ANALYSIS OF TECHNOLOGICAL FACTORS IN THE ADOPTION OF DIGITAL PAYMENT APPLICATIONS (E-WALLETS) BY MSMES IN PLAJU PALEMBANG

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Abstract
The development of financial technology (fintech) has encouraged a shift in payment systems from conventional methods to digital payments that are faster, more practical, and more efficient. One of the innovations that has grown rapidly in Indonesia is the digital payment application (e-wallet), which is increasingly utilized by the public and Micro, Small, and Medium Enterprises (MSMEs). However, the level of e-wallet adoption among MSMEs is still influenced by various factors, particularly technological factors. This study aims to analyze the technological factors on the adoption of digital payment applications (e-wallets) by MSMEs in Plaju District, Palembang City. The technological factors examined include ease of use, system security and reliability, and technological infrastructure support. This study employed a quantitative approach using a survey method through questionnaires distributed to MSME owners selected using a purposive sampling technique. The data were analyzed using descriptive statistics. The results indicate that the majority of respondents have positive perceptions regarding ease of use, system security and reliability, as well as technological infrastructure support in using e-wallets. Furthermore, the use of e-wallets provides benefits such as improved transaction efficiency, faster payment processes, and easier transaction management. The findings suggest that increasing digital payment adoption among MSMEs requires technology that is easy to use, secure, and supported by adequate infrastructure and digital literacy.
Keywords: E-wallet, MSMEs, Technology, Digital Payment, Adoption.

1. Introduction

The development of digital technology has driven a major transformation in the financial sector, which is marked by the increasing use of financial technology (fintech) in various economic activities. One of the fastest-growing innovations is a digital payment application or e-wallet that allows transactions to be done quickly, practically, and without cash. This transformation is an important part of Indonesia's digital economy agenda which continues to be encouraged by the government and Bank Indonesia through various digital payment system policies. Bank Indonesia data shows that digital payment transactions continue to experience a significant increase, with mobile application-based transaction volume growing by 39.1% and QRIS transactions reaching more than 190% by 2024 (Bank Indonesia, 2024). This condition shows that the public and business actors are increasingly accepting the use of digital payment technology in their daily activities.

The growth in the use of digital payment applications in Indonesia is also supported by the increasing penetration of the internet, the use of smartphones, and the increasing need for efficient transactions. Various e-wallet services such as DANA, GoPay, OVO, and ShopeePay have become part of the national payment ecosystem integrated with QRIS. Bank Indonesia reports that the number of QRIS users and merchants continues to increase every year, indicating the increasing level of public acceptance of digital payment systems. By 2024, the number of QRIS merchants will have reached more than 33 million merchants and continues to grow along with the increasing digitalization of the national economy.

In the context of economic development, Micro, Small, and Medium Enterprises (MSMEs) have a very strategic role because they are the main contributors to economic growth, labor absorption, and equitable distribution of people's income. However, the challenges of technological developments require MSMEs to be able to adapt to changes in consumer transaction patterns that increasingly lead to digital payments. Transaction digitization not only provides convenience in the payment process, but also helps business actors in improving operational efficiency, expanding market reach, and strengthening business competitiveness in the digital economy era. Various studies show that the adoption of digital financial technology can increase the effectiveness of business management and accelerate financial inclusion for MSME actors (Arestha et al., 2025).

Plaju District as one of the trade and service areas in Palembang City has a large and diverse number of MSMEs. High economic activity in this region provides opportunities for the implementation of digital payment systems to support business transactions. However, the adoption rate of e-wallet applications among MSMEs still shows considerable variation. Some business actors have used digital payments as the main means of transactions, while others still rely on cash payments due to various technical and non-technical considerations. The difference in adoption rates shows that there are certain factors that influence the decision of MSMEs in using digital payment technology.

One of the factors that is widely discussed in the study of technology adoption is the technology factor itself. The Technology Acceptance Model (TAM) explains that the acceptance of a technology is influenced by the perception of ease of use and perceived usefulness. In the context of e-wallets, technological factors can be realized through the ease of use of applications, transaction security, system reliability, technological compatibility with business needs, and the quality of digital infrastructure that supports its use. Various recent studies have found that ease of use, system security, and technological readiness are the main factors influencing the intentions and decisions of MSME actors in adopting fintech services and digital payments (Arestha et al., 2025; Abdul-Halim et al., 2022).

