

Does Cashless Society Moderate Factors Affecting on MSME Performance in Central Java?

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Abstract. This study aims to test whether the cashless society can moderate the effect of fintech payments and e-commerce on the MSMEs performance in Central Java. Respondents in this study were Business actors in Central Java MSMEs who in their business transactions used the fintech payment platform and e-commerce. The number of data processed in this study was 102, using the SMART PLS 4.0 analysis tool. The results of this study indicate that fintech payment has a positive and significant influence on MSME performance (p-value 0.030), while the influence of e-commerce has no effect on MSME performance (p-value 0.839). Cashless society can moderate the influence of fintech payment on MSME performance (p-value 0.098), but cannot moderate the influence of e-commerce on MSME performance in Central Java (p-value 0.098).

Keywords: Cashless Society, Digital Adaptation, E-Commerce, Fintech Payments, MSME Performance

INTRODUCTION

The phenomenon of MSME performance in Indonesia reflects an interesting dynamic. The use of digital technology in financial transactions is increasing, providing opportunities for MSMEs to access wider markets and improve their operational efficiency. This also encourages innovation in business models, where MSMEs can utilize e-commerce and fintech payment platforms to transact and expand their product reach and interact more closely with consumers. This development shows that adaptation to digital technology is not just a trend, but an urgent need for MSMEs to remain competitive and survive amidst rapid market changes.

Advances in financial technology (fintech) and electronic commerce (e-commerce) have offered innovative solutions to address these challenges (Yulida, 2019). Fintech Payment covers various digital financial services such as electronic payments, e-wallets, and online loans that make it easier for MSMEs to conduct financial transactions quickly and efficiently. Meanwhile, e-commerce provides a platform for MSMEs to sell their products online, expand market reach and increase brand visibility (Rahayu & Ningtyas, 2021). Hopefully, MSMEs will be able to adapt quickly to market changes and take advantage of existing opportunities to expand their reach and improve the quality of their products.

Several previous studies on fintech, e-commerce, and MSME performance have been conducted by B. Rahardjo, Budi; Khairul (2019) which concluded that fintech plays a key role in improving MSME performance, while Sadrakh Zefanya Putra et al. (2023) revealed that e-commerce has a major influence on economic growth in MSMEs. Referring to a study conducted by Paripurna, Raihan; Ajija (2019), although the use of payment gateways was identified, its influence on MSME income was not significant. In addition, research by Handayani, Nurdiana; Badjuri (2022) shows that fintech payments do not have a direct positive influence on MSME development.

In this study, cashless society is a moderating variable defined as an event where people make transactions in a non-cash manner and lead to digital-based activities. The development of a cashless society will affect the transformation of the payment system and the development of digital-based businesses to improve the performance of MSME players. Several studies on cashless society have been conducted by various researchers, including Kustina & Aji, (2023), who found that the cashless society variable can moderate and strengthen the impact of payment gateways on the financial performance of MSME players. The development of a cashless society will affect the transformation of the payment system and the development of digital-based businesses to improve the performance of MSME players. Cashless society research has been researched by Kustina & Aji (2023) findings that cashless society variable can moderate and strengthen the impact of payment gateways on the financial performance of MSMEs. Cashless society accelerates the adoption of digital payments, which in turn strengthens the ability of MSMEs to utilize fintech payment and e-commerce technology. With faster, safer, and more efficient digital transactions, MSMEs can better manage their supply chains, increase market access, and improve financial performance and business sustainability.

Several previous studies have shown differences in results related to the impact of fintech payments on MSME performance. This difference prompted the author to examine the integration of fintech payments and e-commerce on MSME performance using cashless society as a moderating variable. The purpose of this study is to analyze the impact of fintech payment and e-commerce integration on MSME performance moderated by the cashless society variable. Statistical tests will be conducted to test the hypothesis and identify key factors that influence MSME performance. The hypotheses proposed in this study are as follows:

- H1: It is suspected that Fintech Payment has an effect on MSME Performance
- H2: It is suspected that E-Commerce has an effect on MSME performance
- H3: Cashless Society can moderate the influence of Fintech Payment on MSME Performance
- H4: Cashless Society can moderate the influence of E-Commerce on MSME Performance

Through this hypothesis, this study aims to provide in-depth insight into the key factors that influence the performance of MSMEs in the context of e-commerce and digital payment technology which is strengthened by the cashless society variable.

