

Determinants of MSME Decisions in Using E-Commerce in Nganjuk Regency

Sri Murni¹, Indrian Supheni², Nuriatul Muafifah³, Grevita Elma Novianti⁴, Rohwiyati E⁵

¹University of Sebelas Maret

^{2,3,4} University of PGRI Mpu Sindok

⁵Surakarta University

ABSTRACT: This research aims to analyze the determinants of Micro, Small, and Medium Enterprises (MSMEs) decisions in using e-commerce in Nganjuk Regency. Using the UTAUT Theory (Unified Theory of Acceptance and Use of Technology) approach, this research uses variables on the influence of performance expectations, business expectations, social influences, and facility conditions on MSMEs' decisions in adopting e-commerce platforms. The method used was a quantitative method, with 355 MSMEs as respondents. The results of the analysis show that all the factors studied have a significant influence on the decision to use e-commerce, with performance expectations and business expectations as the main drivers. However, challenges such as limited infrastructure and lack of digital skills are still obstacles for MSMEs in utilizing e-commerce optimally. This research concludes that to increase e-commerce adoption, support from the government is needed in terms of training and infrastructure development. By utilizing e-commerce, MSMEs in Nganjuk Regency can expand their markets, increase operational efficiency, and compete better in the digital era.

KEYWORDS: MSMEs, E-Commerce, Technology Adoption, UTAUT

I. INTRODUCTION

One of the business pillars that plays an important role in Indonesia's economic growth is micro, small, and medium enterprises (MSMEs). The development of technology and networks has changed the way people think about business. Technological sophistication is one of the main priorities for businesses in this digital era. Applications for conducting online transactions of goods and services, known as e-commerce, are one of the technological advances in business that are often of concern today (Sulistya, Rohwiyati, 2022). Nganjuk Regency was chosen as the object of research because based on data from MSME Actors at the Cooperatives and Micro Enterprises Service from the Nganjuk Regency dashboard website, in 2021 there were 40.36% of MSMEs, and increased in 2022 by 68.94%. In Nganjuk Regency, MSME growth is slightly hampered by several factors. One of them is the obstacle in terms of marketing, which is the main problem for MSMEs in the area (Tri Mahendra et al., 2024). The difficulty of implementing marketing strategies effectively has caused difficulties in business development. As a result, the increase in sales and production capacity of MSMEs in Nganjuk Regency has been hampered, tending to stagnate.

The development of digitalization has increasingly made people accustomed to searching for products and shopping through digital platforms. MSME actors need to take advantage of this condition to participate and be active in the digital world. Like a beautiful 24-year-old young girl in Nganjuk who sells MSME products of red onions on the e-commerce platform TikTok Shop, every day she does live TikTok to increase sales of her red onions. Quoted from the YouTube account Cracking Eggs. From this we know that e-commerce is very influential among MSMEs, especially in Nganjuk Regency.

The adoption of technology allows MSMEs to take a competitive advantage in the global market, technology can provide a competitive advantage in the new economic era, especially in product marketing. Internet technology for sustainable trade can be done using e-commerce (Trisnowati et al., 2024). When compared to e-commerce sales in ASEAN countries, Indonesia is the largest country. However, the use of e-commerce for MSME sales has not been implemented properly (Sulistya, Rohwiyati, 2022), even the increase in the use of e-commerce for business processes is mostly driven by large companies (Dr. Mukta Jain & Dr. Nipun Aggarwal, 2020).

E-commerce can help micro, small, and medium enterprises (MSMEs) improve the quality of information and expand their market position, thereby opening up more potential business opportunities to increase revenue and profits. Through e-commerce, MSMEs can expand their business reach with websites that allow them to reach customers outside their immediate

Determinants of MSME Decisions in Using E-Commerce in Nganjuk Regency

area (Mahendra et al., 2023). In addition, e-commerce helps people understand various local products, offering new ways for entrepreneurs to promote products and services (Atie et al., 2023). E-commerce is believed to be able to provide more responsive services, thereby increasing customer loyalty. E-commerce can also increase awareness of MSME actors regarding competition and market changes so that it can encourage product or service innovation to improve quality (Yusvita Aprilyan et al., 2022).

This study aims to identify factors that influence the use of e-commerce by MSMEs in Nganjuk Regency. With a deeper understanding of the barriers and benefits of using e-commerce, this study is expected to provide practical recommendations for MSMEs and local policy makers. The main objective is to encourage the digitalization of the MSME sector in Nganjuk Regency, so that they can be more competitive in an increasingly global market and contribute more to the regional economy.

