

# Fintech, Financial Knowledge and Performance: Factors That Support The Sustainability of MSMEs.

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**Abstract.** The use of technology in business can affect the company's performance to survive in the long term. This study aims to determine the influence of Financial Technology and Financial Knowledge on the performance of MSMEs. Financial technology is measured using two proxies, namely automatization and alternative payment methods (APMs). This study uses primary data based on questionnaires distributed to MSME managers and owners in Kebumen District, Central Java, Indonesia using the purposive sampling method. Hypothesis testing uses SEM-PLS analysis with the SmartPLS application version 4.0. The statistical results show that APMs and financial knowledge have a positive effect on the performance, while automation have no effect on the performance of MSMEs. The results of this study are expected to encourage MSME management to improve their capabilities related to financial technology and financial knowledge to support business sustainability.

## 1 Introduction

Indonesia is one of the countries experiencing the impact of the Covid-19 pandemic on the economic activities, with many businesses failing or even going bankrupt due to inability to operate. In this condition, MSMEs can actually survive and become the driver of the national economy to recover. This phenomenon explains that MSMEs are a very productive business that continues to be developed to support macro and micro economic development in Indonesia [1]. Micro, Small and Medium Enterprises (MSMEs) support the economics of the nation by creating jobs and equalising income [2].

Therefore, strengthening the role of MSMEs through performance improvement needs to be carried out continuously. Many factors can influence the improvement and growth of MSME performance, one of which is the development of technology, including financial technology (fintech). The role of fintech is very important to support economic progress. After the COVID 19 pandemic, fintech is not only recognised by entrepreneurs but also by the wider community and traders [3].

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Fintech is a new financing model that combines financial system services with technology. The examples of fintech are automation and alternative payment methods that make transactions easier for consumers and businesses [4]. One example of an alternative payment is the development of cash payment instruments into non-cash payments such as paper-based payments, such as electronic fund transfers and cards as payment instruments (debit cards, credit cards, ATMs, and e-money) [5]. The rapid development of this non-cash payment instrument is increasingly in demand by the public.

Therefore, the use of fintech in MSMEs is expected to support the performance of MSMEs to survive in business competition. On the other hand, the purpose of business is to generate profit. Management needs to have adequate financial knowledge in managing the business so that it can improve the performance of MSMEs.

This study aims to examine the influence of financial technology consist of automatization, alternative payment methods and financial knowledge to the MSMEs performance in Kebumen District, Central Java, Indonesia. Based on data from the Central Java Cooperatives and SMEs Office, the number of MSMEs in Kebumen in 2023 is quite high, reaching 11,992 MSMEs. However, there are still many obstacles that need to be faced by MSMEs due to the lack of experience in doing business, so that their resilience is still not optimal [6].

## **2 Literature review**

### **2.1 Resources based view (RBV)**

Resource Based View (RBV) theory becomes part of the performance theory put forward by [7]. RBV theory is the ability of a company to create or acquire resources that affect performance and competitiveness compared to its competitors. Performance is a measuring tool used as a benchmark for business success in achieving business goals. The RBV theory views a company as a unique collection of assets and resources, so that the company can create a competitive advantage [8]. For MSME, RBV can be applied by identifying aspects that can increase productivity so that it can improve its performance [9].

### **2.2 MSME performance**

MSME performance shows the result of MSME's work and adapts it to the tasks and roles that have been determined by the MSME goals. Performance is a standard effort or measure of the success or failure of the achievement of a goal that has been set by an organization or business. The performance of MSMEs has several factors that underlie the achievement of maximum performance such as the level of financial literacy, the level of education of the business owner, the location of the business owner's residence, the location of the business, age, etc [10], [11], [12]. MSME performance is an indicator to regulate the success rate of MSMEs. The performance of MSMEs is used as an objective measurement medium to describe the effective use of assets in operations to increase profits from business development [13].

### **2.3 Financial technology (fintech)**

Financial Technology or fintech according to Bank Indonesia Regulation No. 19/12/PBI/2019 is the use of technology with the financial system to create the latest products, services, technologies, and business models and can have a monetary impact, financial system stability, efficiency, smooth and safe activities, and payment system

constraints. Fintech has had an impact on today's business changes by simplifying corporate operational activities. Aspects in financial technology include automation and APMS [4].

Alternative Payment Methods as a tool to make payments other than cash. An example of the use of APM is the use of digital payment which has recently been widely used by business actors, especially MSMEs [2]. With the development of this technology, business actors are greatly facilitated in the financial system. There are QRIS (Quick Response Code Indonesian Standard, paperless payment instruments and payment instruments using cards [5].

