Analysis of the Acceptance Level of E-Wallet as a Non-Cash Payment Method among Indonesian Students

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Abstract

This research delves into the adoption of e-wallets, specifically Shopee Pay, among Indonesian students in the digital economic era. The study aims to analyze students' acceptance levels of e-wallets as a non-cash payment method, motivated by the rapid advancement in information and communication technology and the emerging need for efficient and secure financial transactions. Employing a survey-based approach, the research focuses on students' perceptions regarding the ease of use, usefulness, and perceived risks of e-wallets.The findings reveal a predominantly positive perception among students towards e-wallets. A significant majority of respondents acknowledge the ease and benefits of non-cash transactions, indicating effective implementation of this technology. Moreover, the low risk perception underscores a sense of security among students in using e-wallets. Conclusively, e-wallets, particularly Shopee Pay, demonstrate considerable potential as a favored non-cash payment method among Indonesian students. This widespread acceptance can catalyze the growth of the digital payment ecosystem, propelling Indonesia's digital financial transformation. The study offers valuable insights into consumer preferences and behaviors concerning e-wallets, aiding fintech companies and financial institutions in enhancing digital payment services. The adoption of e-wallets by students not only boosts transaction efficiency but also contributes to the expansion of Indonesia's digital economy. These findings provide a foundation for further research into the acceptance of non-cash payment technologies in Indonesian society.

Keywords: E-Wallet, Payment Technology, Payment Method

1. Introduction

Covid-19, a global outbreak that started in Wuhan State in China in December 2019, has paralyzed various countries around the world since April 2020. WHO declared Covid-19 a pandemic in March 2020, responding to the spread of this virus which affected all aspects of human life, including economic aspects. Governments in various countries, including Indonesia, are taking firm measures such as Large-Scale Social Restrictions (PSBB), Work from Home (WFH), and Distance Learning (PJJ) to minimize the spread of this disease[1], [2].

This pandemic has accelerated the change in consumer mindset from offline to online transactions. Advances in technology and information have established the existence of digital

services, covering various needs ranging from transportation to basic necessities, all of which can be accessed and fulfilled through digital platforms. One of the most striking changes in behavior is the use of e-wallets as a payment method. E-wallet, or what is often called a digital wallet, is a prepaid application that allows users to store money and carry out digital transactions with password protection[3]–[5].

The Covid-19 pandemic has changed Indonesian people's behavior in making transactions, triggering the use of e-wallets as a way to reduce the risk of virus transmission. E-wallets, especially Shopee Pay, have become a popular choice among consumers because they are practical, safe and fast. Research on the use of Shopee Pay shows high usage intensity, especially in online payments, according to survey data from Snapcart. Apart from security, Shopee Pay also offers various offers and benefits to its users. The use of digital payments is considered safer and in accordance with health protocols, becoming an alternative that is well received by the public amidst the current global pandemic conditions[6]–[8].
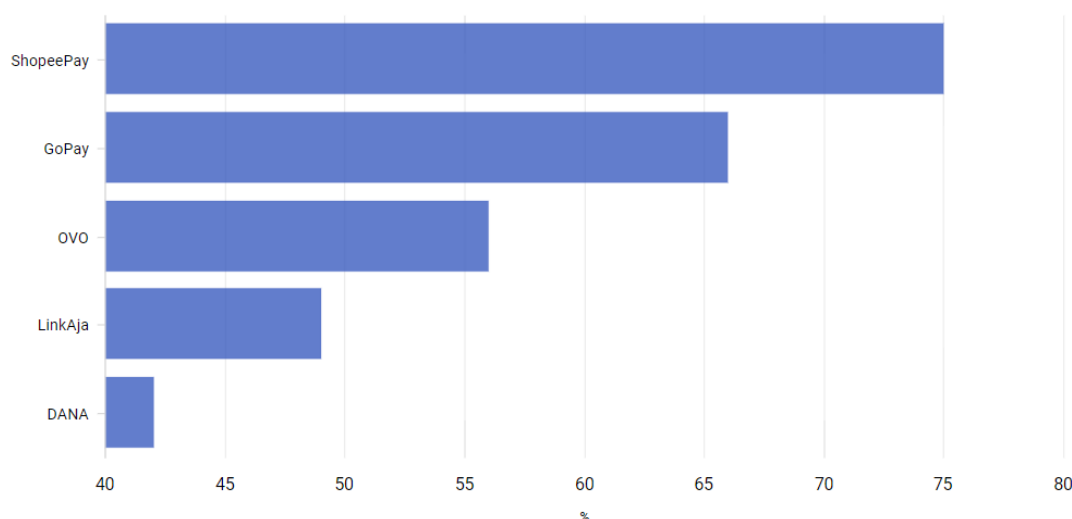

