., 2015; Haefner et al., 2021). The conceptual model of intention is continuously affected by friendly technology, perceived usability, perceived ease of use, functionality, enabling technology, free goods, compatibility, and design (Revathy & Balaji, 2020). Indicators used to measure post-acceptance of information systems include: the satisfaction that users feel when using an information system that meets their expectations and confirms that using an online system can meet their expectations (Dahlberg et al., 2015).

### **Perceived Usefulness**

Perceived usefulness refers to the degree to which a person believes that using a particular system will enhance their performance (Nusraningrum et al., 2019b; Nusraningrum & Gading, 2021). There are three dimensions of perceived usefulness: a). Effectiveness - Adapted technology can maximize function in producing desired results and outputs successfully through certain processes. b). Productivity and time-saving – It measures how efficient the system is in generating output volume relative to input volume by reducing the time required for system operation. c). Importance of system to one's job - The system's output percentage in enhancing users' performance.

In this case, the user's perceived usability will increase the intent to use. When an application achieves a high percentage of perceived usability, there will be a significant impact on the continuous use of digital payment methods (Chaveesuk et al., 2022; Revathy & Balaji, 2020). Payment using an e-wallet in the perceived usability factor offers usability in terms of time and cost savings, convenience, and flexibility anywhere during transactions, thus increasing customer interest in reusing it as a payment option (Dahlberg et al., 2015; Gutierrez & Bank, 2014; Museba et al., 2021; Putri et al., 2020; Revathy & Balaji, 2020).

Previous research has demonstrated that perceived usability significantly influences the continued use of mobile banking services (Aboelmaged & Gebba, 2013; Arahita & Hatammimi, 2015; Kumar et al., 2020). The perceived usefulness of the technology platform, especially Android, has shown a positive impact on users' intentions

to continue using transactional activities (Foroughi et al., 2019; Jun et al., 2018). The first hypothesis is:

H<sub>1</sub> : Perceived usefulness influences significantly the reuse intention of e-wallets in Jakarta and Seoul.

### **Perceived Ease of Use**

Perceived ease of use refers to users' ability to adapt to a technology if the system is user-friendly and easy to operate, which yields significant results in repetitive actions (Davis, 1989). The higher the ease of use of a system, the greater the percentage of information technology consumption, which influences consumption patterns and capabilities (Arahita & Hatammimi, 2015; Davis, 1989; Usna, 2020). Design plays a crucial role in perceived ease of use, including elements such as symbols, function buttons, graphics, and user interfaces (Schierz et al., 2010; Sharma et al., 2022).

Urban dwellers highly value the time and evolution of financial transaction practices and technology using mobile banking, making their lives easier (Afira & Yuliati, 2019; Nusraningrum et al., 2019b). Perceived ease of use of e-wallets serves as one of the strongest determinants of continuous service usage. Key indicators include physical design for ease of use and a system that is easy to understand and operate (Davis, 1989; Usna, 2020).

Research on mobile payments indicates that perceived ease of use enhances the predictive power of sustainable use intentions (Poromatikul et al., 2020; Shankar et al., 2022; Singh & Srivastava, 2020). The intention for continuous system usage is strongly influenced by perceived ease of use factors including comfort, friendliness, and ease of operation (Kumar et al., 2020; Shankar et al., 2022). The second hypothesis is as follows:

H<sub>2</sub>: Perceived ease of use impacts significantly the reuse intention of e-wallets in Jakarta and Seoul.

### **Social Influences**

Social influence refers to the impact of significant individuals in social circles such as family, friends, co-workers, peers, etc. who

encourage adopting the same system as they do (Venkatesh et al., 2003). Key indicators include subjective norms, where users perceive the importance placed by individuals in their circle on whether the user should or should not and operate the system; social factors, encompassing the user's perception of the organizational culture and confidence required to operate the system; and image, reflecting the user's belief that operating the system can enhance their self-image and social status within their social class. The role of society in influencing technology acceptance is a complex issue influenced by various factors. Users often rely on their social circles to acquire more information and broaden their awareness of social acceptance in reusing the system (Hu et al., 2019; Melamed et al., 2019; Nolan et al., 2008; Spears, 2021; Verkijika & De Wet, 2018).

A study of travel mobile applications revealed that social effects particularly from family, friends, and significant parties, influenced respondents to reuse m-commerce, m-payment, and m-banking applications (Afira & Yuliati, 2019; Ciranka & van den Bos, 2019; Knoll et al., 2015; Li et al., 2018; Lim, 2022; Melamed et al., 2019; Sharma et al., 2022; Spears, 2021). The third hypothesis is as follows:

H<sub>3</sub>: Social influences impacts significantly the reuse intention of e-wallets in Jakarta and Seoul.