II. LITERATURE REVIEW

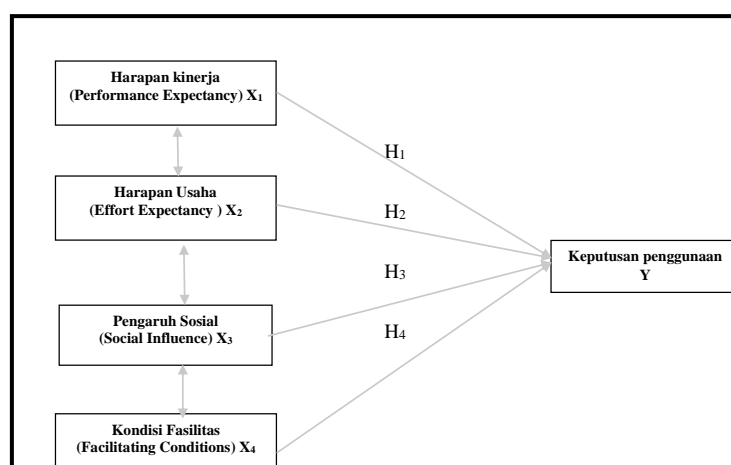
Trust and interactivity influence the use of e-commerce by MSMEs, and increasing the use of e-commerce will improve MSME performance (Supheni et al., 2019). Therefore, MSME actors will utilize e-commerce to improve their performance, but they will consider an e-commerce platform that is trustworthy and has good interaction facilities between sellers and buyers (Affan, 2022).

E-commerce is a valuable transformational entrepreneurial practice and innovative business policy, which is suitable for facing periods of crisis and uncertain change as experienced by our society in the post-pandemic era. This study uses a mixed methods approach to investigate how the e-commerce commitment of manufacturing MSMEs and the adoption of digital platforms stimulate the actualization of three e-commerce affordances: consumer knowledge creation, internationalization, and customer diversification (Ballerini et al., 2023).

MSMEs can function as a source of innovation and creativity by integrating these elements into their production processes. MSMEs can process resources that may become unique and attractive products (Rizqi et al., 2022). E-commerce is an online platform where entrepreneurs can sell and buy goods and services using electronic devices and computer communication networks. In general, e-commerce means buying and selling goods via the internet and computers via a web browser. E-commerce includes the process of selling, purchasing, and marketing products, just like direct or face-to-face transactions. Both the public and business owners who use e-commerce benefit (Firmansyah & Husna, 2021). UTAUT is a model to explain user behavior towards information technology (Venkatesh et al., 2003). This model is a combination of eight models that have been successfully developed previously. The UTAUT model shows that behavioral intention and behavior to use technology (use behavior) are influenced by performance expectancy, effort expectancy, social influence, and facilitating conditions. These four factors are moderated by gender, age, experience, and voluntariness of use.

III. RESEARCH METHODS

All This study involves MSMEs located in Nganjuk Regency. Researchers in this project use quantitative methods to distribute questionnaires. Visually, the research design image can be seen as follows:



This study involved MSMEs located in Nganjuk Regency. Researchers in this project used quantitative methods, such as distributing questionnaires. The population and sample in this study were in Nganjuk Regency, totaling 3175 MSMEs taken from

Determinants of MSME Decisions in Using E-Commerce in Nganjuk Regency

20 Districts in Nganjuk Regency. In this study, the minimum sample measurement was using the Slovin formula of 355.2487 samples/respondents, which was repeated to 355 samples/respondents.

IV. RESEARCH RESULT

A. Instrument Testing

The validity test can be explained that all statement items of Performance Expectation variables (X1), Business Expectation (X2), Social Influence (X3), Facility Conditions (X4), and Decision to Use (Y) have a calculated r value $> r$ table. Then the statement items from the questionnaire can be declared valid. After searching for the validity results of the instrument with the test criteria if the calculated $r > r$ table with a significance level of 0.05 then it can be stated that the measuring instrument is valid, and vice versa if the calculated $r < r$ table then the measuring instrument is not valid. From the test results, the average results were obtained that all research instruments had a calculated r value $> r$ table, namely $0.104 > 0.934$. This means that the measuring instrument is declared valid.

While the reliability test, that the measuring instrument is declared Reliable. The reliability test shows that the Cronbach Alpha value (α) on the variables Performance Expectation (X1), Business Expectation (X2), Social Influence (X3), Facility Conditions (X4), and Decision to Use (Y) in this study is greater than 0.60. This means that all variables are declared reliable.

B. Classical Assumption Analysis

The results of the normality test above can be seen in the Asymp Sig. uindsandarized is 0.210 which is greater than 0.05, so it can be concluded that the data is normally distributed. The results of the multicollinearity test analysis in Table 4.8 show that all variables of Performance Expectations (X1), Business Expectations (X2), Social Influence (X3), Facility Conditions (X4), and Decision to Use (Y) have a tolerance value of > 0.1 or 10%, and a VIF value of < 10 . This finding indicates that there are no symptoms of multicollinearity in this regression model so the data is considered good and ready to be used in further testing.

While the results of the heteroscedasticity test show that all variables have a significance value greater than 0.05, so it can be concluded that the regression model in this study is suitable for use and there is no heteroscedasticity.

C. Multiple Regression Analysis

Determination Test Results (R2)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.774 ^a	.598	.594	.46095	2.000

a. Predictors: (Constant), Facility Conditions, Business Expectations, Performance Expectations, Social Influence

b. Dependent Variable: Usage decision

The results above show that the coefficient of determination (R2) test was obtained at 0.598, which is equal to 59.8%. This means that the influence of performance expectations, business expectations, social influences, and facility conditions on the decision to use e-commerce for MSMEs in Nganjuk Regency is 59.8%. While the remaining 40.2% is influenced by other factors not examined in this study.