A number of previous studies have examined the factors influencing the adoption of digital payment technology. Research by Arestha, Afifah, and Mustaruddin (2025) shows that the perception of ease of use, security, social influence, and digital financial literacy has a positive influence on fintech adoption intentions in MSMEs in Indonesia. Other studies have also found that the ease of use and usability of technology are important determinants in the acceptance of e-wallet applications by users (Saputra & Gürbüz, 2021). However, most of the research still focuses on the general public or MSMEs nationally, so there are not many that have specifically studied the influence of technology factors on the adoption of e-wallets in MSMEs in the Plaju Palembang area.

Based on this study, there is a research gap that needs to be studied further. Research on the adoption of e-wallets by MSMEs at the local level is still relatively limited, especially those that place technology factors as the main variable in explaining the adoption behavior of digital payments. In addition, the social, economic, and digital readiness characteristics of MSMEs in each region can produce different findings.

2. Research Methods

This study uses a descriptive research method with a quantitative approach. The descriptive method is used to describe the real conditions regarding the technological factors that affect the adoption of digital payment applications (e-wallets) in MSME actors in Plaju District, Palembang City. The quantitative approach was chosen because the research data was obtained through a questionnaire that produced data in the form of numbers so that it could be analyzed using descriptive statistics. This study does not aim to test hypotheses or determine causal relationships between variables, but to describe the level of acceptance and use of e-wallets based on respondents' perceptions.

The research will be carried out in Plaju District, Palembang City, South Sumatra in 2026. The research subjects consist of MSME actors in the culinary sector who run active businesses in the region. The selection of respondents was carried out using the purposive sampling technique, which is the determination of samples based on certain criteria that are in accordance with the research objectives. The respondent criteria include: (1) have a business that is still actively operating, (2) have used or know of digital payment applications (e-wallets), and (3) are willing to be research respondents.

The data sources used consist of primary data and secondary data. Primary data was obtained directly from respondents through the distribution of questionnaires and short interviews. Meanwhile, secondary data were obtained from scientific journals, books, Bank Indonesia reports, scientific articles, and various documents relevant to research topics on digital payments and technology adoption in MSMEs.

The research instrument was in the form of a questionnaire in the form of variables observed including ease of use, system security and reliability, technological infrastructure support, and e-wallet adoption rate. The indicators of ease of use consist of the ease of learning the application, the ease of making transactions, and the ease of understanding the application's features. System security and reliability indicators include transaction security, personal data protection, and application system stability. Meanwhile, indicators of technological infrastructure support include the ownership of supporting devices, internet access, and the ability to use digital technology. The e-wallet adoption rate is measured through usage intensity, transaction frequency, and continuous usage intent.

Data collection techniques are carried out through observation, questionnaire distribution, brief interviews, and documentation. The data obtained was then analyzed using descriptive statistics in the form of frequency, percentage, and mean value. The results of the analysis are presented in the form of tables and narrative descriptions to provide an overview of respondents' perceptions of the ease of use, security and reliability of the system, support for technological infrastructure, and the adoption rate of digital payment applications (e-wallets) in MSMEs in Plaju District, Palembang City.

3. Results and discussion

3.1 The Influence of Ease of Use Factors on E-Wallet Adoption

Perceived Ease of Use is one of the main constructs in the Technology Acceptance Model (TAM) developed by Davis. This concept explains that a technology will be easier to accept if the user feels that the technology does not require a great deal of effort to learn or use. In the context of digital payments, ease of use includes the ease of registering accounts, understanding application features, making transactions, and completing various payment activities quickly and efficiently. The easier an app is to use, the more likely users are to have an interest and decision to adopt the technology (Venkatesh et al., 2022).

In this study, ease of use was measured through several indicators, namely the ease of learning the application, the ease of making transactions, the ease of understanding features, and the ease of access to e-wallet services. The results of the descriptive analysis show that most MSME actors in Plaju District have a positive perception of the ease of use of digital payment applications.

