IMPACT OF OVO DIGITAL WALLET ON MSME WELFARE IN SURAKARTA

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ARTICLE INFO	ABSTRACT
	This study examines the impact of using the OVO digital wallet on the turnover of street vendors in Surakarta. The informal economy, particularly street vendors, plays a significant role in Indonesia's economy. This research utilizes multiple linear regression analysis on questionnaire data to understand the influence of OVO usage. Findings indicate that OVO usage increases vendor welfare through higher income turnover, supported by the ease of use, mobility, reputation, trust, and security of the fintech product. Jebres, with its large number of vendors around Sebelas Maret University, shows significant influence.

1. INTRODUCTION

The economic development in Indonesia is progressing rapidly, which demands economic actors to be more prudent in handling various complex economic issues, such as domestic and international trade activities that have their own challenges. To face these challenges, different strategies are necessary for both domestic and international trade.

Domestic trade encompasses both the formal and informal sectors. The informal sector consists of businesses that operate unofficially, often without the formal requirements such as establishment deeds, articles of association, business licenses, and so on. Essentially, the informal economic sector is similar to the formal economic sector, but informal businesses do not take the form of companies and their financial systems are often managed manually with simple records. The informal sector typically includes household industries, street vendors, and other businesses that do not have legal status. The informal sector can also provide both goods and services.

The rapid economic development in Indonesia demands that economic actors be more prudent in handling various issues in both domestic and international trade. The informal sector, including businesses without official permits such as street vendors and household industries, remains a major provider of employment. In February 2010, approximately 33.74 million people (31.42%) worked in the informal sector, highlighting its capacity to absorb labor not accommodated by the formal sector (Hartati et al., 2015).

The success of the informal sector depends on the business actors in maintaining the quality of the goods offered. If consumers need products and the quality of the goods produced does not meet their expectations, they will not want to consume those products. One example of the informal economic sector is Micro, Small, and Medium Enterprises (MSMEs) like street vendors, who exhibit entrepreneurial characteristics such as the ability to seek and seize business opportunities, perseverance, self-confidence, creativity, and innovation.

The informal economic sector still dominates in providing employment opportunities to the community, as follows: Street vendors are inseparable from cultural elements, and their existence cannot be eradicated. Street vendors can enhance the aesthetics of the city if well-organized, they hold tourism potential, and they can contribute to the city's aesthetics when designed properly.

The success of the informal sector largely depends on the entrepreneurial characteristics of its actors, such as perseverance, confidence, creativity, and innovation. Street vendors, part of this sector, also have tourism potential and can enhance city aesthetics if managed properly. With technological advancements, the informal sector has evolved, particularly with the advent of financial technology (FinTech) that facilitates transactions through digital wallets like OVO, DANA, Go-Pay, and E-Wallet (Eka, 2018).

FinTech has positively impacted Indonesia's economy, contributing Rp 25.97 trillion to GDP in 2018 and increasing household consumption by Rp 8.94 trillion (Kencana, 2018). Despite a decline in FinTech adoption from 60.96% in 2017 to 58.14% in 2018, its transaction potential is predicted to reach US $100 billion by 2025 (Sidik, 2019). However, FinTech penetration in Indonesia remains low at only 5%, primarily due to the continued prevalence of cash payments (Zuraya & Pryanka, 2019). The usage density of FinTech products in Indonesia is also lower compared to other ASEAN countries like Vietnam and Malaysia (Mittal, 2019).

Digital wallets, similar to credit or debit cards, provide various services such as bill payments, mobile top-ups, and fund transfers (Rosmayanti, 2019). The growth of digital wallets affects user satisfaction, influenced by factors like technology, security, and convenience (Dennehy & Sammon, 2015). Studies in several countries show that comfort, compatibility, trust, perceived usefulness, and ease of use positively impact user satisfaction with digital wallets (Chen & Wu, 2017; Smolarczyk, 2018)

With the increasing use of digital wallets, further research is needed to examine their impact on the economic activities of the informal sector in Indonesia, particularly street vendors. This research aims to provide insights into how digital wallets can improve the welfare of economic actors in the informal sector.

2. RESEARCH METHODS

This study discusses the role of OVO, a digital wallet product and part of financial technology (fintech), in enhancing the welfare of vendors in Indonesia. OVO is managed by PT Visionet Data Internasional, previously known as PT Visionet Internasional before 2016, under the Lippo Group. In 2018, OVO established strategic partnerships with Tokopedia (an Indonesian e-commerce startup) and Grab Indonesia (an Indonesian transportation startup) for a Digital Gateway Payment System. According to research by Morgan Stanley, OVO is the most widely used digital wallet product in Indonesia (Annur, 2019).

The population is the entire group, which can consist of people or events, to be studied. The size of the population can be limited by the scope of the research according to the researcher's needs (Sekaran, 2006). The population in this context refers to the subjects within a specific area that meet the criteria and conditions to address the research problem. In other words, the population in this study consists of all street vendors in the city of Surakarta.