Statistical Test Results t (Partial)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
		B	Std. Error	Beta	T	Sig.	Tolerance VIF
1	(Constant)	3.041	.313		9.713	.000	
	Performance Expectations	.056	.024	.119	2.313	.021	.435 2.299
	Business Hope	.057	.019	.086	2.448	.015	.922 1.084
	Social Influence	.069	.028	.155	2.507	.013	.299 3.344
	Facility Conditions	.179	.020	.524	8.735	.000	.319 3.135

a. Dependent Variable: Keputusan penggunaan

In this variable, as stated in the table above, there is a t table of 1.967 with a calculated t of the performance expectation variable of 2.313, a calculated t of the business expectation variable of 2.448, then a calculated t of the social influence variable of 2.507 and a calculated t of the facility condition variable of 8.735. The four factors have a calculated $t > t$ table, meaning that the four hypotheses above influence the decision to use.

V. DISCUSSION

The influence of performance expectations on MSME decisions in using e-commerce in Nganjuk Regency.

Based on the submission of the first hypothesis, it is known that the proposed H1 can be accepted. Table 4.15 shows that the t-statistic value for the Performance Expectancy variable on the desire to use E-Commerce is greater than the t-table value (1.967) which is 2.313 so that the positive influence given by Performance Expectancy on MSME Decisions in using E-Commerce is proven to be significant.

Respondents who feel that e-commerce can increase sales and operational efficiency tend to prefer to adopt this digital platform. This is in line with previous research which shows that performance expectations are a key factor in the adoption of new technology by MSMEs.

The influence of business expectations on MSME decisions in using e-commerce in Nganjuk Regency.

Based on the submission of the second hypothesis the proposed H2 can be accepted. Table 4.15 shows that the t-statistic value for the variable Business Expectations on the decision of MSMEs in using E-commerce is greater than the t-table value (1.967) which is 2.448 so that the positive influence given by business expectations on the decision of MSMEs in using E-Commerce.

Respondents who feel that the use of e-commerce is not too complicated and easy to access are more likely to adopt this system. This shows the importance of training and technical support for MSMEs in the transition process to a digital platform. As shown by the questionnaire that the researcher distributed for the indicator Using the system takes a lot of time for my normal tasks Working with the system is complicated to understand what is going on. Many respondents who disagreed meant that the use of E-commerce on MSMEs had a very positive influence and was easy to use according to the business expectations of MSME actors.

Social Influence on MSMEs' decisions in using e-commerce in Nganjuk Regency.

Based on the submission of the third hypothesis, it is known that the proposed H3 is accepted. Table 4.15 shows that the t-statistic value for the variable of social influence on the decision of MSMEs in using E-Commerce is greater than the t-table value (1.967) which is 2.507 so that the positive influence given by social influence on the decision of MSMEs in using E-Commerce is proven to be significant.

Many respondents reported that recommendations from business partners and the influence of their social environment motivated them to switch to e-commerce. This shows that the social aspect can be an important driver in the adoption of technology among MSMEs. Shown in the questionnaire distributed by the researcher.

The influence of facility conditions on MSME decisions in using e-commerce in Nganjuk Regency.

Based on the submission of the fourth hypothesis, it is known that the proposed H4 can be accepted. Table 4.15 shows that the t-statistic value for the variable of facility conditions on the decision of MSMEs in using E-Commerce is greater than the t-table value (1.967) which is 8.735 so that the influence given by facility conditions on the decision of MSMEs in using E-Commerce is proven to be significant.

Facility conditions, including technological infrastructure and internet access, have been proven to be inhibiting factors in the use of e-commerce by MSMEs. The results show that MSMEs that have better access to technology and the internet tend to be more successful in implementing e-commerce. Therefore, infrastructure development in rural areas such as Nganjuk is very necessary to support the growth of MSMEs.

VI. CONCLUSION

Based on the results of the research conducted, it can be concluded that factors such as performance expectations, business expectations, social influence, and facility conditions have a significant positive influence on MSME decisions in using e-commerce. By understanding these determinants, it is hoped that it can help MSMEs in Nganjuk Regency to better utilize digital technology for their business growth.

Challenges for MSMEs Although e-commerce offers many advantages, MSMEs in Nganjuk Regency still face various challenges, such as limited technological infrastructure, lack of digital skills, and high costs for using e-commerce platforms.

Digitalization is very important for MSMEs to increase competitiveness and expand markets. E-commerce provides opportunities for MSMEs to reach wider consumers and increase operational efficiency. And efforts are needed from the government and related parties to provide adequate training and infrastructure support so that MSMEs can optimally utilize e-commerce.

Determinants of MSME Decisions in Using E-Commerce in Nganjuk Regency

The weakness of this study is the lack of support from the government, this study suggests support from the government in the form of training and infrastructure development. Further research can further evaluate how government support can increase the adoption of e-commerce in MSMEs.

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