METHOD

This study uses a quantitative approach to analyze the effect of fintech payment and e-commerce integration on MSME performance moderated by the cashless society variable. The population that is the focus of this study is MSME actors in Central Java who have used fintech payment and e-commerce in business transactions in MSMEs. Data were collected through an online questionnaire, carried out from September 6 to October 19, 2024. The instrument used in this study is a questionnaire consisting of several parts, namely the demographics of respondents and MSMEs, and measurements using a Likert scale of 1-6 for each indicator of each variable related to fintech payment, e-commerce, MSME performance, and cashless society. A total of 102 respondents have filled out the questionnaire distributed via Google Form, and then processed the data using Smart PLS 4.0 software to describe the basic characteristics of the data and test the hypothesis.

Measurement Model or Outer Model is carried out to assess the validity and reliability of the model (Ghozali & Latan, 2015). Instrument validity is seen based on the significance and loading factor value of each research indicator. Internal validity shows the ability of a research instrument to measure what should be measured from a concept, so that it can be used to answer the question of whether the research has used the concept it should.

Table 1. Validity Test Measurement Table

Parameter	Rule of Thumb
Outer Loading	Loading Factor value must be > 0.70
Average Variance Extracted (AVE)	Average Variance Extracted (AVE) value > 0.50

Reliability testing aims to measure a questionnaire which is an indicator of a variable or construct. If the answers to the question instrument are consistent and stable, then the questionnaire is reliable. The construct reliability test is measured by two criteria, namely composite reliability and cronbach alpha (α) from the indicator block that measures the construct. A questionnaire data is said to be reliable if the composite reliability and cronbach alpha values are above 0.07(Ghozali, 2014).

Table 2. Reliability Test Measurement Table

Parameter	Rule of Thumb
Cronbach's Alpha	Cronbach's Alpha value > 0.70
Composite Reliability	Composite Reliability Value > 0.70

RESULTS AND DISCUSSION

Table 3. Validity Test Results

Indikator	CS	FP	EC	KUMKM	CSxEC	CSxFP	Validitas
Mo1.1	0,806						Valid
Mo1.2	0,873						Valid
Mo2.1	0,799						Valid
Mo3.2	0,728						Valid
X1.1.2		0,806					Valid
X1.2.2		0,837					Valid
X1.3.1		0,878					Valid
X1.3.2		0,867					Valid
X1.4.1		0,918					Valid
X1.4.2		0,936					Valid
X1.5.2		0,891					Valid
X1.6.1		0,878					Valid
X1.6.2		0,873					Valid
X2.10.1			0,949				Valid
X2.10.2			0,916				Valid
X2.11.1			0,957				Valid
X2.5.2			0,907				Valid
X2.6.1			0,931				Valid
X2.7.2			0,935				Valid
X2.8.1			0,918				Valid
X2.8.2			0,959				Valid
X2.9.1			0,927				Valid
Y1.2				0,816			Valid
Y6.2				0,825			Valid
Y7.1				0,872			Valid
Y7.2				0,844			Valid
Y8.1				0,868			Valid
Y8.2				0,854			Valid
Mo.CS x X2.EC					1,000		Valid
Mo.CS x X1.FP						1,000	Valid

Source: Data processed by SmartPLS 4.0, 2024

Joseph F. Hair et al. (2022) put forward the Rules of Thumb criteria to be used to assess the validity of reflective construct measures with convergent validity testing criteria, the Average Variance Extended (AVE) value must be higher than 0.50. As in the table above, the validity value of all constructs is above 0.50, which means that all indicators can be said to be valid.

Table 4. Reliability Test Results

Variabel	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
Mo. Cashless Society	0,821	0,851	0,645
X1. Fintech Payment	0,963	0,976	0,769
X2. e-Commerce	0,982	1,008	0,871
Y. Kinerja UMKM	0,922	0,941	0,717