A sample is defined as a part of the population comprising a number of members selected from the population. Researchers can draw conclusions from the sample studied and generalize them to the research population. Thus, this requires a sampling technique to produce a representative sample and avoid research bias (Sekaran, 2006).

Due to the uncertainty regarding the total number of vendors using the OVO digital wallet, the sampling technique used in this study is non-probability sampling, meaning that the elements of the population selected as sample subjects are not known. This method is more reliable for providing insights into the essential information about the research population (Sekaran, 2006).

The category of non-probability sampling used is purposive sampling. Purposive sampling is used to understand the criteria needed for the sample in the study and its relevance to the research objectives. The selected samples meet the criteria set by the researcher, namely: a) Vendors who have used the OVO digital wallet, b) Street vendors who do not use OVO, and c) Street vendors with clear financial reports. The sample size used in this study is based on Sekaran and Bougie in (Anggoro, 2018), which suggests a sample size ranging from 30 to 500. This study uses a sample size of 60 respondents, meeting the minimum standard set.

The data in this study uses both primary and secondary data. Primary data is data obtained directly by the researcher to test the research variables. The primary data in this study was obtained through the research instrument, which is a questionnaire. Secondary data refers to information collected from existing sources (Sekaran, 2006). In this study, several sources of secondary data are used to provide a clear picture of the research, including external organizational data, scientific publications, and government publications. The primary data collection technique used in this study is the questionnaire. This technique involves providing a set of written questions or statements to the research respondents. A questionnaire is an efficient data collection mechanism if it aligns with the researcher's needs and variable measurements (Sugiyono, 2010).

The questionnaire for this study will be distributed both online and directly to the research respondents who meet the criteria. The questionnaire in this study uses closed-ended questions, which require respondents to choose from the alternatives provided by the researcher. All question items using nominal, ordinal, Likert, and ratio scales are considered closed-ended questions (Sekaran, 2006). In collecting samples from respondents, dummy variables will be used to measure OVO usage (dependent variable), nominal entries for revenue, and categorical entries for location.

The research employs a quantitative analysis method to analyze data that can be quantified. The sample for this study was selected through random sampling of street vendors in Surakarta. The hypothesis formulated will be tested using multiple linear regression analysis. This method is used to determine whether the dependent variable can be predicted by the independent variables, providing insights into the relationships between OVO usage and vendor turnover.

The regression model used in this study is as follows:

$$Y = \alpha + \beta 1 X1 + \beta 2 D1 + \beta 2 D2 + \beta 2 D3 + \beta 2 D4 + \beta 2 D5 + e$$

Where as:
Y = Turnover
α = Constant
β = Coefficient
$X1$ = Use of OVO
$D1$ = Serengan
$D2$ = Banjarsari
$D3$ = Pasar Kliwon
$D4$ = Laweyan
$D5$ = Jebres

3. RESULTS AND DISCUSSION
3.1. RESULTS
Descriptive Analysis

This study focuses on micro, small, and medium enterprises (MSMEs) that have adopted OVO as a transaction tool. The research objects are MSMEs located throughout the city of Surakarta, facilitating the sampling process as the researcher is based at Universitas Sebelas Maret Surakarta. MSMEs were chosen because small and medium enterprises are considered an opportunity to boost the economy at the micro, small, and medium levels. The rapid development of Fintech for MSMEs in Indonesia has also positively impacted the country's gross domestic product (GDP).

Descriptive analysis aims to understand the responses and characteristics of the respondents to the questionnaire items. The respondents in this study are MSME merchants who use the OVO digital wallet as a payment tool, located in the city of Surakarta. The study employs probability sampling techniques for data collection. According to Sekaran (2013), probability sampling design is used when elements in the population have a known non-zero chance of being selected as subjects in the sample.

Since the exact number of MSMEs using OVO as a payment tool is unknown, the sample determination follows Hair et al. (1995), which suggests a minimum sample size of 100 respondents chosen randomly, provided they meet the criteria of using OVO and not using OVO. The number of respondents obtained in this study is 126 MSMEs, thus exceeding the minimum sample size required.

Based on the descriptive statistics, the sample size used consists of 126 street vendors in the Surakarta region. This includes 63 samples of street vendors who have used OVO and 63 samples of street vendors who have not used OVO. From the descriptive statistics results, we can see that the revenue variable has a minimum value of 7,230,000 and a maximum value of 47,400,000. These results indicate a significant gap between the revenues of street vendors who use OVO and those who do not. The average revenue value is 18,432,000, indicating that the average revenue of street vendors in Solo is relatively high. The standard deviation of the revenue variable is 12,223, which is smaller than the mean, indicating that the data is homogeneously distributed and does not cause bias. Descriptive statistics also show that the average location value is 3, indicating that the majority of street vendors are located in the Laweyan subdistrict. The standard deviation of the location variable is 2.034, which is below the average. These results indicate that the data obtained regarding location is homogenous and does not cause bias.