## **METHODOLOGY**

The research design employed was causal research aimed at specifying the extent and nature of cause-and-effect relationships. The research population consisted of e-wallet users in Seoul and Jakarta who had used the system more than once. Convenience sampling, a non-probability sampling technique was used to collect information from members of the population who were readily available. Hair et al. (2021) stated that for models with fewer than five constructs, with each construct measured by at least three indicators, a minimum sample size of 100–300 observations is necessary. Thus, the author opted to use a sample size of 240. The outer and inner data were analyzed by Partial Least Squares and the Statistical Package for the Social Sciences for descriptive statistics.

## RESULTS

**Table 1**

*Respondents' Characteristics in Jakarta and Seoul*

		Jakarta (%)	Seoul (%)
Gender	Women	87.1	72.9
	Men	12.9	27.1
Age	≥ 26	20.0	11.4
	21–25	74.3	74.3
	≤ 20	5.7	14.3
Occupation	Employee	30.0	8.6
	Entrepreneur	4.3	2.9
	Student	40.0	81.4
	Student & worker	18.6	2.9
	Looking for job	7.1	4.3
Education	High school	17.1	18.6
	Diploma	11.4	4.3
	Undergraduate	70.0	72.9
	Postgraduate	1.4	4.3

Table 1 shows that this survey was conducted in Jakarta and Seoul. Participants completed an online questionnaire administered through a Google form. The criteria required for respondents were customers who had used any e-wallet platform and conducted transactions more than once or frequently. The gender distribution was dominated by women, both in Jakarta and Seoul, with over 70 percent aged between 21 and 25 years, indicating that the respondents belonged to Generation Z. Furthermore, most respondents had received undergraduate-level education. All indicators in the structural model below have undergone a validity test and are deemed suitable for use. The indicators utilized in this study include: effectiveness, productivity and time saving, importance of the system towards one's job, physical effort, clarity and understandability, reduced mental effort, subjective norms, social factors, image, satisfaction, and confirmation.

Figure 1 depicts the structural model after the modification process wherein one item of X16 was dropped due to an outer loading value below 0.5. The structural model shows that all indicators exhibit good validity and meet the required criteria.