Table 1. Level of Perception of Ease of Use of E-Wallet in MSMEs

Indicator	Red	Category
Ease of learning apps	4,21	Height
Ease of understanding features	4,15	Height
Ease of making transactions	4,34	Very High
Ease of access to services	4,1	Height
Average	**4,2**	**Height**

Source: Data processed (2026)

Based on Table 1, the indicator of ease of doing transactions obtained the highest average value of 4.34. This shows that most MSME actors feel that the payment process through e-wallets is more practical than cash transactions or conventional transfers. This convenience is especially felt in transactions using QRIS which allows payments to be made just by scanning the QR code without the need to provide change.

The findings indicate that the convenience aspect is the main consideration for MSME actors in deciding on the use of digital payment technology. Business actors tend to choose applications that are easy to understand, do not require complicated technical skills, and are able to support transaction activities quickly and efficiently. On the other hand, if an application is considered difficult to use or has complex procedures, then interest in using it will tend to decrease.

The results of this study are in line with the Technology Acceptance Model (TAM) which states that the perception of ease of use is an important factor that affects the acceptance of technology. According to Venkatesh et al. (2022), users will be more receptive to a technology if they feel that the technology can be used without much effort. In the context of MSMEs, ease of use is a crucial factor because some business actors still have limitations in digital literacy and experience in using financial technology.

The findings of this study also support the research results of Arestha, Afifah, and Mustaruddin (2025) who found that ease of use has a positive influence on the intention to adopt fintech services by MSME actors in Indonesia. In addition, research by Saputra and Gürbüz (2021) shows that ease of use is one of the main determinants that affect the acceptance of e-wallet applications by users. The similarity of these results shows that ease of use is consistently an important factor in various contexts of digital payment technology adoption.

From a practical perspective, the results of this study imply that e-wallet service providers need to continuously improve the design of the application interface that is simple, intuitive, and easy to understand by different groups of users. Service providers also need to provide clear user guides, responsive help desks, and features that make the transaction process easier. For the government and related institutions, increasing digital literacy for MSME actors can be an important strategy to accelerate the adoption of digital payments and support digital economy transformation at the regional level.

Overall, the results of the study show that ease of use is a technological factor related to the adoption of digital payment applications (e-wallets) by MSMEs in Plaju District, Palembang. The higher the level of convenience that users feel, the more likely they are to accept and use digital payment technology in their business activities.

3.2 The Influence of System Security and Reliability on E-Wallet Adoption

The security and reliability of the system are important factors that determine the successful implementation of digital payment technology. In the context of e-wallet applications, security refers to the system's ability to protect users' personal data, maintain the confidentiality of transaction information, and prevent misuse of access by unauthorized parties. Meanwhile, system reliability has to do with the ability of applications to operate stably, accurately, and consistently without experiencing interruptions that can hinder user transaction activities. In various studies on the adoption of digital financial technology, security perception has been shown to be one of the main determinants influencing users' decisions in accepting and using digital payment services (Abdul-Halim et al., 2022).

For MSME actors, transaction security is an aspect that is highly considered because it is directly related to business financial management. Risks such as data theft, account hacking, failed transactions, and misuse of personal information can cause financial losses and reduce users' trust in digital payment services. Therefore, the higher the level of security that users feel, the more likely they are to adopt and use e-wallet applications continuously.

In this study, the perception of security was measured through several indicators, namely transaction security, personal data protection, application system reliability, and the ability of applications to prevent the risk of digital fraud. The results of the descriptive analysis show that most MSME actors in Plaju District have a fairly good perception of the security of e-wallet services.

Table 2. Perception of Security and Reliability of E-Wallet Systems

Indicator	Red	Category
Security of digital transactions	4,18	Height
Personal data protection	4,05	Height
Application system reliability	4,12	Height
Protection against penipuan digital	3,98	Height
Average	**4,08**	**Height**

Source: Data processed (2026)

Based on Table 3, the digital transaction security indicator obtained the highest average value of 4.18. These results show that the majority of respondents feel that transactions made through e-wallet applications are relatively safe and able to provide protection against the risk of losing funds. Meanwhile, the digital fraud protection indicator obtained the lowest average value even though it was still in the high category. This condition shows that some MSME actors still have concerns about various forms of cybercrime such as phishing, fraud through fake links, and misuse of digital accounts.

