The Relationship between Digital Wallet Adoption and Usage to Financial Inclusion

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Abstract

The rapid development of information technology such as the internet provides convenience for many human activities. One of them is the existence of a financial technology product and service in the form of a digital wallet that makes it easier for people to make payments and send money. This is a special attraction for people to use digital wallets. The increasing number of usage of financial services is in line with the increase in financial inclusion. This study analyzes the relationship between the use and adoption of digital wallets on increasing financial inclusion in Indonesia. The main data source was obtained from 100 respondents who have used Gopay as a digital wallet product. Simple linear regression analysis was used in this study. The findings of this study indicate that there is a positive correlation between the use of digital wallets and financial inclusion.

Keywords
Digital Wallet, Financial Inclusion, Financial Technology, Financial Behavior, Financial Services

1. Introduction

Very fast changes and developments in information technology such as the internet, provide convenience for all human activities (Mahwadha, 2019) this also has a significant impact on the world economy (Chotiyaputta and Savira, 2020). Based on the results of a survey conducted by We Are Social and Kepios, as of February 2022, there were 370.1 million mobile phone users and 204.7 million internet users in Indonesia. The increase in the number of mobile and internet users has finally led businesses to continue to innovate to respond to the challenges of globalization, one of which is innovation in the financial sector as indicated by the existence of a digital wallet.

Digital wallet is part of financial technology, which was developed to provide and facilitate financial services via mobile phones (Hinson et al., 2019) such as storing money on servers, conducting transactions, and tracking transaction history through a system. Until February 2022, there were 158.7 million Indonesians who made digital payments (We Are Social and Kepios, 2022), the existence of that payment system was supported by changes in consumer behavior and increased digitization in many aspects of people's lives (Odei-Appia et al., 2021).

As one of the non-formal financial facilities for payments, digital wallets provide easy access for users, which is indicated by the simple requirements for account ownership and does not require fees. In this regard, according to the Reserve Bank of India, to achieve financial inclusion, it is necessary to provide access to various financial services needed by the community in a safe, comfortable and affordable manner for all levels of society (Bank of Indonesia, 2021). This ease of access then changes the way people get services which ultimately makes financial technology products such as digital wallets considered as a tool to achieve financial inclusion (Odei-Appiah et al., 2021).

Equitable public access to financial facilities is seen as an important element in economic growth and poverty reduction (Andrew et al., 2021). The ease of registration, practicality in use, and other benefits of adopting and using digital wallets are very likely to be a solution for the unbanked society to have access to financial facilities. Therefore, this study is intended to analyze the relationship between digital wallet usage and the increase of financial inclusion in Indonesia. It is hoped that the results will provide insight for the society and the government in...
planning a financial inclusion agenda related to non-formal financial facilities, in order to achieve the national financial inclusion target of 90% by 2024 (OJK, 2019).

2. Literature Review
A Digital wallet is an online account to store money that is used to make online and offline transactions via mobile phones. A digital wallet is an electronic payment system that requires a connection with a server to make transactions, where a certain amount of money needs to be loaded into a digital wallet account so that it can be used to make cardless transactions (Pahwa, 2021), but there are several applications that give users the option of linking digital wallet accounts with a personal savings account to make transactions easier (Financer.com, 2021). One of the popular digital wallets in Indonesia is Gopay with a percentage of 58.4% usage throughout 2021 (Daily Social, 2021). Gopay collaborates with one of the digital banks in Indonesia, namely Bank Jago, which makes it easier for users to make transactions without the need for top-up balances first, simply linking with the user's digital bank account (Gojek, 2021).

The use of digital wallets is intended to speed up the process of transaction activities carried out by users and make it easier for users not to need to carry a physical wallet (Chotiyaputta and Savira, 2020) because all transaction activities can be completed in one hand. The compatibility, flexibility, and convenience offered by digital wallets provide a special attraction for people to adopt and use them to transact via smartphones (Karim et al., 2020). This is evidenced by data from a FinTech company, Xendit, digital wallets are the most popular payment platforms in 2021 in Indonesia, as indicated by an increase in the number of digital wallets used for transactions by 300% in November when compared to early 2021 (Javier, 2022).

Digital Wallet is gaining popularity because it can provide convenience to its users in making transactions, sending, receiving, and saving money via smartphones (Gundaniya, 2020). In several countries, digital wallets have succeeded in democratizing payments by providing access to all people, both those who have bank accounts and those who do not have bank accounts, to be able to use this service for transactions (Bhargava, 2022) as long as they have the media to operate it, namely smartphones. As in Indonesia, Gopay provides an opportunity for the unbanked society to be able to access its services, which is indicated by the convenience of top-up digital wallet balances through mini markets (Gojek, 2021).