Figure 1

Model of Convergent Validity of Jakarta Respondents

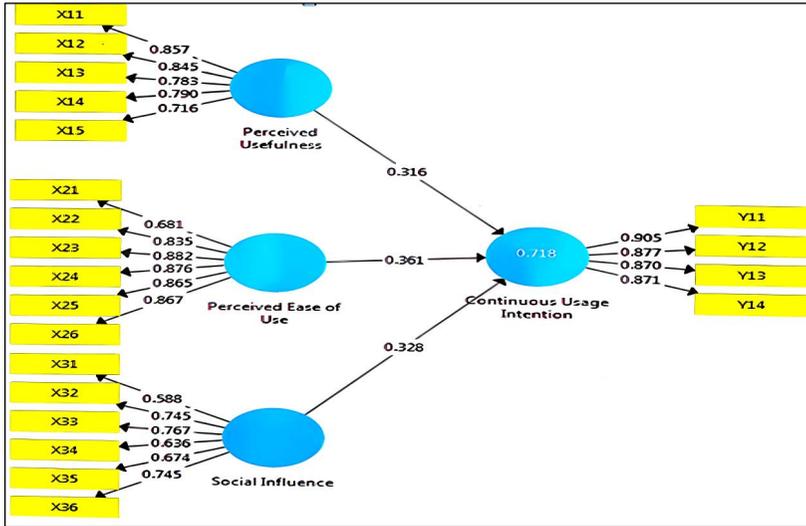


Figure 2

Model of Convergent Validity of Seoul Respondents

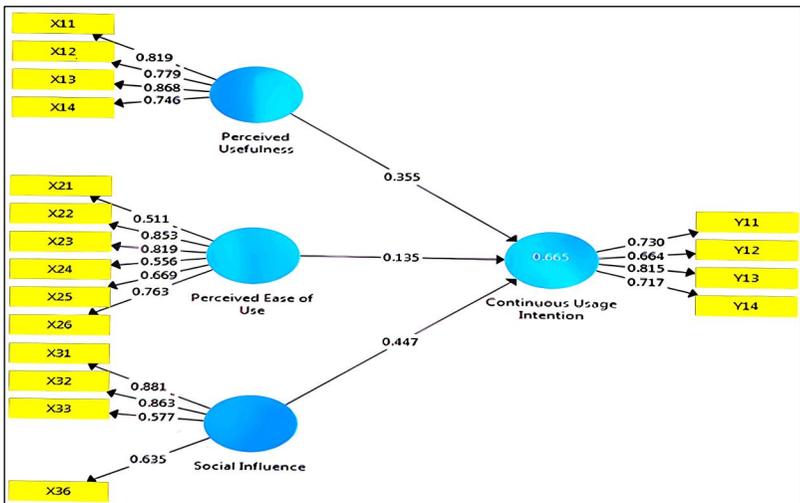


Figure 2 illustrates the structural model after the modification process, where four items of X16, X34, and X35 were omitted due to outer loading values below 0.5. Consequently, the structural model in Figure 2 shows that all indicators maintain good validity and meet the required criteria. The results of the measurement of the variance level of the construct components collected from the indicators used below confirm that the coefficient of variant extraction rate (AVE) correctly measures the latent construct targeted to meet the specified minimum limit of 0.50.

**Table 2**

*Comparison of AVE Results*

Seoul		Jakarta	
Variable	AVE	Variable	AVE
Perceived Usefulness	0.640	Perceived Usefulness	0.647
Perceived Ease of Use	0.701	Perceived Ease of Use	0.500
Social Influence	0.584	Social Influence	0.564
Continuous Usage Intention	0.776	Continuous Usage Intention	0.538

Table 3 indicates that the AVE values have good discriminant validity.

**Table 3**

*Comparison of Correlation Values between Constructs*

Seoul	Continuous Usage Intention	Perceived Ease of Use	Perceived Usefulness	Social Influence
Continuous usage intention	0.733			
Perceived ease of use	0.623	0.707		
Perceived usefulness	0.713	0.674	0.804	
Social influence Jakarta	0.734	0.556	0.598	0.751
Continuous usage intention	0.881			
Perceived ease of use	0.769	0.837		
Perceived usefulness	0.698	0.687	0.800	
Social influence	0.668	0.583	0.409	0.696

Table 4 indicates that composite reliability is greater than 0.70, which means that all variables are reliable. Table 5 indicates that the goodness-of-fit model of continuous usage intention could be explained by the three dependent variables in the model, namely perceived usefulness, perceived ease of use, and social influence,

accounting for 71.8 percent among Jakarta respondents and 66.5 percent among Seoul respondents. These results showed that 28.2 percent of the continuous usage intention construct variable in Jakarta is explained by other constructs, while 33.5 percent in Seoul is explained by other constructs.

**Table 4**

*Comparison of Composite Reliability*

Variable	Jakarta	Seoul	Note
Continuous Usage Intention	0.904	0.933	Reliable
Perceived Ease of Use	0.913	0.933	Reliable
Perceived Usefulness	0.858	0.898	Reliable
Social Influence	0.787	0.848	Reliable

**Table 5**

*Comparison of R<sup>2</sup> Values*

Endogenous Variable	R <sup>2</sup> (Jakarta)	R <sup>2</sup> (Seoul)
Continuous Usage Intention	0.718	0.665

**Table 6**

*Comparison of Hypothesis Test Results*

Sample	Variable	Original Sample	T statistics	p-values	Result
Seoul	Perceived usefulness towards continuous usage intention	0.355	2.570	0.010	Positively significant
Seoul	Perceived ease of use towards continuous usage intention	0.135	1.170	0.243	Negatively significant
Seoul	Social influence toward continuous usage intention	0.447	4.795	0.000	Positively significant
Jakarta	Perceived usefulness towards continuous usage intention	0.316	3.169	0.001	Positively significant
Jakarta	Perceived ease of use towards continuous usage intention	0.361	3.680	0.000	Positively significant
Jakarta	Social influence toward continuous usage intention	0.328	3.926	0.000	Positively significant

Table 6 presents a comparison of hypotheses test results for samples taken in Seoul and Jakarta. The results reveal that for research conducted in Seoul: a) the influence of perceived usefulness towards continuous usage intention was positive and significant, b) there was no significant effect between perceived ease of use and continuous usage intention, and c) the influence of social influence towards continuous usage intention was positive and significant. Meanwhile, the research results in Jakarta demonstrated that the influence of perceived usefulness, perceived ease of use, and social influence on continuous usage intention were all positive and significant.