Figure 1. E-wallet Data that Consumers Prefer
(Source: https://databoks.katadata.co.id/)

Based on the data presented, it can be concluded that ShopeePay is the most popular e-wallet choice for consumers in Indonesia who are looking for various promotional programs. In this data, ShopeePay reached the highest percentage, namely 75%. GoPay follows as the e-wallet that is consumers' favorite for looking for promotions, with a percentage reaching 66%. Furthermore, OVO is in third place with a percentage of 56%, becoming the e-wallet targeted by consumers to pursue promotional programs. Meanwhile, LinkAja and DANA are competing closely in fourth and fifth positions, with percentages of 49% and 42% respectively.

This data also reveals that e-wallets are quite popular among consumers in Indonesia, especially among students, because of a number of advantages. These benefits include attractive promotional programs, cashback, discounts, and ease of using the paylater feature. This research involved 2,292 respondents from 25 provinces in Indonesia and was carried out through the Jakpat application.

2. Research Method
The research method in this study is based on qualitative and quantitative approaches. Data collection was carried out through an online survey using a structured questionnaire distributed via the internet using Google Form. This questionnaire was designed to assess student perceptions regarding the use of E-Wallets, especially ShopeePay, in terms

of security, convenience and benefits of non-cash transactions. Respondents were asked to rate the extent to which they agreed or disagreed with the proposed statements. The items and measurements used in this questionnaire are TAM (Technology Acceptance Model) measurements on the use of electronic wallets. Where later the respondents will state whether they agree or not with the statement submitted regarding the perception of using electronic wallets, in this case Shopee Pay. Then, if it is felt that all the data has been obtained sufficiently, the next step is to interpret the data descriptively in order to draw conclusions regarding the perceptions of students in Indonesia regarding e-wallet (Shopee Pay) as a non-cash payment tool[9], [10].

This research involved a sample of 500 respondents who were randomly selected from various universities throughout Indonesia. Apart from collecting data through surveys, this research also involved in-depth interviews with a number of students who actively use E-Wallet. This interview aims to obtain a more in-depth perspective regarding their experiences and preferences regarding the use of E-Wallets.

Qualitative data obtained from interviews were analyzed using a thematic approach to identify emerging patterns and themes. Meanwhile, quantitative data, including student perception scores towards E-Wallet, were analyzed using descriptive statistical techniques and factor analysis. Factor analysis aims to identify the main factors that influence the level of E-Wallet acceptance[11], [12].

This research also involves a comparative analysis between various types of E-Wallets that are popular in Indonesia, especially ShopeePay. Evaluation of the features offered by each E-Wallet, such as transaction security, promotional programs, ease of use, and transaction speed, was carried out to understand student preferences for each platform. In addition, a direct observation approach is used to understand students' practical interactions with digital payment technology in the campus environment, including daily transactions in various places such as canteens and bookstores.

In this research, research ethics were strictly maintained, including the confidentiality of respondent data and the validity of the information obtained. Conclusions drawn from data analysis are interpreted carefully to ensure that the research findings provide an in-depth understanding of E-Wallet acceptance among Indonesian students. This holistic approach is expected to make a significant contribution to understanding consumer behavior in adopting digital payment technology in the modern era[13], [14].

2.1 Literature Review

2.1.1 E-Wallet and its Development
E-Wallet, or digital wallet, is a software application that allows users to store payment data, including credit card information, balances, and other payment data electronically. E-Wallet facilitates cashless transactions via mobile devices, creating a more efficient and convenient payment system[15].

2.1.2 Benefits of Using E-Wallets in the Digital Era
The use of E-Wallets is growing rapidly thanks to the benefits they offer. Transaction security, ease of use, and flexibility in providing various promotional and discount programs make E-Wallet an attractive choice for consumers. During the Covid-19 pandemic, E-Wallet has become a non-cash payment solution that minimizes physical contact, making it more relevant and accepted by society[11].

2.1.3 E-Wallet User Preferences in Indonesia
Recent studies show that E-Wallet has strengthened its position in the Indonesian market. Research shows that E-Wallet users, especially students, tend to choose platforms that offer a variety of promotional programs and are easy to use. The success of an E-Wallet

in attracting customers is often closely related to the promotional strategy and services provided.