In line with the general definition of financial inclusion, which is the ability of individuals and businesses to have basic access and use of financial products and services (World Bank, 2021), digital wallets bring the unbanked society into the formal financial ecosystem through digital channels by providing remittance and payment services quickly and cost-effectively so that it can assist in meeting the basic financial needs of the unbanked society (Bhargava, 2022). In addition, the impact of the migration of payment systems to digital allows countries to reduce the costs of printing and circulation of cash and can increase the efficiency of national payments (Andrew et al. 2021).

According to the World Bank, having access to transaction accounts allows people to deposit money, send and receive payments, which is the first step towards broader financial inclusion (World Bank, 2021). In this regard, Gopay has a service called Gopaylater which is an alternative postpaid payment method, and Gopay Jago service that can make it easier for users to save money by having a digital bank account (Gojek, 2021). This means, in this case, Gopay as a digital wallet service allows it to be able to help increase financial inclusion in Indonesia.

H1: The use of digital wallets has a positive and significant impact in increasing financial inclusion in Indonesia (Figure 1).
3. Methodology
A quantitative approach was used in this study where primary data was obtained by distributing questionnaires to 100 Gopay digital wallet users with a 5-point Likert scale questionnaire to measure the assessment indicators with a scale of 1 meaning strongly disagree, scale 2 disagree, scale 3 meaning doubtful, a scale of 4 means agree and a scale of 5 means strongly agree. Then the data that has been collected is processed with SPSS software.

This study aims to analyze the relationship of the independent variable, namely digital wallet adoption and usage, to the dependent variable, namely financial inclusion. Simple linear regression analysis was used to assess the relationships described in the study.

4. Result and Discussion
The results of simple linear regression analysis to prove the relationship of digital wallet adoption and usage (X) to financial inclusion (Y) can be seen in the following explanation (table 1).

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a. Predictors: (Constant), Digital Wallet Adoption and Usage

The table above explains the magnitude of the correlation value between digital wallet adoption and usage with financial inclusion which refers to the R-value of 0.591 and the coefficient of determination (R square) which explains the percentage of the influence of the independent variable on the dependent variable of 0.349 which means that the influence of digital wallet adoption and usage (X) to financial inclusion (Y) is 34.9%. In this case, the remaining 65.1% percentage is interpreted as the influence of other factors besides of variable X which is formal financial facilities such as banking, insurance, financial institutions, and so on (table 2).

Table 2. Simple Linear Regression Result

<table>
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<th>Coefficientsa</th>
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a. Dependent Variable: Financial Inclusion

Based on the table of results of the analysis of the relationship between digital wallet adoption and usage (X) on financial inclusion (Y), a simple linear regression equation is obtained, as follows

\[ Y = a + bX \]

\[ Y = 9000 + 0.563X \]

The constant value of 9000 indicates that there is a positive effect of digital wallet adoption and usage on financial inclusion. As for the regression coefficient value of the X variable to Y of 0.563, it means that if there is an increase in the digital wallet usage variable by one unit, the financial inclusion variable will increase by 0.563 or 56.3%. Then in the table, there is a significance value of 0.001 < 0.005, which means that the digital wallet adoption and usage variable has a significant effect on financial inclusion.
a. **Hypothesis test**

According to the t-test, shown in Table 3, the t-value is 7.251, and the significance value is 0.001. Since t-value is (7.251) is higher than t-table (1.661), H0 is rejected and H1 is accepted. Thus, the digital wallet adoption and usage affects financial inclusion (table 3).

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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<tr>
<td></td>
<td>(Constant)</td>
<td>9.000</td>
<td>1.637</td>
<td>5.498</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Digital Wallet Adoption and Usage</td>
<td>.563</td>
<td>.078</td>
<td>.591</td>
<td>7.251</td>
<td>&lt;.001</td>
</tr>
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</table>

a. Dependent Variable: Financial Inclusion

5. **Conclusion**

This study aims to analyze the relationship between the adoption and use of digital wallets on financial inclusion in Indonesia. The findings obtained from this study indicate that there is a positive correlation between the use of digital wallets and financial inclusion. Digital wallets can provide easier and more affordable financial access to the unbanked society and can bring them closer to financial facilities such as account ownership, savings, and credit. However, the use of digital wallets to date has not been able to contribute much in increasing financial inclusion in Indonesia as much as the access and the use of formal financial facilities such as banks, insurance, financial institutions, and so on.

**References**


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