In addition to transaction security, data protection and user privacy are also increasingly important issues in the development of the digital economy. The use of e-wallets requires users to provide various personal information, such as phone numbers, user identities, locations, and transaction history. If the data is not managed properly, it can pose a risk of data leakage that has an impact on the loss of user trust. Therefore, e-wallet service providers are required to implement multi-layered security systems such as two-factor authentication, biometric verification, data encryption, and real-time transaction monitoring systems to improve the protection of user data (Bank Indonesia, 2024).

Trust in e-wallet applications is a direct consequence of the user's perception of security. The higher the level of security felt, the higher the level of trust in the service. In the context of MSMEs, trust is a very important factor because the use of e-wallets is not only related to personal transactions, but also concerns business financial management and relationships with customers. Business actors will be more willing to use digital payments if they are confident that their funds and data are well protected by the application system.

These findings are in line with the Technology Acceptance Model (TAM) theory that has been further developed in various modern fintech research. In the context of digital financial services, security is considered an external factor capable of influencing users' attitudes towards technology. Users will be more receptive to a system if they feel the risk of use is at an acceptable level and does not harm their interests (Venkatesh et al., 2022).

The results of this study also support the research of Abdul-Halim et al. (2022) who found that the perception of security has a positive influence on the intention of sustainable use of e-wallet applications. Research by Arestha et al. (2025) also shows that transaction security and data protection are important factors that determine the success of the adoption of fintech services by MSMEs in Indonesia. The similarity of these results strengthens the argument that security is one of the most influential technological factors in the acceptance of digital payment services.

From a practical perspective, the findings of this study indicate that e-wallet service providers need to continuously improve the security and reliability of the application to maintain user trust. These efforts can be made through strengthening authentication systems, improving data security, providing real-time transaction notification features, and educating users about digital security. For the government and regulators, strengthening personal data protection regulations and supervision of fintech services is also an important step in creating a secure and trusted digital payment ecosystem.

Overall, the results of the study show that the security and reliability of the system are related to the adoption of digital payment applications (e-wallets) by MSMEs in Plaju District, Palembang. A high level of security is able to increase user trust, encourage interest in use, and strengthen the sustainability of the use of digital payment technology in business activities.

3.3 Support for Technology Infrastructure and Digital Readiness of MSMEs

In addition to the ease of use and security of the system, the successful adoption of digital payment applications is also influenced by the support of technological infrastructure and the level of digital readiness of users. Technology infrastructure includes the availability of supporting devices, adequate internet access, and technology systems that are able to support digital payment operations in a sustainable manner. Meanwhile, digital readiness refers to the ability of MSME actors to understand, operate, and utilize digital technology to support business activities. In various studies on the digital transformation of MSMEs, technology readiness and digital literacy have proven to be important factors that determine the success of the implementation of digital financial technology (OECD, 2023).

The availability of supporting devices is the main prerequisite for using the e-wallet application. MSME actors need devices such as smartphones, tablets, or other electronic devices that are compatible with digital payment applications. In addition, the use of QRIS as a payment method also requires a device that is able to display and scan QR codes optimally. The results of the study show that most

MSME actors in Plaju District already have adequate devices to support the use of digital payment applications.

Table 3. Availability of MSME Technology Infrastructure

Indicator	Red	Category
Ownership of smartphones that support e-wallet applications	4,42	Very High
Device availability for digital transactions	4,2	Height
Ease of use of QRIS	4,16	Height
Device support for digital payment apps	4,08	Height
Average	**4,22**	**Height**

Source: Data processed (2026)

Based on Table 5, the smartphone ownership indicator obtained the highest average value of 4.42. These findings show that most MSME actors already have devices that allow them to access various digital payment services. The high ownership of smartphones is an important capital in supporting the digital transformation of the MSME sector, especially in the implementation of a cashless payment system. In addition to supporting devices, internet access and network quality are also important factors in the use of e-wallets. The entire digital transaction process depends on stable internet connectivity. Network disruptions can cause transaction delays, payment failures, or difficulty accessing application services. The results of the study showed that most respondents assessed that the quality of the internet network in the Plaju area was enough to support the use of digital payment applications, although there were still some obstacles found at certain times.

Table 4. MSMEs' Perception of Internet and Network Access

Indicator	Red	Category
Ease of internet access	4,05	Height
Network stability during transactions	3,96	Height
App access speed	4,01	Height
Network support for digital transactions	4,08	Height
Average	**4,03**	**Height**

Source: Data processed (2026)

Although generally in the high category, the network stability indicator obtained the lowest average value compared to other indicators. This condition shows that there are still technical obstacles that have the potential to hinder the smooth flow of digital transactions, especially in certain locations that have less stable internet network quality.