Hypothesis Analysis

The estimation results from the hypothesis testing are presented in Table 2.

Table 2. Hypothesis Testing Estimation Results

Estimation Results			
Uji t Parsial	BETA	Nilai T	Sig
OVO	0.046	2.322	.001
D1_Serengan	0.003	0.081	.224
D2_Banjarsari	0.021	0.351	.235
D3_PasarKliwon	0.921	0.442	.321
D4_Laweyan	0.311	0.512	.543
D5_Jebres	0.112	0.031	.003
R Squared (R^2) Test and F Test			
R Squared / R^2	.318 Nilai F		4.910
Adjusted R^2	.201 Sig		.000

Source: Processed data, 2019

This statistical test consists of t-test, F-test, and R² (coefficient of determination) tests, each serving its specific purpose. The t-test is conducted to assess the significance of each variable individually. The F-test aims to determine the significance of the variables collectively. Meanwhile, the R² test measures the extent of the influence of the independent variables.

The effect of the independent variables collectively (simultaneously) on the dependent variable can be determined using the F-test. Based on Table 2, the significance value is 0.000, which is below 0.05. The significance value of 0.000 indicates that the independent variables collectively affect the dependent variable.

The value of the coefficient of determination is symbolized by R². The closer it is to 1, the higher the influence of the independent variables. The multiple linear regression results show an adjusted R² value of an adjusted R² value of 0.318 indicates that the independent variables explain 31.8% of the variance in the dependent variable, with the remaining 68.2% influenced by factors outside the model.

The t-test is part of the procedure to verify the truth or falsehood of the null hypothesis from the selected sample. The regression formula used yields the test results shown in Table 2.

$$Turnover = 1,256 + 0,046OVO + 0,003D1 + 0,021D2 + 0,921D3 + 0,311D4 + 0,112D5$$

Based on Table 2, each variable has a significance value of less than 0.05 and a positive beta, indicating that each independent OVO variable significantly and positively affects the dependent variable. Among the location variables, only Jebres (D5) shows significant influence. Other location variables (D1, D2, D3, D4) are not significant, as they have significance values greater than 0.05, thus are considered not influential. The regression formula indicates that OVO usage significantly and positively affects vendor turnover. Among location variables, only Jebres shows significant influence.

The table 3 below presents the results of the paired sample t-test to reinforce the parameter estimation results. This test is used to determine whether there is a difference in turnover for MSME traders before and after using OVO.

Table 3. Paired Sample t-test

Variabel		Mean	Std.dev	Sig.
MSMEs	Non OVO	13,592,730	0,032	0,026***
Turnover	OVO	19,239,540		

Source: Processed data, 2019
***: Significant at a standard error of 0.05

Results show a significant difference in turnover for MSMe traders before and after using OVO, with a significance value of 0.026.

3.2. DISCUSSION

The results of the paired sample t-test show a significance value of 0.026 between traders not using OVO and those using OVO, which is below 0.05. This indicates a significant difference in turnover levels experienced by traders after using the OVO digital wallet, thereby accepting the hypothesis. The average sample turnover before using OVO was 50,592,730, while after using OVO, it was 65,239,540. The significant difference in turnover levels before and after OVO usage supports the hypothesis. This aligns with the opportunity cost theory by (Robert B. Ekelund & Hébert, 2007), which states that the use of funds for a specific purpose is measured by the gains not obtained due to choosing an alternative, suggesting that using funds for specific purposes can yield measurable benefits.

The results indicate that location within Surakarta does not influence street vendors' turnover, except for the Jebres area. Only the Jebres location significantly influences turnover, likely due to its student market. Other locations do not show significant influence, possibly due to the widespread use of OVO among street vendors in Surakarta.

The significant effect in Jebres is attributed to its market potential among students who have a high consumption behavior for buying food from street vendors. This additional test supports the findings on the impact of turnover among street vendors. However, the results show that there is no influence of location differences based on districts in Surakarta, except for Jebres. This is due to the widespread use of OVO by street vendors throughout all districts in Surakarta (Anissa, 2019).

4. CONCLUSION

There is a difference in revenue between merchants who use OVO and those who do not use OVO. Merchants who use OVO tend to have higher revenue compared to those who do not use OVO. The factors influencing the use of OVO by merchants, thereby increasing their revenue, include trust, cost, convenience, reputation, and mobility. Based on the research and data analysis collected, there is a difference in turnover between traders using OVO and those not using OVO. Traders using OVO tend to have higher turnover compared to those not using OVO.

Factors influencing the increase in turnover due to OVO usage include trust, cost, convenience, reputation, and mobility. Locations D1, D2, D3, and D4 do not significantly impact turnover because the use of OVO by street vendors in Solo is evenly distributed, making location differences irrelevant. However, D5 Jebres has a significant impact due to the market potential dominated by millennials and students from Universitas Sebelas Maret Surakarta.

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