Automation is the process of work, procedures, or equipment becoming automated operations or controls [4]. Automation has function to replace the human's work to machines, involving deep reorganization in work processes, thus redefining human and machine functions [14]. The use of automation in MSMEs will greatly help streamline business activities, for example in production activities and recording company transactions using accounting software.

## **2.4 Financial knowledge**

Financial knowledge refers to individual understanding about financial aspects, including the ability to understand the concept of financial management [15], [16]. Individual knowledge refers to financial concepts, financial principles and technology that is used as the basis for financial management that enables individuals to make financial decisions [10].

# **3 Hypothesis development**

## **3.1 The effect of alternative payment methods (APMs) on MSME performance**

Digital payment (Alternative payment methods / (APMs)) are one of the digital services that provide a digital payment system by utilizing the sophistication of today's technology [17]. The use of this method in MSMEs is expected to simplify the payment process so as to increase consumer interest in buying at MSMEs, increase income and ultimately improve the performance of MSMEs. Therefore, the hypothesis in this study is:

H1: Alternative payment methods (APMS) have a positive effect on the performance of MSMEs.

## **3.2 The effect of automation on MSME performance**

Automation is an automated process that replaces humans in controlling operations for observation and decision-making activities [4]. Automation will be able to improve the efficiency of business performance, so that all activities can be done precisely and quickly while maintaining quality in production, marketing and record-keeping activities. Thus, MSMEs can improve their performance in terms of creating products, financial recording and management systems. [11] found that technology has positive influence to the growth of MSMEs. Therefore, the hypothesis of this study is:

H2: Automation has a positive effect on the performance of MSMEs.

## **3.3 The influence of financial knowledge on the performance of MSMEs**

Financial knowledge can influence how individuals apply saving behaviours, investment activities, and manage finances [16]. To assist MSME business actors in making decisions, a good financial manager can provide business financial health, both current and past, so that

they can use it when making decisions. Thus, financial knowledge can be one of the basic needs for business actors in overcoming financial problems.

H5: Financial knowledge has a positive effect on the performance of MSMEs.

## 4 Research methodology

The sampling method used in this study is purposive sampling. The object is MSMEs in Kebumen District, Central Java, Indonesia. The criteria used are MSME actors who have been operating for more than one year with the respondent criteria being managers and MSME business owners. The data are collected using questionnaire as primary data. The questionnaire uses a likert scale of 1-5, from strongly disagree (score 1) to strongly agree (score 5).

Variable dependent in this study is performance of MSMEs while independent variable consist of automatization, alternative payment methods (APM)s and financial knowledge. Research data will be analysed using Partial Least Square (PLS). SmartPLS v.4. There are some tests such as statistics descriptive, common method variance test (CMV), validity and reliability test, adjusted R-Square and hypothesis test.

## 5 Result and discussion

This study collects 100 data from 100 MSMEs in Kebumen District. Table 1 shows the respondents characteristics and table 2 shows the results of descriptive statistics.

**Table 1.** Respondent characteristics

Information	Description	Amount	Percentage (%)
Gender	Number of Respondents:	100	
	Male	53	53
	Female	47	47
Age	Number of Respondents:	100	
	<20 years	0	0
	21-30 years	38	38
	31-40 years	46	46
	41-50 years	16	16
Length of Business	Number of Respondents:	100	
	1-3 Years	40	40
	4-6 Years	39	39
	7-10 Years	11	11
	>10 Years	10	10
Position in Business	Number of Respondents:	100	
	Owner	86	86
	Manager	14	14
Type of business	Number of respondents:	100	
	Fashion/Clothing	8	8
	Culinary	51	51
	Automotive	11	11
	Basic necessities	11	11
	Others	19	19

Table 1 shows that the number of male and female respondents is almost equal, dominated by business owners with the majority of ages between 21-30 and 31-40 years, and the business category that mostly fills this questionnaire is the culinary sector.