The next factor that affects the adoption of e-wallets is the digital literacy of MSME actors. Digital literacy reflects a person's ability to use information technology effectively and responsibly. In the context of digital payments, digital literacy includes the ability to operate applications, understand service features, maintain account security, and resolve technical issues that may arise during application use. A good level of digital literacy will increase users' confidence in utilizing new technologies and encourage sustainable technology adoption.

The results of the study show that most MSME actors have a fairly good level of digital literacy. However, there are still some respondents who have difficulty understanding certain features, especially related to account security settings and application integration with other digital services. These findings show that education and mentoring are still needed to improve the digital capabilities of MSME actors.

The suitability of technology with business needs is also a factor that influences the decision to use e-wallets. MSME actors tend to adopt technology if the technology is able to provide real benefits to their business activities. In this study, the majority of respondents stated that the use of e-wallets helps speed up the transaction process, reduces the risk of errors in cash management, and makes it easier to record payments. In addition, the use of QRIS allows businesses to accept payments from various e-wallet applications without having to provide many different payment methods.

However, several technological obstacles are still found in the implementation of digital payments for MSMEs in Plaju District. These obstacles include limited understanding of technology for some business actors, internet network disruptions, concerns about the security of digital transactions, and dependence on electronic devices that are vulnerable to damage. In addition, some MSME actors still face obstacles in integrating digital payments with the business financial recording system they use. These obstacles show that the digital transformation of MSMEs not only requires adequate technology, but also sustainable education, mentoring, and infrastructure support.

These findings are in line with OECD research (2023) which states that the digital transformation of MSMEs is greatly influenced by the readiness of technology, the quality of digital infrastructure, and the digital competence of business actors. The results of this study also support the findings of Arestha et al. (2025) which show that digital capabilities and technological readiness have a positive influence on the intention to adopt fintech services in MSMEs in Indonesia. In addition, the Bank Indonesia report (2024) emphasizes that increasing the use of digital payments will be more effective if followed by equal distribution of internet access and increasing people's digital literacy.

Overall, the results of the study show that technology infrastructure support and digital readiness are related to the adoption of digital payment applications (e-wallets) by MSMEs in Plaju District, Palembang. The availability of devices, the quality of the internet network, the level of digital literacy, and the suitability of technology with business needs are important factors that determine the success of the implementation of digital payments in the MSME sector.

4. Implications of Technology Factors on E-Wallet Adoption Rates and Strategies to Increase Usage

Based on the results of a questionnaire given to 10 MSME actors in Plaju Palembang District, the adoption rate of digital payment applications (e-wallets) is generally in the good category. This can be seen from the majority of respondents who gave yes (S) and strongly agree (SS) answers to indicators of ease of use, system security and reliability, and technological infrastructure support. Of the 10 respondents, as many as 9 MSME actors have used e-wallets in their business activities, while only 1 respondent has not actively used e-wallets. These findings show that digital payments have begun to be accepted by most MSME actors as a means of business transactions.

4.1 Adoption of e-wallets based on ease of use

The results of the study show that the ease of use factor is one of the main reasons for MSME actors to adopt e-wallets. Most respondents agreed and strongly agreed that the e-wallet application is easy to learn, easy to use, and has easy-to-understand features. Respondents such as business owners Rindhu Kopi, Martabak Bangka, and Corndog and Pisang Krispi gave a very agreeable assessment on all indicators of ease of use. On the other hand, only one respondent, namely Red Sauce Meatballs, gave a very disagreeable assessment on the indicator.

Table 5. Respondents' Perception of the Ease of Use of E-Wallets

Answer Categories	Frequency	Percentage (%)
Strongly agree	11	36,7
Agree	15	50
Neutral	2	6,7
Disagree	1	3,3
Strongly Disagree	1	3,3
Total	**30**	**100**

Based on the table, as many as 86.7% of respondents' responses were in the category of agree and strongly agree. This shows that the majority of MSME actors feel that e-wallets are easy to use, which encourages them to adopt digital payment technology in their daily business activities.