## **DISCUSSIONS AND IMPLICATIONS**

The first hypothesis, consistent with the results of previous research, suggests that perceived usefulness positively and significantly affects the continuous usage intention of reusing e-wallets (Acharya et al., 2023; Alqudah et al., 2023; An et al., 2023; Khlaif et al., 2023; Li et al., 2018; Liesa-Orús et al., 2023; Núñez-Barrapedro et al., 2023; Soares et al., 2023). The findings of this research are supported by millennial respondents who believe that e-wallets can address the challenges they face in financial transactions by simplifying processes, speeding up transactions, and reducing transaction time. Before using e-wallets, they had to carry cash for buying and selling transactions. Digital e-wallets are particularly useful for Generation Z Internet users. E-wallets are easily accessible, save time, provide transparent information, and are convenient to carry everywhere, as they are integrated with specific applications based on artificial intelligence and can be operated using Android-based phones (Jack & Suri, 2011; Shankar et al., 2022). The effectiveness of using e-wallets, time savings leading to increased productivity, and the importance of an integrated system also influence the intention to continuously use e-wallets.

The second hypothesis, in line with previous studies, indicates that the perceived ease of use variable positively, and significantly affects continuous usage intention (Foroughi et al., 2019; Putri et al., 2020; Zhang et al., 2020; Zhou & Li, 2014). When e-wallet users can easily use their e-wallets without difficulty, the desire to continuously use e-wallets is heightened especially among users in Jakarta. Users in

Seoul have stated that the e-wallets they use have become a habitual part of their routine. Thus, they require minimal effort to operate and still desire to use e-wallets continuously. Therefore, the second hypothesis regarding respondents in Seoul is rejected. The finding that perceived ease of use negatively affects continuous usage intention is supported by previous research (Humbani & Wiese, 2018; Inan et al., 2023; Karjaluoto et al., 2020; Lee et al., 2021; Lee, 2021; Rahmayanti et al., 2021; Ramos, 2022; Wang et al., 2021; Xu et al., 2020). The widespread use of the Internet in Seoul compared to Jakarta influences the behavior of Generation Z in their daily activities. E-wallets, based on technology and the Internet, have facilitated financial transactions and payments for them. This behavior reinforces the research findings that Generation Z in Seoul does not encounter difficulties in using e-wallets because they are accustomed to electronic and Internet-based applications. Low physical effort, clarity, and ease of use of e-wallets, as well as minimal mental effort in operating them, will affect the intention to use e-wallets continuously.

The third hypothesis can be supported by the results of studies conducted in both cities, which showed that social influences positively and significantly affected the variables of continuous usage intention, as found in previous research (Foroughi et al., 2019; Inan et al., 2023; Ji et al., 2019; Karjaluoto et al., 2020; Lee et al., 2021; Lee, 2021; Putri et al., 2020; Rahmayanti et al., 2021; Wang et al., 2021; Xu et al., 2020; Yuan et al., 2019; Zhang et al., 2020; Zhou & Li, 2014). This indicates that important individuals in users' circle perceive using an e-wallet as valuable. It implies that the intention to use an e-wallet is largely influenced by circles such as family, friends, and social media users who see additional benefits in using an e-wallet. Generation Z, having grown up with the Internet from birth and followed by the proliferation of smartphones and advanced communication technology equipment, has experienced a more complex educational environment (Lee, 2021). Additionally, social media applications that integrate various social functions such as cooperation, sharing, freedom, openness, interaction, and engagement further contribute to the continuous use of e-wallets by Generation Z.

In terms of theoretical implications, the results support existing literature on e-wallets, perceived usefulness, perceived ease of use, social influence, and continuous usage intention in the millennial

context in Jakarta and Seoul. This research provides insights into the importance of developing electronic financial transaction systems for millennials, thus making a theoretical contribution to the sustainability of electronic financial transactions. It was found that the more developed a country is, the higher the social influence, perceived usefulness, and perceived ease of use of electronic wallets will be, increasing millennials' desire to use them. Therefore, the industrial world needs to continue innovating related to electronic devices used by millennials, while the government, as a regulator needs to ensure that e-wallets are safe to use.

As for practical implication, the use of electronic wallets has become a necessity in today's 5.0 era. This condition implies that all financial transactions no longer use physical money but shift to electronic transactions. Hence, further research could delve into including variable related to the older generation population, namely baby boomers or Generation X, to determine if e-wallets are also part of their lives.

