

THE EFFECT OF FINANCIAL LITERACY, FINANCIAL MANAGEMENT BEHAVIOR, USE OF E-COMMERCE, AND PRODUCT INNOVATION ON MICRO BUSINESS PERFORMANCE IN PURBALINGGA REGENCY

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Abstract

This research aims to analyze the influence of financial literacy, financial management behavior, use of e-commerce, product innovation on the performance of micro businesses in Purbalingga Regency. The research method used is a quantitative approach. The population in this study were all members of the Purbalingga Batik Craftsmen Forum Association, totaling 257 members. The sample in this research were members of the Purbalingga Batik Forum Association who are included in the micro scale category, have a business age of at least 3 years, and have social media to support their business. This research collects data by distributing questionnaires directly to respondents. The data analysis used in this research is multiple linear regression analysis. The conclusion of this research shows that financial literacy and financial management behavior have no effect on the performance of micro businesses in Purbalingga Regency. However, the use of e-commerce and product innovation has an influence on the performance of micro businesses in Purbalingga Regency. The implication of this research is that business performance can increase if business actors increase financial literacy, carry out good financial management behavior, maximize the use of e-commerce to expand markets, and carry out product innovation so that consumers have a variety of choices from the products offered.

Keywords: Business Performance, Financial Literacy, Financial Management Behavior, Use of E-commerce, Product Innovation

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INTRODUCTION

Indonesia's economic growth is currently growing rapidly. Especially after the covid 19 pandemic, the government has always put pressure on the national economy for economic revival. MSMEs are one of the government's tools to grow the existing economy. In an effort to build a populist economy, the President of the Republic of Indonesia has given directions to develop MSMEs Upgrading and Modernizing Cooperatives. The role of MSMEs is very large for the growth of the Indonesian economy, with the number reaching 99% of all business units. The contribution of MSMEs

to GDP also reaches 60.5%, and to employment is 96.9% of the total national employment ([Coordinating Ministry for Economic Affairs of Republic of Indonesia, 2022](#)).

Table 1. Number of MSMEs per classification in Central Java

No	Classification	Number
1	Micro	127.165
2	Small	9.453
3	Medium	69
4	Incomplete data	5.112
Total		141799

Source: Office of Cooperatives Small & Medium Enterprises of Central Java Province

Table 1 shows that the number of micro enterprises in Central Java has the largest number of existing scales, namely small and medium. In Indonesia, MSMEs are growing rapidly, for example in Purbalingga Regency. The following is data on MSMEs in Purbalingga Regency from 2019 to 2021 according to the Purbalingga Regency Cooperative and MSE Office.

Table 2. Number of MSMEs in Purbalingga Regency

Year	2019	2020	2021
Number of MSMEs	96.592	96.780	97.537

Source: Office of Cooperatives and MSEs of Purbalingga Regency

Based on the latest data from the Purbalingga District Cooperative and MSME Office, the number of MSMEs is always increasing from year to year. Micro enterprises are the largest scale of MSMEs in Purbalingga Regency. This can be seen from the 47 associations fostered by the Purbalingga Cooperatives and MSEs Office. All members of these associations fall into the micro scale. The types of micro businesses also include many categories such as services, trade and repair, accommodation, food and beverage supply, batik crafts, fisheries, processing industry, agriculture, fashion, exhaust production, convection, and many other categories.

Batik craft is one type of business that has potential in Purbalingga Regency. This can be seen from the increasing number of batik artisans. According to the Industry and Trade Office of Purbalingga Regency, the number of batik business actors in Purbalingga Regency in 2021 was 220 business actors. The number of batik business actors in Purbalingga Regency has increased compared to the previous year, which was 240 business actors in 2022. This increase shows that the batik business in Purbalingga Regency has considerable potential.

Company performance is a measurement of the strategy prepared by a company in order to achieve the goals and realization of the vision, mission of the company ([Munisu, 2010](#)). Business performance is an important element of company performance in general because the performance of a company can be seen from its business performance so far. Business performance needs to be considered for business development ([Wahyuni et al., 2021](#)). Good business performance can make the business grow and have good sustainability amid competitors. Poor business performance can also hinder business growth and development. Many factors underlie or influence business performance, including financial literacy, financial management behavior, e-commerce usage, and product innovation.