3. Findings

This research measures students' perceptions regarding the use of e-wallet (Shopee Pay) as a non-cash payment method by utilizing the TAM (Technology Accepted Model). The variables measured include gender, age, and preference for the type of e-wallet (Shopee Pay) used. Detailed information about the characteristics of these respondents is described in detail in the relevant table. The TAM approach in this analysis provides an in-depth understanding of how students respond to and accept e-wallet use, which is an important contribution to understanding consumer behavior towards non-cash payments.

Table 1. Respondent Data

Responden	Percentage
Woman	89,7%
Man	10,3%

The findings in Table 1 illustrate the imbalance in the sex ratio in this study sample. In this study, there were 4 male participants (10.3%) and 32 female participants (89.7%). These results indicate the predominance of female participation in this study, which reflects the unequal gender distribution in the sample of respondents. This phenomenon may reflect a special preference or interest among women towards using e-wallets as a non-cash payment method. These results provide interesting insights into the interaction of gender in the adoption of digital payment technologies among Indonesian students, which is a valuable contribution to the consumer behavior research literature.

Table 2. Respondent Category

Category	Percentage
Age 22-25	68,8%
Ages 18-21	31,2%

The results in Table 2 reflect the age distribution of respondents in this study. Most of the respondents who filled out the questionnaire were 18-21 years old (31.2%), while the remaining 68.8% were in the 22-25 year age range. These findings indicate that the majority of respondents to this study were young individuals in the student age group, which is a significant cohort in understanding the acceptance of E-Wallets as a non-cash payment method. Additionally, this data provides a temporal perspective to the research, identifying that the data was collected in 2023, reflecting the situation and preferences of students at that particular time in the development of digital payment technology. These findings have important relevance in the context of understanding the adoption of non-cash payment technology among the younger generation.

Table 3. Knowledge of E-wallets

Category	Percentage *Yes*	Percentage *No*
Respondents who use e-wallet (Shopee Pay)	86,9%	13,1%
Respondents who know about e-wallets	100%	-

The findings in Table 3 illustrate the level of acceptance of E-Wallet (Shopee Pay) among students. From this data, it can be concluded that 86.9% of respondents use Shopee Pay as a non-cash payment method. Additionally, 100% of respondents were aware of e-wallets, indicating a high level of awareness of this digital payment technology among students. However, it is important to note that only around 94.3% of students actually use Shopee Pay for non-cash transactions. These findings indicate a discrepancy between knowledge about e-wallets and their active use as a payment method, reflecting the complex dynamics in the adoption of digital payment technologies among college students. These findings provide a deep understanding of the level of acceptance and implementation of E-Wallets among Indonesian students, which is important for further developments in the consumer behavior and technology adoption research literature.

Table 4. Perceived Ease of Use

Category	Percentage *Yes*	Percentage *No*
Respondents who find it easy to make transactions anywhere using Shopee	95,3%	4,7%
Respondents felt ShopeePay was very easy to use for shopping and paying online	94,8%	5,2%
ShopeePay is easy to understand	100%	-
Respondents who felt Shopeepay was very easy to use and access	98,6%	1,4%

The results from Table 4, which shows students' perceptions of the ease of use of E-Wallet (Shopee Pay), show that 100% of respondents feel that Shopee Pay is very easy to use and can be accessed quickly at any time. Apart from that, Shopee Pay provides the advantage of being easy to understand even for new users; This conclusion was obtained from all respondents who agreed that Shopee Pay is very user-friendly. As many as 97.1% of respondents felt that Shopee Pay made the online shopping and payment process easier. Apart from that, 94.3% of respondents felt that Shopee Pay made it easy to carry out transactions anywhere and at any time. Therefore, Shopee Pay is considered suitable as a daily online payment method, enabling E-Wallet users to carry out financial transactions efficiently and conveniently, illustrating the effective adoption of digital payment technology among students. These findings illustrate the continued importance of using E-Wallets as an alternative to cashless transactions, reinforcing the idea that Shopee Pay is a highly desirable option that meets user needs in the digital payments space.

The convenience offered by the use of E-Wallet (Shopee Pay) has the potential to support continued use. Perceived ease of use of E-Wallets has a positive impact on electronic wallet adoption. The higher a user's perception of the ease of use of an E-Wallet, the more

likely they will actively use the E-Wallet. These findings underscore the direct relationship between perceived ease of use and the level of adoption of digital payment technologies, reflecting complex dynamics in consumer behavior towards cashless payment methods. An in-depth understanding of these factors makes a significant contribution to research on consumer behavior and marketing strategies in the context of E-Wallet use among Indonesian students.