## **CONCLUSION, LIMITATIONS, AND DIRECTIONS FOR FUTURE RESEARCH**

This research found that there is no difference in the influence of perceived usefulness on the continuous usage intention of e-wallets in Seoul and Jakarta. This indicates that the use of e-wallets has become part of the payment patterns, and habits for respondents, mostly aged between 21 and 25 years, in these two major cities. However, there were differences in the influence of perceived ease of use on usage intention continuity between Seoul and Jakarta. Respondents in Seoul indicated no issues with the use of e-wallets, whereas in Jakarta, the ease of use of e-wallets still posed challenges for continuous usage intentions. The variable of social influence significantly affects continuous usage intentions in both cities, suggesting that more people in the respondents' circle use e-wallets, leading to increased continuous usage intentions among millennials and Generation Z. These results show that Generation Z is satisfied, and confirmed in their continuous use of e-wallets. E-wallets, as a financial transaction system, need continuous improvement to enhance user perception of usability and ease of use, enabling them to save time, energy, costs,

and mitigate the transmission of Covid-19. Applications equipped with user-friendly and secure features will further increase the adoption and utilization of e-wallets.

The study was limited to Seoul, and Jakarta, focusing on young, and educated respondents. Given the widespread adoption of e-wallets, it is necessary to include respondents with more diverse characteristics in future studies. Besides student-based studies in Jakarta and Seoul, further studies should be conducted in other smaller cities to provide additional insights and validate research findings. While this research utilized a quantitative survey design, subsequent studies could employ a combination of quantitative and qualitative research methods, considering other variables such as consumer behavior that have not been previously studied.

### **ACKNOWLEDGEMENT**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### **REFERENCES**

- Aboelmaged, M., & Gebba, T. R. (2013). Mobile banking adoption: An examination of technology acceptance model and theory of planned behavior. *International Journal of Business Research and Development*, 2(1), 35-50. <https://doi.org/10.24102/ijbrd.v2i1.263>
- Acharya, N., Sassenberg, A. M., & Soar, J. (2023). Consumers' behavioural intentions to reuse recommender systems: Assessing the effects of trust propensity, trusting beliefs and perceived usefulness. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(1), 55-78. <https://doi.org/10.3390/jtaer18010004>
- Adeel, A., Batool, S., & Madni, Z.-A. (2023). Intrinsic motivation and creativity: The role of digital technology and knowledge integration ability in facilitating creativity. *International Journal of Management Studies*, 30(1), 1-36. <https://doi.org/10.32890/ijms2023.30.1.1>

- Afira, N., & Yuliati, E. (2019). Factors affecting reuse intention on mobile shopping application. *IPTEK Journal of Proceedings Series*, 1(5), 551-558. <https://doi.org/10.12962/j23546026.y2019i5.6429>
- Agrebi, S., & Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services*, 22, 16-23.
- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>
- Alqudah, O. M. A., Jarah, B. A. F., Al-Shehadeh, A. R., Al-Matarneh, Z., Soda, M. Z., & Al-Khawaja, H. A. (2023). Data processing related to the impact of performance expectation, effort expectation, and perceived usefulness on the use of electronic banking services for customers of Jordanian banks. *International Journal of Data and Network Science*, 7(2), 657-666. <https://doi.org/10.5267/j.ijdns.2023.3.006>
- An, S., Eck, T., & Yim, H. (2023). Understanding consumers' acceptance intention to use mobile food delivery applications through an extended technology acceptance model. *Sustainability (Switzerland)*, 15(1), 832; <https://doi.org/10.3390/su15010832>
- Arahita, C. L., & Hatammimi, J. (2015). Factors affecting the intention to reuse mobile banking service. *International Journal of Research in Business and Social Science*, 4(4), 15–23. <https://doi.org/10.20525/ijrbs.v4i4.15>
- Batiz-Lazo, B., Karlsson, T., & Thodenius, B. (2014). The origins of the cashless society: Cash dispensers, direct to account payments and the development of on-line real-time networks, C. 1965-1985. *Essays in Economic and Business History*, 32, 100-137.
- Chaveesuk, S., Khalid, B., & Chaiyasoonthorn, W. (2022). Continuance intention to use digital payments in mitigating the spread of Covid-19 virus. *International Journal of Data and Network Science*, 6(2), 527–536. <https://doi.org/10.5267/j.ijdns.2021.12.001>
- Choon, C. (2015, May). Card not cash is king in South Korea. *Payments Journal*. <https://www.paymentsjournal.com>
- Ciranka, S., & Vn Den Bos, W. (2019). Social influence in adolescent decision-making: A formal framework. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2019.01915>

- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14(5), 265-284. <https://doi.org/10.1016/j.elerap.2015.07.006>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319-339. <https://doi.org/10.2307/249008>
- Foroughi, B., Iranmanesh, M., & Hyun, S. S. (2019). Understanding the determinants of mobile banking continuance usage intention. *Journal of Enterprise Information Management*, 32(6), 1015–1033. <https://doi.org/10.1108/JEIM-10-2018-0237>
- Gutierrez, E., & Bank, W. (2014). *Mobile money services development the cases of the Republic of Korea and Uganda*. <http://econ.worldbank>
- Haefner, N., Wincent, J., Parida, V., & Gassmann, O. (2021). Artificial intelligence and innovation management: A review, framework, and research agenda. *Technological Forecasting and Social Change*, 162. <https://doi.org/10.1016/j.techfore.2020.120392>
- Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) Using R: A workbook* (p. 197). Springer Nature
- Hu, X., Chen, X., & Davidson, R. (2019). Social support, source credibility, social influence, and impulsive purchase behavior in social commerce. *International Journal of Electronic Commerce*, 23(3), 297-327. <https://doi.org/10.1080/10864415.2019.1619905>
- Humbani, M., & Wiese, M. (2018). A cashless society for all: Determining consumers' readiness to adopt mobile payment services. *Journal of African Business*, 19(3), 409–429. <https://doi.org/10.1080/15228916.2017.1396792>
- Inan, D. I., Hidayanto, A. N., Juita, R., Soemawilaga, F. F., Melinda, F., Puspacinantya, P., & Amalia, Y. (2023). Service quality and self-determination theory towards continuance usage intention of mobile banking. *Journal of Science and Technology Policy Management*, 14(2), <https://doi.org/10.1108/JSTPM-01-2021-0005>
- Jack, W., & Suri, T. (2011). *Mobile money: The economics of M-PESA*. <https://doi.org/10.3386/w16721>

- Jain, V. (2017). A journey towards a cashless society. In Book: *Banking sector in Oman: Strategic issues, challenges and future scenarios* (pp. 61-73). <https://www.researchgate.net/publication/315823434>
- Ji, Z., Yang, Z., Liu, J., & Yu, C. (2019). Investigating users' continued usage intentions of online learning applications. *Information (Switzerland)*, 10(6). <https://doi.org/10.3390/info10060198>
- Jun, S.-P., Yoo, H. S., & Choi, S. (2018). Ten years of research change using Google Trends: From the perspective of big data utilizations and applications. *Technological Forecasting and Social Change*, 130, 69–87. <https://doi.org/10.1016/j.techfore.2017.11.009>
- Karjaluoto, H., Shaikh, A. A., Leppäniemi, M., & Luomala, R. (2020). Examining consumers' usage intention of contactless payment systems. *International Journal of Bank Marketing*, 38(2), 332-351. <https://doi.org/10.1108/IJBM-04-2019-0155>
- Khlaif, Z. N., Sanmugam, M., & Ayyoub, A. (2023). Impact of technostress on continuance intentions to use mobile technology. *Asia-Pacific Education Researcher*, 32(2), 151-162. <https://doi.org/10.1007/s40299-021-00638-x>
- Kin, N., & Farida, N. (2016). Effects of convenience online shopping and satisfaction on repeat-purchase intention among students of higher institutions in Indonesia. *Journal of Internet Banking and Commerce*, 21(2). <http://www.icommercecentral.com>
- Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S. J. (2015). Social influence on risk perception during adolescence. *Psychological Science*, 26(5). <https://doi.org/10.1177/0956797615569578>
- Kumar, A., Dhingra, S., Batra, V., & Purohit, H. (2020). A framework of mobile banking adoption in India. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2). <https://doi.org/10.3390/JOITMC6020040>
- Lashitew, A. A., Tulder, R., & Liasse, Y. (2019). Mobile phones for financial inclusion: What explains the diffusion of mobile money innovations? *Research Policy*, 48(5), 1201–1205.
- Lee, S. E., Jung, H. J., & Lee, K. H. (2021). Motivating collaborative consumption in fashion: Consumer benefits, perceived risks, service trust, and usage intention of online fashion rental services. *Sustainability*, 13(4). <https://doi.org/10.3390/su13041804>
- Lee, Y. K. (2021). Impacts of digital technostress and digital technology self-efficacy on fintech usage intention of Chinese