Source: Data processed by SmartPLS 4.0, 2024

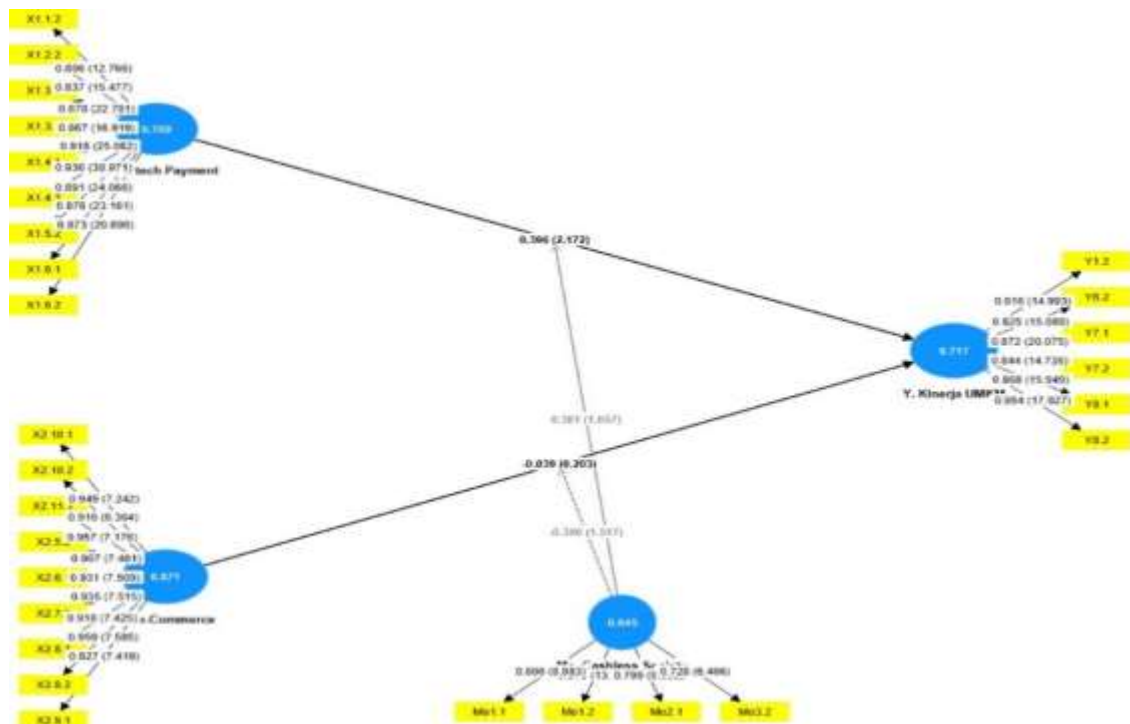
The measurement model shows how the manifest variables or observed variables represent the latent variables to be measured. In this model analysis, the relationship between the latent variables and their indicators is determined. The table above shows that all variables pass the reliability test stage. This can be seen from the Cronbach's alpha value on the Cashless Society variable showing a value of $0.821 > 0.7$, Fintech Payment $0.963 > 0.7$, E-Commerce $0.982 > 0.7$, and MSME Performance $0.922 > 0.7$. As well as for the composite reliability value on the Cashless Society variable showing a value of $0.851 > 0.7$, Fintech Payment $0.976 > 0.7$, E-Commerce $1.008 > 0.7$, and MSME Performance $0.941 > 0.7$. Thus, all instruments are said to be reliable and can be continued to the hypothesis test.

Table 5. Hypothesis Test Results (Path Coefficients)

Variable	Original sample (O)	T statistics (O/STDEV)	P values
X1. Fintech Payment -> Y. Kinerja UMKM	0,396	2,172	0,030
X2. e-Commerce -> Y. Kinerja UMKM	-0,039	0,203	0,839
Mo. Cashless Society x X2. e-Commerce -> Y. Kinerja UMKM	-0,390	1,517	0,129
Mo. Cashless Society x X1. Fintech Payment -> Y. Kinerja UMKM	0,381	1,657	0,098

Source: Data processed by SmartPLS 4.0, 2024

The results of the hypothesis in this study can be seen from the p-values in table 1.3 Direct Effect and Indirect Effect. The hypothesis will be accepted if the P-Values < 0.10 . Based on the results of the partial Direct Effect analysis, the value obtained on the fintech payment variable on MSME performance with a p value of $0.030 < 0.10$, then statistically H_0 is rejected while H_a is accepted. Then on the E-Commerce variable on MSME Performance with a p value of $0.839 > 0.10$, then statistically H_0 is accepted and H_a is rejected. Based on the results of the partial Indirect effect analysis, the value obtained on the fintech payment variable on MSME performance mediated by a cashless society has p values of $0.098 < 0.10$ and the coefficient indicates a positive direction of 0.381, meaning that cashless society mediates positively and significantly between fintech payments on MSME performance. Meanwhile, the e-commerce variable on MSME performance mediated by cashless society has p values of $0.129 > 0.10$ with a coefficient showing a negative direction with a value of -0.390 which indicates that cashless society is unable to mediate between e-commerce and MSME performance.