Financial literacy is a person's ability or knowledge to manage all their financial resources effectively ([Manurung, Jonni, & Manurung, 2009: 24](#)). With the awareness of this knowledge, it has long-term effects that can keep financial conditions stable and safe. Financial literacy is not only

important for individuals, but also influential in the economic progress of a country. The importance of public awareness of financial literacy is an indicator of a country's economic progress.

Research conducted by [Wahyuni et al. \(2021\)](#) shows that financial literacy has a positive effect on the performance of MSMEs. The skills and knowledge that a person has in the financial sector can have an influence on his business performance. This is indicated by business actors already doing budgeting and cash bookkeeping. [Suardana & Musmini \(2020\)](#). The results of this study are inconsistent with research conducted by [Fitria et al. \(2021\)](#), namely financial literacy has no effect on performance.

The next factor that affects performance is financial management behavior. financial management behavior becomes an intangible resource that can be controlled by the business so that it supports the running of the business to achieve performance growth for MSMEs. This is in line with research conducted by [Mali \(2023\)](#) which states that the performance of MSMEs has increased regarding financial management. Contrary to previous research, research by [Fitria et al. \(2021\)](#) financial behavior has no effect on performance.

In the digital era like now, many activities are carried out by the community by applying technology, such as the use of e-commerce in economic activities, for example. E-commerce is another factor that affects micro business performance. The use of e-commerce can make it easier for sellers and buyers, both of whom can still make transactions without being hampered by distance. [Wahyuni et al. \(2021\)](#) in their research stated that e-commerce has a positive effect on the performance of MSMEs. In contrast to [Prasetyo & Farida \(2022\)](#), it's research shows that e-commerce has no effect on performance.

Business performance is also influenced by other factors such as innovation. Innovation is an idea, idea, practice or object/object that is realized and accepted as new by a person or group for adoption ([Robbins & Coulter, 2010](#)). Tests conducted by ([Lie et al., 2022](#)) show that product innovation has a significant effect on the performance of MSMEs. In contrast to the results of research conducted by [Nizam et al. \(2020\)](#) that product innovation has no significant effect on marketing performance in MSMEs.

This research is a replication of the research of [Ramdhani et al. \(2022\)](#) by adding variables of financial management behavior and product innovation. The unit of analysis is different from previously conducted research, namely micro businesses. The research location is different from previous research, the research will be conducted in Purbalingga Regency, Central Java.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Resource Based View Theory

[Barney \(1991\)](#) developed the concept of resource-based view which has an important role for strategic management. The concept states that organizations will achieve sustainable competitive advantage if they have resources that are valuable, unique, rare and difficult to imitate. Resourced Based View (RBV) Theory according to [Barney in 1991](#), namely numbers have valuable, rare resources, make innovations that cannot be imitated, and the ability to implement into the business will get a sustainable competitive advantage. Tangible and intangible resources are part of the company's resources and bringing them together strategically can help organizations operate better where tactical steps that businesses can take to improve performance while maximizing their potential ([Sendari & Isbanah, 2018](#)).

Micro Business

Micro-enterprises are productive businesses owned by individuals and / or individual business entities that meet the criteria for micro-enterprises. According to Government Regulation Number 7 of 2021 concerning Ease, Protection, and Empowerment of Cooperatives and Micro, Small, and Medium Enterprises article 35 to article 36, the criteria for Micro Enterprises are having a business capital of not more than IDR 1,000,000,000 (one billion rupiah) outside the land and building of the place of business, having annual sales proceeds of not more than IDR 2,000,000,000 (two billion rupiah). Micro-scale businesses play an important role in the country's economy, as they contribute to the absorption of labor and the reduction of unemployment.