- gen Z consumers. *Sustainability (Switzerland)*, 13(9). <https://doi.org/10.3390/su13095077>
- Li, K., Zhang, L., & Huang, H. (2018). Social influence analysis: Models, methods, and evaluation. *Engineering*, 4(1). <https://doi.org/10.1016/j.eng.2018.02.004>
- Liebana- Cabanillas, F., Marinkovic, V., Ramos de Luna, I., & Kalinic, Z. (2018). Predicting the determinants of mobile payment acceptance: A hybrid-neural network approach SEM. *Technological Forecasting and Social Change*, 12(C), 117–130.
- Liesa-Orús, M., Latorre-Cosculluela, C., Sierra-Sánchez, V., & Vázquez-Toledo, S. (2023). Links between ease of use, perceived usefulness and attitudes towards technology in older people in university: A structural equation modelling approach. *Education and Information Technologies*, 28(3). <https://doi.org/10.1007/s10639-022-11292-1>
- Lim, W. M. (2022). Toward a theory of social influence in the new normal. *Activities, Adaptation and Aging*, 46(1). <https://doi.org/10.1080/01924788.2022.2031165>
- Melamed, D., Savage, S. V., & Munn, C. (2019). Uncertainty and social influence. *Socius*, 5. <https://doi.org/10.1177/2378023119866971>
- Mufingatun, M., Prijanto, B., & Dutt, H. (2020). Analysis of factors affecting adoption of mobile banking application in Indonesia: An application of the unified theory of acceptance and use of technology (UTAUT2). *BISMA*, 12(2), 88–106.
- Museba, T. J., Ranganai, E., & Gianfrate, G. (2021). Customer perception of adoption and use of digital financial services and mobile money services in Uganda. *Journal of Enterprising Communities*, 15(2), 177-203. <https://doi.org/10.1108/JEC-07-2020-0127>
- Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, 34(7). <https://doi.org/10.1177/0146167208316691>
- Núñez-Barriopedro, E., Cuesta-Valiño, P., & Mansori-Amar, S. (2023). The role of perceived usefulness and annoyance on programmatic advertising: The moderating effect of Internet user privacy and cookies. *Corporate Communications*, 28(2). <https://doi.org/10.1108/CCIJ-03-2022-0033>
- Nusraningrum, D., & Gading, D. K. (2021). Purchase intention of pregnancy pillow: Price, brand awareness, and brand image. *European Journal of Psychology of Education: Psychology and Education*, 58(2), 4536–4550. [www.psychologyandeducation.net](http://www.psychologyandeducation.net)

- Nusraningrum, D., Pangestu, P. R., & Alaydrus, L. L. (2019a). *Web-based ticket's purchase*. 326–333. <https://www.ijrte.org/wp-content>
- Nusraningrum, D., Pangestu, P. R., & Alaydrus, L. L. (2019b). Web-based ticket's purchase. *International Journal of Recent Technology and Engineering*, 8(2s), 326–333.
- Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404–414. <https://doi.org/10.1016/j.chb.2016.03.030>
- Poromatikul, C., De Maeyer, P., Leelapanyalert, K., & Zaby, S. (2020). Drivers of continuance intention with mobile banking apps. *International Journal of Bank Marketing*, 38(1). <https://doi.org/10.1108/IJBM-08-2018-0224>
- Pritchard, J. (2022, April 19). *The Pros and Cons of a Cashless Society*. <https://www.thebalancemoney.com/pros-and-cons-of-moving-to-a-cashless-society-4160702>
- Putri, A. F., Handayani, P. W., & Shihab, M. R. (2020). Environment factors affecting individual's continuance usage of mobile payment technology in Indonesia. *Cogent Engineering*, 7(1), 1–18. <https://doi.org/10.1080/23311916.2020.1846832>
- Rahmayanti, P. L. D., Widagda, I. G. N. J. A., Yasa, N. N. K., Giantari, I. G. A. K., Martaleni, Sakti, D. P. B., Suwitho, & Anggreni, P. (2021). Integration of technology acceptance model and theory of reasoned action in predicting e-wallet continuous usage intentions. *International Journal of Data and Network Science*, 5(4). <https://doi.org/10.5267/j.ijdns.2021.8.002>
- Ramos, K. (2022). Factors influencing customers' continuance usage intention of food delivery apps during Covid-19 quarantine in Mexico. *British Food Journal*, 124(3). <https://doi.org/10.1108/BFJ-01-2021-0020>
- Revathy, & Balaji, P. (2020). Determinant of behavioural intention on e-wallet: An empirical examination in amid of Covid-19 lockdown period. *International Journal of Management (IJM)*, 11(6), 92–104. <https://doi.org/10.34218/IJM.11.6.2020.008>
- Rizal, A. (2017). Analisis penerapan project management information system (PMIS) menggunakan metode technology acceptance model (TAM) Studi Kasus pt. Indosat, Tbk. *Jurnal Telekomunikasi dan Komputer*, 5(1). <https://doi.org/10.22441/incomtech.v5i1.1131>