Source: Data processed by SmartPLS 4.0, 2024

Figure 1. KPP Model

This model provides insight into the elements that most influence MSME performance related to fintech payment, e-commerce, and cashless society. Construct X1 has a significant effect on Y with a coefficient of 0.396 and a t-value of 2.172, X1 has a significant effect on MSME Performance. Construct X2 is not significant on Y with a coefficient of -0.039 with a t-value of 0.203 indicating that this effect is not significant. Cashless Society as a Mediator: The indirect effect of other constructs is influenced by Cashless Society, but some of its path coefficients show low significance.

a. The Influence of Fintech Payment on MSME Performance

The findings of the study indicate that Fintech Payment has a positive and significant effect on MSME Performance with a significance value of $0.030 < 0.10$. These results identify that the use of fintech-based payment technology (such as e-wallets, QR payments, and other digital platforms) can help improve various operational and financial aspects of MSMEs. This influence could mean that the more MSMEs adopt fintech payments, the better their performance in terms of increased sales, transaction efficiency, better financial management and ease of access to financing.

The use of fintech payments can increase the competitiveness of MSMEs in an increasingly digital market. Consumers today tend to choose businesses that offer convenience, including ease of payment. MSMEs that adopt fintech payments are more attractive to customers who want faster and safer transactions. Although the influence of fintech payments tends to be positive, there are several challenges that MSMEs may face in the process of adopting fintech payments, such as technological readiness, transaction costs and digital literacy. This study provides strong empirical evidence regarding the significant contribution of fintech payments in improving MSME performance.

The results of this study underline the importance of fintech payments as a catalyst for

MSME growth. By facilitating more efficient and inclusive transactions, fintech payments open up new opportunities for MSMEs to compete in an increasingly competitive market. This is in line with global trends that show the adoption of financial technology is increasingly widespread among micro, small, and medium enterprises. (B. Rahardjo, Budi; Khairul, 2019). This result is in line with the findings Sholeha et al., (2024), Zebua & Wisdom, (2024) And Hidayatullah et al., (2024) that Fintech Payment has a positive effect on MSME Performance. Likewise with research (Purnamasari, 2020) that Payment Gateway has a positive and significant influence on the development of MSMEs.

b. The Influence of E-Commerce on MSME Performance

The results of the study prove that E-Commerce does not have a significant effect on MSME performance with a significance value of $0.839 > 0.10$. One of the main factors that may cause E-Commerce to not have a significant effect on MSME performance is limited access and knowledge of technology among MSME actors. Although the E-Commerce platform is growing, not all MSMEs have the ability or resources to adapt quickly. This could be due to a lack of training, digital skills, or even limited technological infrastructure in certain areas, such as slow or uneven internet access.

In some cases, E-Commerce may take time to have a significant impact on MSME performance. The use of E-Commerce does not always result in rapid improvements because it takes time to build consumer trust, optimize online stores, and adjust marketing strategies. Thus, in certain periods, its influence has not been seen significantly. The results of this study are in line with research conducted by Prasetyo & Farida, (2022), Subagio & Saraswati, (2021) And Triandra et al., (2019) with the result that the use of e-commerce does not affect the performance of MSMEs. However, the results of this study are not in line with the research conducted by Khaira & Jalalluddin, (2021) And The Last Supper, (2018)

c. Fintech Payment On the Performance of MSMEs with Cashless Society Moderation

This study, the coefficient value of 0.381 indicates a positive relationship between cashless society and MSME performance. This means that the higher the adoption of digital payments, the better the performance of MSMEs. And the p-value of 0.098 indicates that this relationship is quite significant because it is smaller than 0.10. This indicates that there is a significant potential benefit from adopting a cashless society for MSMEs.

In the era of Cashless Society, consumers increasingly trust the security of digital transactions. MSMEs that utilize Fintech Payment gain greater trust from consumers because they provide payment methods that are considered safer and more convenient. This increases customer loyalty and leads to increased sales. However, although Cashless Society provides many benefits, the level of financial literacy and technological adaptation are determining factors for the success of implementing Fintech Payment in MSMEs. MSMEs that do not have sufficient digital and financial capabilities may have difficulty in taking advantage of the opportunities offered by Fintech Payment. Therefore, digital education and mentoring programs for MSMEs are very important to ensure they can adapt to Cashless Society.