Business Performance

Performance is essentially the achievement of goals set for one's efforts in accordance with the chosen strategy. Performance is the result of the work activities of a person or group in an organization, which is influenced by various factors in order to achieve organizational goals within a certain period of time. The implementation of the work or activities of a person or group that is the authority and responsibility in an organization is the function or work activity in question. Performance is an achievement in a company that has made a strategic plan ([Purwaningsih et al., 2019](#)).

Financial Literacy

Financial literacy is the ability of individuals to carry out the basic principles of financial management. The purpose of financial literacy is to help people understand the risks associated with the financial activities they carry out. Financial literacy is a person's ability or knowledge to manage all their financial resources effectively ([Manurung, Jonni, & Adler Haymans Manurung, 2009](#)).

Financial Management Behavior

Behavior is human action or activity, either directly observed, or that cannot be observed by outsiders ([Notoatmodjo, 2003](#)). Financial management is all company activities related to how to obtain funds, use funds, and manage assets according to overall company goals. Financial management is management (management) regarding how to obtain assets, fund assets, and manage assets to achieve company goals ([Febriana, 2021](#)). From the above understanding, it can be concluded that financial management behavior is a person's financial responsibility regarding how their finances are managed. Ida and Dwinta (2020) state that money management behavior is the process of mastering using financial assets.

Use of E-commerce

E-commerce or electronic commerce is a buying and selling activity that utilizes internet facilities ([Azhar & Arofah, 2021](#)). Currently, e-commerce facilities are not only via telephone and television, but now more often use the internet. E-commerce in Indonesia has increased sharply after the pandemic. The increase in e-commerce transactions is projected to continue to increase every year.

Product Innovation

Innovation refers to anything that a person or group realizes and accepts as new in order to adopt an idea, notion, practice, or object. Another way to define innovation is as a person's capacity for original thinking resulting in commercially viable ideas. These ideas are used to generate new concepts and create action plans to deal with current customers, competing businesses, and markets.

The Effect of Financial Literacy on Micro Business Performance

Financial literacy is an individual's ability to understand, analyze and effectively manage personal or business finances. Financial literacy includes knowledge, skills and attitudes in making the right financial decisions, including in terms of managing money, taking credit, investing, and planning and preparing for future finances. Financial literacy is needed in business management, especially in making decisions based on accurate financial information, so that this can also determine business performance. This is in line with the Resourced Based View (RBV) Theory, where financial literacy is an intangible asset owned by businesses that can increase competitive advantage.

Research by [Wahyuni et al. \(2021\)](#) proves that financial literacy has a positive effect on the performance of MSMEs. The indication of these results is that financial literacy is the ability to understand and use financial information wisely in making financial decisions. Financial literacy allows business owners to better understand financial statements, budgets, and financial projections.

Research by [Septiani & Wuryani \(2020\)](#) proves that financial literacy has a positive effect on the performance of MSMEs. The indication of these results is that financial literacy is an important factor in improving the performance of MSMEs because a high level of financial literacy allows MSME managers to make better financial decisions and understand the implications of their actions on their business performance. This shows that the higher the level of literacy, the greater the effect on business performance. Based on this, the following hypothesis is formulated:

H1: Financial literacy has a positive effect on micro business performance

Effect of Financial Management Behavior on Micro Business Performance

Financial management behavior in business is all activities related to how to obtain funds, use funds, and manage assets according to overall business objectives. proper financial management behavior can help businesses to better manage financial risks, including risks such as market fluctuations, credit risk, or emergency situations. Based on the Resourced Based View (RBV) Theory, financial management behavior becomes an intangible resource that can be controlled by the business so that it supports the running of the business to achieve performance growth for MSMEs.

Research by [Saski et al. \(2023\)](#) proves that financial management behavior has a positive effect on the performance of MSMEs. The indication of these results is that good financial management behavior creates a strong foundation for business stability. If MSMEs have sufficient funds to meet their financial obligations, they can avoid situations of liquidity shortages that can disrupt daily operations.