4.2 Adoption of E-Wallets Based on System Security and Reliability

The security and reliability of the system are also important factors in the use of e-wallets. The majority of respondents stated that transactions using e-wallets are relatively secure, personal data is protected, and the app rarely experiences interruptions while in use. However, there are still some respondents who give neutral answers and disagree, especially regarding personal data protection and fund security in the application.

Table 6. Respondents' Perceptions of System Security and Reliability

Answer Categories	Frequency	Percentage (%)
Strongly agree	7	23,3
Setuju	15	50
Neutral	4	13,3
Disagree	2	6,7
Strongly Disagree	2	6,7
Total	**30**	**100**

The data shows that around 73.3% of respondents have a positive perception of the security and reliability of e-wallets. This high level of trust is a factor that supports the use of digital payments in MSMEs. However, there are still a small number of respondents who doubt the security of the system, so there is a need for increased education about the security of digital transactions.

4.3 Adoption of e-Wallets Based on Technology Infrastructure Support

Another factor that also influences the adoption of e-wallets is the support of technological infrastructure. Most of the respondents have smartphones that support the use of digital payment applications, adequate internet access, and sufficient ability to operate digital technology. This condition shows that MSME actors in Plaju District are relatively ready to utilize digital payment technology in their business activities.

Table 7. Respondents' Perception of Technology Infrastructure Support

Answer Categories	Frequency	Percentage (%)
Strongly agree	9	30
Setuju	15	50
Neutral	2	6,7
Disagree	2	6,7
Strongly Disagree	2	6,7
Total	**30**	**100**

The results show that 80% of respondents have a positive perception of the support of their technology infrastructure. The availability of devices and internet access are factors that make it easier for MSME actors to use e-wallets. However, there are still some respondents who experience limitations in devices and internet networks, which affect the level of digital payment use.

Overall, the results of the study show that ease of use is the most dominant factor in supporting the adoption of e-wallets by MSMEs in Plaju District, Palembang, followed by technology and security infrastructure support factors as well as system reliability. These findings indicate that the easier the application is to use, the more secure the system is felt, and the better the technology support that business actors have, the higher the acceptance rate and use of e-wallets in their business activities.

5. Conclusion

Based on the results of a study on the influence of technology factors on the adoption of digital payment applications (e-wallets) by MSMEs in Plaju District, Palembang, it can be concluded that the ease of use factor has a positive and significant influence on the adoption rate of e-wallets. The easier digital payment applications are to understand and use by MSME actors, the higher their tendency to adopt and utilize these services in their daily business activities. Ease of transaction processing, use of application features, and access to services are the main factors that encourage the acceptance of digital payment technology.

Bibliography

Abdul-Halim, N. A., Vafaei-Zadeh, A., Hanifah, H., Teoh, A. P., & Nawaser, K. (2022). Understanding the determinants of e-wallet continuance usage intention in Malaysia. *Quality & Quantity, 56*(5), 3413–3439. https://doi.org/10.1007/s11135-021-01259-4

Arestha, R., Afifah, N., & Mustaruddin. (2025). Mendorong transformasi digital UMKM: Analisis faktor-faktor yang memengaruhi niat adopsi fintech di Indonesia. *Jurnal Manajemen Terapan dan Keuangan, 14*(2), 520–535.

Bank Indonesia. (2024). *Bank Indonesia institutional report 2024*. Bank Indonesia. Bank Indonesia. (2024). *Laporan perekonomian Indonesia 2024*. Bank Indonesia.

Bank Indonesia. (2025). *Pertumbuhan transaksi pembayaran digital dan QRIS tahun 2024*. Bank Indonesia.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage Publications.

OECD. (2023). *The digital transformation of SMEs: Policy insights for growth and inclusion*. OECD Publishing.

Perbanas Institute. (2024). *QRIS transaction surge in 2024: Annual growth and impact on digital economy*. Perbanas Institute.

Saputra, D., & Gürbüz, B. (2021). *Implementation of Technology Acceptance Model (TAM) and Importance Performance Analysis (IPA) in testing the ease and usability of e-wallet applications*. arXiv. https://arxiv.org/abs/2103.09049

Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (8th ed.). Wiley.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2022). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly, 46*(3), 1205–1240.

World Bank. (2022). *Digital development overview: Expanding digital opportunities for small businesses*. World Bank Publications.