

Digital Economy Transformation: The Potential of Digital Transactions in Developing Small and Medium Enterprises in Palu City

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ABSTRACT

This study introduces a digital economy perspective that focuses on digital transactions in developing a business, especially Small and Medium Enterprises (SMEs) in Palu City. The method used in this study is quantitative with a causal associative approach to determine the relationship and influence between exogenous variables (digital transactions) on endogenous variables (income level). The population of this study, namely SMEs in West Palu District, totaled 288, while the determination of the sample in this study used a census. The sampling technique is the purposive sampling technique, the number of samples obtained is 197 SMEs, while 91 SMEs do not meet the criteria that have been determined. The findings of this study are that digital transactions have a significant influence on the income level of a Small and Medium Enterprises (SMEs) in West Palu District, Palu City. Another finding is that digital transactions have a strong relationship with income levels.

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INTRODUCTION

Technological innovation has been a driving force in transforming business practices and improving economic resilience across sectors, especially in small and medium enterprises (SMEs). Small and medium business actors, who are often considered the backbone of the global economy even in Indonesia, according to the Ministry of Cooperatives 2024 MSMEs account for around 65% of Indonesia's Gross Domestic Product (GDP). Facing increasing pressure to adopt digital solutions to maintain competitiveness in an increasingly interconnected market. According to (Brigham & Houston, 2020) transactions using digital are indeed fairly easy and practical, besides that another benefit of using transactions through digital payments is the promotions that are obtained, such as cashback, and discounts. Technology Adoption Theory seeks to explain the process of accepting and using technological innovations. The Technology Acceptance Model (TAM) was developed by (Davis, 1989) as one of the most dominant, proposing that the perception of ease of use and benefits of technology is a major determinant in adoption decisions.

Electronic payments (e-payments) and mobile payments, have emerged as important drivers for operational efficiency, cost reduction, and revenue levels. In (Smith, 1776) introduced the concept of efficiency through market mechanisms. He stated that individual decisions driven by self-interest, in the context of free competition, can automatically lead to efficient allocation of resources. According to (Saprudin & Hakim,

2023) digital payment systems can make it easier, efficient, and effective in conducting buying and selling transactions. For SMEs, leveraging this technology is not only an option but also a strategic imperative to navigate the challenges of globalization and shifting consumer behavior. Despite the promising prospects for digital transactions, many SMEs, especially in developing regions, struggle to utilize these tools due to various obstacles, ranging from technological illiteracy to financial constraints. According to (Suwedy et al., 2022) good financial performance is a description of the achievements of a company's business.

This study seeks to overcome this gap by exploring the potential of digital transactions to transform the financial and operational performance of SMEs in Palu City, Central Sulawesi, especially in West Palu District, thereby contributing to sustainable economic growth in a digital-first economy. Small and medium-sized enterprises (SMEs) are major contributors to economic growth and job creation, many of which continue to face persistent challenges in optimizing their operational and financial performance. One of the critical problems that exist for SMEs in West Palu District is the lack of utilization of digital transaction technology, such as electronic and mobile payments, which has the potential to streamline operations, reduce transaction costs, and expand market reach.

However, empirical evidence suggests that SMEs face significant barriers to adopting these technologies, including limited access to digital infrastructure, inadequate technological literacy, and resistance to change. Expressions from (Akhriza et al., 2022); (Tukino et al., 2024) that small traders often face problems in daily financial transactions so that small traders find it difficult to develop their business, and are not even interested in digital transactions that are currently popular, namely payments through QRIS (Quick Response Code Indonesian Standard). However, the expression is different from (Saputri, 2020) that QRIS is a digital payment system that allows cashless payment transactions. Indirectly, digital-based transactions can reduce risks for SMEs and consumers and provide efficiency in payment time directly and indirectly.

According to (Mutmainah et al., 2024) the use of digital technology in MSMEs can increase competitive advantages, which in turn contributes to more inclusive and sustainable economic growth. Therefore, it is important to explore the potential for digital transaction transformation in encouraging the growth of SMEs, especially in Central Sulawesi. This research focuses on how digital transaction technology can be a strategic tool for SMEs in West Palu District to overcome existing challenges, while taking advantage of digital economy opportunities to improve the financial and operational performance of SMEs. By providing practical and academic insights, this research is expected to make a significant contribution to business actors, policymakers, and technology providers.