Research by [Rachmawati & Nuryana \(2020\)](#) implies that proper financial management behavior can help businesses to better manage financial risks, including risks such as market fluctuations, credit risk, or emergency situations. Through financial management with good risk management, a business can protect itself from unexpected losses and maintain financial stability. This shows that the better the financial management behavior, the better the business performance. Based on this, the following hypothesis is formulated:

H2: Financial management behavior has a positive effect on micro business performance

Effect of E-Commerce Use on Micro Business Performance

E-commerce is a system with an internet network that is used for business transaction processes such as buying, selling, marketing, and payment. MSMEs that have a good and consistent e-commerce strategy can target potential customers more precisely, optimize advertising spending, and measure the results of marketing campaigns more optimally. These efforts allow MSMEs to allocate marketing budgets more efficiently, thereby increasing their revenue and business performance. This

is in accordance with the Resourced Based View (RBV) Theory, e-commerce can help run a business so that it can support performance growth. Companies that have superior resources will have a great opportunity for success in using e-commerce.

Research by [Harfie & Lastiati \(2022\)](#) proves that e-commerce has a positive effect on the performance of MSMEs. The indication of these results is that e-commerce allows MSMEs to reach a much wider market than just relying on physical stores, namely by reaching local, national, and even international customers.

Research by [Setiawati et al. \(2021\)](#) proves that e-commerce has a positive effect on the performance of MSMEs. The indication of these results is that e-commerce can be used by MSMEs to utilize online marketing such as digital advertising and social media in order to reach a larger audience and consumers. This can be interpreted that the higher the use of e-commerce technology by business actors, the more their business performance will increase. Based on this, the following hypothesis is formulated:

H3: E-commerce usage has a positive effect on micro business performance

Effect of Product Innovation on Micro Business Performance

Innovation in business is the process of creating, adopting, and implementing new ideas, products, services, or operations that bring added value to the company, customers, or the market in general. More flexible and adaptive products can help businesses avoid declining sales or losing share. Product innovation can be a resource and competitive advantage for MSMEs in improving overall performance. This is in accordance with the Resourced Based View (RBV) Theory, where product innovation is an intangible asset owned by the business and can improve the performance of a business.

Research by [Ludiya & Mulyana \(2020\)](#) proves that product innovation has a positive effect on the performance of MSMEs. Innovation allows businesses to produce better or more unique products than competitors, thus creating a competitive advantage that can help businesses maintain and increase market share.

Research by [Lie et al. \(2022\)](#) proves that product innovation has a positive effect on the performance of MSMEs. The indication of these results is that innovation can create innovative products that meet consumer needs or offer better features, so that these efforts can result in increased sales. This can be interpreted that the better the product innovation carried out by business actors, the more their business performance will improve. Based on this, the following hypothesis is formulated:

H4: Product innovation has a positive effect on micro business performance

RESEARCH METHOD

Type of Research

The research conducted used a quantitative research approach and a survey method. [Sugiyono \(2021: 57\)](#) defines survey research as a type of research used to collect data from samples taken from certain communities about events that occurred in the past or present.

Population and Sample

The population in this study were all members of the Purbalingga Batik Craftsmen Forum Association, totaling 257 craftsmen. The sample in the study was determined using purposive sampling technique with the criteria that the business actors are members of the Batik Craftsmen

Forum Paguyuban who are included in the micro-scale category, the business has been running for at least 3 years, the business actors have social media to support their business.

Sources and Methods of Data Collection

The data source in this study used primary data. The data collection method comes from information collected through distributing questionnaires to respondents.

Research Variables and Variable Measurement

Dependent Variable (Y)

Business Performance

Business performance is an achievement in a company that has made a strategic plan ([Purwaningsih et al., 2019](#)). Measurement of MSME development variables refers to the research of [Kore & Septarini \(2018\)](#), namely sales growth, capital growth, market growth, labor growth.

Independent Variable (X)

Financial Literacy

Financial literacy is the skill or level of understanding of individuals or communities regarding how they manage their finances effectively in accordance with the needs and economic conditions they face. Statement indicators that can be used to measure financial literacy variables refer to [Herleni S & Tasman A \(2019\)](#) research, namely basic financial knowledge, loans, insurance, investment.