Table 5. Perceived Usefulness or Benefits

Category	Percentage *Yes*	Percentage *No*
Respondents felt that using ShopeePay could improve my activities in online shopping or in terms of payments	77,9%	22,1%
Respondents felt that using ShopeePay could increase the effectiveness of searching for and purchasing goods online and payments when purchasing goods	91,6%	8,4%
Respondents felt ShopeePay was very useful for shopping online or in terms of payments	93,7%	6,3%

From Table 5, it can be seen that there is a strong perception regarding the usefulness or benefits of using E-Wallet (Shopee Pay). All respondents stated that Shopee Pay is very useful for online shopping and in terms of payments. Furthermore, 88.6% of respondents believe that using Shopee Pay can increase online shopping and payment activities.

In addition, 97.1% of respondents agreed that Shopee Pay can increase effectiveness in searching for and purchasing goods online, as well as the payment process when shopping. These findings highlight the important role of E-Wallets in facilitating online shopping activities, indicating the high level of acceptance and benefits provided by Shopee Pay in the context of non-cash payments. This analysis provides in-depth insight into students' perceptions of the usability of E-Wallets, providing a strong foundation for the development and implementation of digital payment technology among the younger generation in Indonesia.

There is a simultaneous positive impact between perceived ease of use and student interest in using Shopee Pay as an E-Wallet[16], [17]. The high interest in using Shopee Pay is due to the perception of ease of use and the incentives in the form of cashback offered through the Shopee application. Apart from that, perceptions about comfort, security, available promotions, supporting features also have a positive and significant influence on students' interest in using electronic wallets. These findings illustrate the complexity of factors that influence user preferences in adopting digital payment technology. This analysis provides a theoretical contribution to the understanding of consumer behavior regarding E-Wallets among students, provides an important foundation for developing E-Wallet policies and marketing strategies, and supports the growth of the non-cash payment ecosystem in Indonesia.

In the context of the digital era, this research illustrates the complexity of student preferences and behavior regarding the adoption of non-cash payment technology. These findings show that positive perceptions regarding ease of use, comfort, security, and promotions provided by E-Wallet, especially Shopee Pay, play a crucial role in increasing students' interest in using this service.

Additionally, the results of this study imply that promotional strategies such as cashback have a significant positive impact on user preferences. Awareness of transaction

security and convenience in using E-Wallets are the main drivers in adopting this technology[18]. The practical implication of these findings is that E-Wallet providers need to deeply consider developing features that reinforce positive user perceptions.

This research also underlines the importance of developing policies that support user security and comfort in making transactions via E-Wallet. As a result of these findings, E-Wallet application developers can direct their efforts towards improving service quality, strengthening security features, and optimizing promotional programs to increase acceptance and use of E-Wallets among students and the wider community[19], [20].

As part of a contribution to advanced research in this area, these findings provide a foundation for more in-depth studies of consumer preferences, E-Wallet market dynamics, and the implementation of more effective marketing strategies. In addition, this research also has the potential to provide valuable guidance for the government, financial technology companies and other financial institutions in understanding consumer behavior and creating a competitive digital payments ecosystem in Indonesia.

4. Conclusion

The research on perceptions of using e-wallets, specifically Shopee Pay, as a non-cash payment tool, leads to several conclusions. Firstly, the problem itself: the rapid technological development has evidently shifted transaction preferences from cash to non-cash among Indonesian students. A significant 97.85% of students find Shopee Pay easy to use, underscoring the application's substantial contribution to simplifying transactions. Furthermore, approximately 95.23% of respondents perceive tangible benefits in using Shopee Pay for their transaction activities, highlighting the application's ease and usability in supporting online purchases and payments.

Secondly, the findings that can be utilized: Despite the positive reception, some respondents (around 68%) still consider the risks of using Shopee Pay to be relatively low, indicating a good but not absolute level of trust among students. Additionally, the data reveals that students' interest in non-cash transactions via Shopee Pay is high, with 92% expressing eagerness to adopt this e-Wallet for purchasing and payment activities. These results underscore Shopee Pay's success in capturing young consumers' interest and fostering active usage.

Lastly, aspects that require further research: While the study provides valuable insights, it also uncovers areas needing deeper exploration. The relatively lower perception of risk among some students suggests the need for further investigation into security concerns and trust-building measures in e-wallet usage. Additionally, understanding the factors influencing the remaining 8% of students who are hesitant to adopt Shopee Pay could provide critical insights for enhancing e-wallet adoption strategies. In conclusion, this research confirms that convenience, usability, and user interest are pivotal in promoting the adoption of e-wallet technology among students, who play a crucial role in the digital financial transformation. However, continuous efforts in research are necessary to address the remaining challenges and to fully understand the dynamics of e-wallet adoption among Indonesian students.

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