- Schierz, P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, 9(3), 209–216. <https://doi.org/10.1016/j.elerap.2009.07.005>
- Shankar, A., Tiwari, A. K., & Gupta, M. (2022). Sustainable mobile banking application: A text mining approach to explore critical success factors. *Journal of Enterprise Information Management*, 35(2). <https://doi.org/10.1108/JEIM-10-2020-0426>
- Sharma, M., Banerjee, S., & Paul, J. (2022). Role of social media on mobile banking adoption among consumers. *Technological Forecasting and Social Change*, 180. <https://doi.org/10.1016/j.techfore.2022.121720>
- Silva, F. A., Shojaei, A. S., & Barbosa, B. (2023). Chatbot-based services: A study on customers' reuse intention. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(1). <https://doi.org/10.3390/jtaer18010024>
- Silver, L. (2019, February 5). *Smartphone ownership is growing rapidly around the world, but is not always equally*. Pew Research Center.
- Singh, S., & Srivastava, R. K. (2020). Understanding the intention to use mobile banking by existing online banking customers: An empirical study. *Journal of Financial Services Marketing*, 25(3–4). <https://doi.org/10.1057/s41264-020-00074-w>
- Sitorus, H. M., Govindaraju, R., Wiratmadja, I. I., & Sudirman, I. (2019). Examining the role of usability, compatibility and social influence in mobile banking adoption in Indonesia. *International Journal of Technology*, 10(2). <https://doi.org/10.14716/ijtech.v10i2.886>
- Soares, J. C., Limongi, R., De Sousa Júnior, J. H., Santos, W. S., Raasch, M., & Hoeckesfeld, L. (2023). Assessing the effects of covid-19-related risk on online shopping behavior. *Journal of Marketing Analytics*, 11(1). <https://doi.org/10.1057/s41270-022-00156-9>
- Sorensen, E. (2022, April). *Different types of mobile payments explained*. Mobile Transaction. <https://www.mobiletransaction.org/different-types-of-mobile-payments>
- Spears, R. (2021). Social influence and group identity. *Annual Review of Psychology*, 72. <https://doi.org/10.1146/annurev-psych-070620-111818>
- Suleman, D., Nusraningrum, D., Ali, H., & Mukti Ali, M. (2019). Perceived ease of use, trust and risk toward attitude and intention in shopping for online fashion products In Indonesia. *Archives*

- of Business Research*, 7(4), 240–253. <https://doi.org/10.14738/abr.74.6482>
- Usna, N. (2020). Effect of perceived ease of use, perceived usefulness, and its impact on behavioural intention to use. *International Journal of Advanced Research*, 8(12), 439-444
- Venkatesh, Morris, Davis, & Davis. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Verkijika, S. F., & De Wet, L. (2018). E-government adoption in sub-Saharan Africa. *Electronic Commerce Research and Applications*, 30, 83–93. <https://doi.org/10.1016/j.elerap.2018.05.012>
- Wang, J., Shen, X., Huang, X., & Liu, Y. (2021). Influencing factors of the continuous usage intention of consumers of online food delivery platform based on an information system success model. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.716796>
- Widodo, W., Triyono, M. B., Sudira, P., & Mutohhari, F. (2023). Building sustainable creative economy in society through the mediation role of innovation behavior. *Sustainability (Switzerland)*, 15(14). <https://doi.org/10.3390/su151410860>
- World, G. (n.d.). *Cash report reveals global cash payment are rising*. 2018.
- Xu, Y., Shieh, C. H., van Esch, P., & Ling, I. L. (2020). AI customer service: Task complexity, problem-solving ability, and usage intention. *Australasian Marketing Journal*, 28(4). <https://doi.org/10.1016/j.ausmj.2020.03.005>
- Yuan, Y., Lai, F., & Chu, Z. (2019). Continuous usage intention of Internet banking: A commitment-trust model. *Information Systems and E-Business Management*, 17(1). <https://doi.org/10.1007/s10257-018-0372-4>
- Zhang, T., Tao, D., Qu, X., Zhang, X., Zheng, J., Zhu, H., & Zhu, H. (2020). Automated vehicle acceptance in China: Social influence and initial trust are key determinants. *Transportation Research Part C: Emerging Technologies*, 112, 220–233.
- Zhou, T., & Li, H. (2014). Understanding mobile SNS continuance usage in China from the perspectives of social influence and privacy concern. *Computers in Human Behavior*, 37. <https://doi.org/10.1016/j.chb.2014.05.008>