**Table 2.** Descriptive statistics

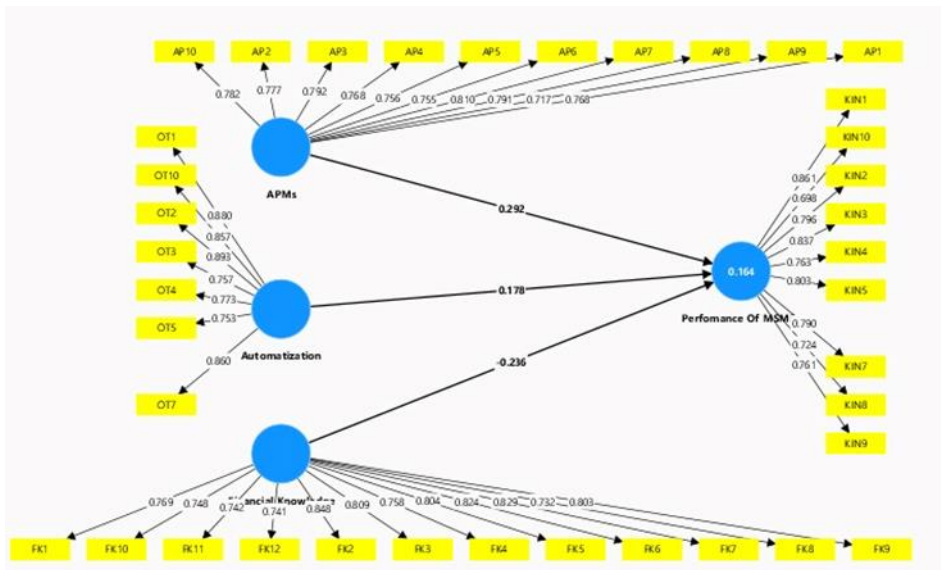
Variables	Min	Max	Mean	Std. Deviation
APMs	2	5	4.21	0,951
OTM	1	5	4.27	0,495
FK	1	5	3.72	0,980
PER	1	5	3.99	0,735

The descriptive statistical result show that the mean value of APMs is 4.21, automatization (OTM) is 4.27, financial knowledge (FK) is 3.72 and Performance is 3.99. A high average score shows that MSME managers are aware of the existence of fintech and financial knowledge.

**Table 3.** Common test method variance (CMV)

Extraction Sum of Squared Loading		
Total	% of variance	Cumulative %
9,053	21,554	21,554

The Common Method Variance (CMV) results show the value of 21.554%, showing that the tested data do not have CMV and the test can be continued. The convergent validity test can be assessed and analysed using outer loading and Average Variance Extracted (AVE). Based on the statistical results, there are several construction indicators that have not met the requirements, so that these indicators are eliminated to meet the requirements. After modification, this study fulfil the validity and reliability. Figure 1 shows the result of the modified outer loading model.



**Fig. 1.** Conceptual framework of the research

The result of hypothesis testing can be seen in Table 4. The adjusted R-Square (R2) value is 0.139 or 13.9%, which means that the MSME performance is influenced by exogenous

variables, namely alternative payment methods (APMs), automation, and financial knowledge by 13.9%. And the rest, which is 86.1%, is influenced by other factors outside these variables.

**Table 4.** Hypothesis testing

Hypothesis		Original Sample (O)	t-statistic	p-Value
APMs -> PER	H1	0.301	2.881	0.002
OTM -> PER	H2	0.177	1.112	0.131
FK -> PER	H3	0.227	1.848	0.031
Adj. R Square		0.139		

Note: APMs: Alternative Payment Methods; OTM: Automatization; FK: Financial knowledge; PER: performance

## 6 Discussion

For the first hypothesis, the original sample value is 0.301 with a t-statistic value of 2.881 and a p-value of 0.002. The statistical result shows that H1 is accepted, meaning that which shows that APMs has a positive effect on the performance of MSMEs. In today's digital era, payment transactions using cash are increasingly rare. This provides convenience for consumers in making transactions so that it can encourage increased sales and performance of MSMEs. The results of the study support the research of [2].

The second hypothesis, namely the effect of automation on the performance of MSMEs in Kebumen, shows a positive original sample value of 0.177 with a t-statistic value of 1.112 and a probability value of 0.131. Then H2 is rejected. The result shows that automation does not influence the performance of MSMEs. Automation does not make an intermediary for MSME to improve its performance. According to [18], technology utilisation is very expensive and it becomes an obstacle for MSMEs to implement it.

The third hypothesis, namely the effect of financial knowledge on the performance of MSMEs in Kebumen, shows a positive original sample value of 0.227 with a t-statistic value of 1.848 and a probability value of 0.032. Thus, H3 is accepted, meaning that financial knowledge has a positive influence on the performance of MSMEs. Financial knowledge will affect how a person applies saving, investing, and managing their finances [10]. Therefore, this understanding can help MSME actors to set strategies in utilising the resources they have as much as possible which can support the improvement of MSME performance.

## 7 Conclusion

This study aims to examine the relationship between APMs, automatization and financial knowledge. The results show that APMs and financial knowledge has positive influence, while automatization has no influence to the performance of MSMEs in Kebumen district, Central Java, Indonesia. Improving services to consumers by providing convenience in transactions, for example with a non-cash payment system, can improve the performance of MSMEs, while financial knowledge is also important to be able to manage the finances and can be used to develop business. Fintech implementation can support the existence of MSMEs in improving their performance which can at the same time maintain the sustainability of this business entity to continue to support the Indonesian economy. There are some limitation in this study. First, this study only takes samples in one district, the future study can enlarge the samples into broader city or district. Second, there are three independent variables in this study, the next study can add other variables such as financial inclusion or financial behaviour.

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