The research also introduces a new perspective on the intersection of digital technology adoption and SME performance by focusing on the transformative potential of digital transactions. Unlike previous studies that primarily emphasized broader digital transformation, this study focuses on the specific role of electronic payment systems as well as mobile transactions as strategic tools for revenue optimization and operational improvement. This finding is also expected to provide practical implications for SMEs, policymakers, and technology developers, as well as make a significant theoretical contribution by overcoming critical gaps in existing knowledge, especially financial management science, where there is a development of innovation in direct transactions to indirect (digital-based).

RESEARCH METHODS

This research is a causal associative research with quantitative techniques. According to (Sugiyono, 2022) associative research is research that aims to find out the relationship between two or more variables. A causal relationship is a causal relationship, one variable (exogenous) affects the other variable (endogenous).

This type of study data consists of primary data (data obtained from SMEs through questionnaires) and secondary data (relevant theoretical and empirical studies). The data collection technique of this study uses an instrument in the form of a questionnaire with a 5-point likert scale to measure the variables of this study. Meanwhile, observations in the form of information in the field are used to support the results in static form.

The population of this study is 288 SMEs in West Palu District, while the determination of the sample in this study uses a census, namely all populations are used as samples. Meanwhile, the sampling technique is the purposive sampling technique. The technique is a sample that is based on specific considerations, not randomly. This study selected population members who had met three criteria to be used as a sample, namely SMEs that have been running for three years, SMEs that provide digital payments, and SMEs that make sales through e-commerce platforms. From these criteria, this study has a sample of 197 SMEs, while 91 SMEs do not meet the criteria that have been determined.

The data collected was analyzed using statistical software, namely SPSS. Before conducting linear regression and Pearson correlation tests, researchers first test the scanner to ensure validity and reliability with the Cronbach's Alpha result above 0.70 for each variable as a form of consistency for each indicator that represents the variable. Regression analysis is used to see the influence of digital transactions on the income level of SMEs, while correlation analysis is used to identify linear relationships between variables. The results of linear regression analysis and Pearson correlation can provide literature on the strength of the relationship and the influence of significance between digital transaction variables on the income level of SMEs in West

Palu District, Palu City, Central Sulawesi. The results of this research can also suggest effective and efficient strategies as a form of effort to increase competitiveness in local, regional and national markets, and abroad. The hypothesis in this study based on the literature is that digital transactions have a significant effect on the level of income in SMEs.

RESULT

The results of this study use a simple regression data analysis technique, before being regression tested, the classical assumption test consists of normality, autocorrelation, multicollinearity, heteroscedasticity test. The classical assumption test can be seen in the details of Table 1, except for the heteroscedasticity test.

Table 1 Classic Assumption Test

Normality Test (One-Sample Kolmogorov-Smirnov Test)	Multicollinearity	
	Tolerance	VIF
0.735	1.000	1.000

Source: SPSS Data Processing Output, 2024

This study tested normality using the One-Sample Kolmogorov-Smirnov Test, the value obtained was $0.735 \geq 0.05$, this indicates that the data is normally distributed, the provisions of the normality test if the value obtained ≤ 0.05 , then the data is not normally distributed. While the multicollinearity test of the digital transaction variable tolerance value was obtained $1,000 \geq 0.1$ while the Variance Inflation Factor (VIF) was $1,000 \leq 10.0$, the results can be concluded that there are no symptoms of multicollinearity in the data of this study.

Heteroscedasticity test, detects the presence or absence of heteroscedasticity by looking at the presence or absence of certain patterns from the graph. If there are dots forming a certain pattern that is regular (wavy, widening, then narrowing) then heteroscedasticity has occurred.

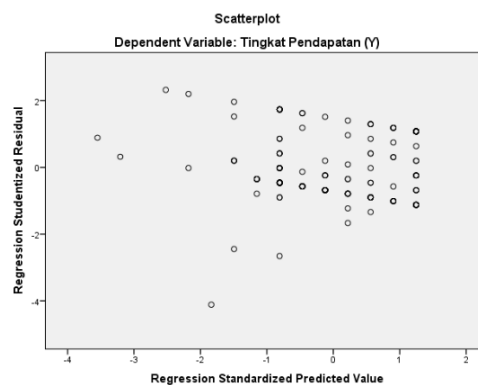


Figure 1 Heteroskedaitiy Test Results
(Source: SPSS Data Processing Output, 2024)

The results in the figure above show that this research model does not have heteroskedasticity disorders because there is no specific pattern on the graph. The dots on the graph are relatively spread out both above the zero axis and below the zero axis.