Fintech Payment helps MSMEs reduce the time on payment processing and reduces the risk of human error. With a digital payment platform, MSMEs can reach a wider range of consumers, even beyond the local geographic area. Cashless Society strengthens this influence as more consumers choose non-cash payment methods. As research conducted by Lestari et al., (2020) that is a significant positive influence of Payment Gateway on the financial performance of MSMEs. (Abiba & Indrarini, 2021) also said that the use of

electronic money (e-money) has a positive and significant influence on the creation of the Cashless Society movement. the study of Kustina & Aji, (2023) shows that the cashless society variable is able to moderate and strengthen the influence of payment gateways on the financial performance of MSMEs. The interaction between payment gateways and cashless society is proven to have a positive and significant influence. Thus, the cashless society moderation variable acts as a quasi-moderation variable, where it not only functions as an interaction variable in moderating the relationship between payment gateways and MSME financial performance, but also as a stand-alone predictor variable.

d. E-Commerce On the Performance of MSMEs with Cashless Society Moderation

The findings of the interaction variable of E-Commerce with cashless society do not have a positive effect with a significance value of $0.129 < 0.10$, the cashless society variable is able to moderate and strengthen the impact of payment gateways on the financial performance of MSMEs. The interaction between payment gateways and cashless society has a positive and significant effect. Therefore, the moderation variable of cashless society can be considered as a quasi-moderation (quasi moderator), where its role is not only as an interaction variable in moderating the relationship between payment gateways and MSME financial performance, but also functions as an independent predictor. Many MSMEs are only present on the E-Commerce platform without utilizing additional features such as digital marketing, better inventory management, or integration with digital payment systems. With the presence of Cashless Society, even though non-cash transactions increase, if MSMEs cannot manage transactions efficiently and effectively, the potential for increased performance will still not be achieved.

Another factor that influences the failure of E-Commerce in improving MSME performance is limited infrastructure, such as unstable internet connections or uneven access to digital technology in remote areas. In addition, MSMEs often lack resources, both in terms of capital and manpower, to maximize the use of E-Commerce. Although the Cashless Society is growing, not all MSMEs have adequate financial literacy to manage digital transactions effectively. Many MSMEs are still comfortable with traditional payment methods and are reluctant to switch to non-cash transactions. This inability to optimally adopt a digital payment system reduces the potential benefits of using E-Commerce, which ultimately results in no significant increase in performance.

This research is in line with Ainur Hardianti et al., (2022) finding that the high volume and number of e-commerce transactions in Indonesia have not been able to encourage the creation of an optimal cashless society in Indonesia, let alone the performance of MSMEs. Different from research conducted by Syaharani et al., (2024) shows that the use of e-commerce has a positive influence on development, this indicates that MSMEs that adopt e-commerce and e-wallets tend to experience better development in terms of service reach and accessibility.

CONCLUSION

Based on the results of the study, it can be concluded that fintech payment has a positive and significant impact on MSME performance. The adoption of fintech-based payment technology allows MSMEs to improve transaction efficiency, financial management, and access to financing, which ultimately contributes to increased sales and competitiveness in the digital market. In contrast, e-commerce does not show a significant impact on MSME performance, which may be due to limited access and knowledge of technology among MSME

actors. Although e-commerce offers growth potential, the results of this study indicate that it takes time and the right strategy to realize a significant impact.

The existence of a cashless society variable as a moderation in the relationship between fintech payments and MSME performance shows that the higher the adoption of digital payments, the better the performance of MSMEs. However, the level of financial literacy and technological adaptation remain challenges that must be overcome so that MSMEs can take full advantage of this technology.

This research is expected to add to the literature on the influence of fintech payment and e-commerce on MSME performance, as well as cashless as a moderating variable. This opens up space for further researchers to explore the relationship and dynamics of interactions between financial technology, e-commerce, and MSME performance in various contexts. These findings provide insight to MSME actors and policy makers regarding the importance of implementing fintech payments and increasing digital literacy to increase competitiveness in the market. It is hoped that policies that support education and access to technology for MSMEs can be created, so that MSME actors are better prepared to face the digital era.

The limitations of this study are the need to increase population variation by involving MSMEs from various regions and sectors to obtain a more comprehensive picture, and a longitudinal study is needed to observe the development and trends of technology use over a long period of time, in order to evaluate the impact of technology adoption on MSME performance more accurately.

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