Simple linear regression analysis aims to test the linear relationship between exogenous variables (digital transactions) and endogenous variables (income levels). This analysis allows us to identify the direction and strength of the relationship between these variables, as well as predict the value of competitive advantage based on changes in exogenous variables. The results of a simple regression test can be seen as follows:

Table 2 Results of Simple Linear Regression Coefficients

Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.030	1.483		9.132	0.000
Digital Transactions	0.251	0.056	0.306	4.483	0.000

(X)	
R	= 0.606
R Square	= 0.393
α	= 0.05

Source: SPSS Data Processing Output, 2024

Simple linear regression equations and more specifically explained can be known as follows:

$$Y = 4.030 + 0.251X$$

A constant value of 4,030 indicates that if a digital transaction (exogenous variable) has a value of 0, then the income level (endogenous variable) remains positive with a value of 4,030.

The value of the digital transaction regression coefficient of 0.251 indicates that if the value of the digital transaction variable increases by 1%, then the income level variable will increase by 25.1%. The value of the coefficient of positive value means that there is a positive relationship between digital transactions and income levels, this indicates that the higher the value obtained by digital transactions, the higher the value of the income level.

Table 2 shows that the regression coefficient results obtained an R value of 0.606 indicate that there is a strong Pearson correlation between digital transaction variables and income levels. Furthermore, the determination coefficient is used to find out how much digital transactions contribute to the level of income. The coefficient of determination is seen in the acquisition of the R Square value, from the results in Table 2 the R Square value obtained is 0.393. This indicates the influence of digital transactions on revenue levels of 39.3% while the remaining percentage of 60.7% is influenced by other variables that are not included in the design of this study model.

DISCUSSION

The results of the regression analysis show that there is a positive and significant influence between digital transactions on the income level of SMEs. This means that the higher the level of use of digital transactions by an SME, the higher the level of income it can achieve. These findings are consistent with the hypothesis proposed and support the existing literature regarding the benefits of digital transactions for businesses.

The use of technology in the digital era in a business is a must to maintain business sustainability. The findings of this study show that digital transactions have a significant influence on the income level of a Small and Medium Enterprises (SMEs) in West Palu District. This means that the use or adoption of technology today helps SMEs in increasing business income so that they can expand or develop their business regionally and nationally. The findings of this study are still relevant to the Technology Acceptance Model (TAM) theoretical framework developed by (Davis, 1989) that the ease of use and benefits of technology affect individual decisions in adopting the use of technology itself. Because basically technology can increase the effectiveness and operational efficiency of a business, so that it has an impact on increasing business income.

The findings of this study also indicate that digital transactions are one of the key factors that can drive SME revenue growth. With an increase in the income of an SME from the use of technology, it is an illustration that a business has good performance. As expressed by (Suwedy et al., 2022) that obtaining good financial performance is an achievement of a company's business. Another thing also indicates that the ability of SMEs to increase income has a positive impact on the economic growth of a region or country.

The significant increase in SME revenue as a result of the adoption of digital transactions indicates great potential in developing businesses. By expanding market reach, improving operational efficiency, and creating a better customer experience, SMEs can gain a sustainable competitive advantage. These findings are supported by research (Mutmainah et al., 2024) which shows that digital technology can drive more inclusive economic growth. In addition, as emphasized by (Brigham & Houston, 2020) that the convenience, practicality, and various incentives such as cashback, and discounts offered by digital transactions are the main driving factors for the adoption of this technology by consumers.

CONCLUSION

This study succeeded in proving that digital transactions have a significant influence on the income level of a Small and Medium Enterprises (SMEs) in West Palu District, Palu City. As well as having a strong level of relationship between digital transactions and income levels.

These findings are expected for policymakers, business actors, and academics. For policymakers, these results can be the basis for formulating policies that support the development of digital infrastructure for SMEs. For business actors, this result can be a motivation to adopt digital transactions and take advantage of the various digital platforms available. Meanwhile, for academics, these results can be a starting point for further research on the impact of digital transformation on various aspects of economic and social life.

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