Financial Management Behavior

Financial behavior is a person's ability to manage, namely planning, budgeting, checking, managing, controlling, searching and storing daily financial funds ([Kholilah et al., 2013](#)). Statement indicators that can be used to measure financial management behavior variables refer to the research of [Dew J & Xiao J J, \(2011\)](#), namely consumption, cash flow management, savings, credit management.

Use of E-commerce

Electronic commerce is the process of buying, selling, exchanging products, services and information via the internet network ([Wulandari et al., 2020](#)). Statement indicators that can be used to measure e-commerce usage variables refer to the research of [Nurlinda & Fatimah V \(2019\)](#), namely the ease of transacting product marketing, and market and customer opportunities.

Product Innovation

Product innovation is the launch of new products by a business to modify existing products and create new brands developed through internal research. The statement indicators that can be used to measure product innovation variables refer to the research of [Lukas et al. \(2000\)](#), namely line expansion, new products, completely new products.

Data Analysis Technique

Data Quality Test

The data quality test in this study uses validity and reliability tests. The validity test is used to determine whether the questionnaire used is valid or not. Meanwhile, the reliability test is used to measure how consistent and stable the data is presented.

Classical Assumption Test

The classic assumption test includes normality test, multicollinearity test, heteroscedasticity test, and linearity test.

Multiple Linear Regression Analysis

Financial literacy (X_1), financial management behavior (X_2), e-commerce usage (X_3), and product innovation (X_4) to one dependent variable, namely micro business performance (Y) will be tested using the following equation:

$$Y = \alpha + \beta_{(1)} X_{(1)} + \beta_{(2)} X_{(2)} + \beta_{(3)} X_{(3)} + \beta_{(4)} X_{(4)} + e$$

Description:

Y	: Micro Business Performance
α	: Constant
$\beta_1, \beta_2, \beta_3, \beta_{(4)}$: Regression Coefficient
X_1	: Financial Literacy
X_2	: Financial Management Behavior
X_3	: E-commerce Usage
X_4	: Product Innovation
e	: Standard Error

Goodness of Fit Test

The goodness of fit test in this study includes the F test and the coefficient of determination (Adjusted R^2). The F test aims to show whether each independent variable in the research model has an impact on the dependent variable simultaneously. Meanwhile, the coefficient of determination (Adjusted R^2) is used to measure the extent of the model's ability to explain how the influence of the independent variables affects the dependent variable.

RESULTS AND DISCUSSION

Validity and Reliability Test

The validity test in this study has a significance value of <0.05 and in the reliability test in this study each variable statement has a Cronbach's Alpha value ≥ 0.60 . So that the questionnaire in this study is said to be valid and reliable.

Descriptive Statistics

Table 3. Descriptive Statistical Analysis Results

Variable	N	Minimum	Maximum	Std. Deviation	Mean
Financial Literacy	82	1	5	0,956	3,887
Financial Management Behavior	82	1	5	1,157	3,957
E-commerce Usage	82	1	5	0,953	3,937
Product Innovation	82	1	5	0,828	4,191
Microenterprise Performance	82	2	5	0,617	4,578

Source: Processed data (2025)

Based on table 3, the respondents who filled out the questionnaire were 82 respondents. The mean value of the variables of financial literacy, financial management behavior, and e-commerce usage is 3.887, 3.957, and 3.937. This shows that business actors have a good level of financial literacy, financial management behavior, and use of e-commerce. The variables of product innovation and micro business performance have a mean value of 4.191 and 4.578, meaning that product innovation and business performance in business actors are classified as very good.

Classical Assumption Test

Based on the results of the classical assumption test, this study passes the normality test, multicollinearity test, heteroscedasticity test, and linearity test. The normality test uses the Kolmogorov-Smirnov (K-S) test which shows an asymp Sig 2-tailed value of 0.2 greater than the significance value of 0.05. Multicollinearity test seen from the VIF value and tolerance value for financial literacy variables of 1.015 and 0.986; financial management behavior of 1.019 and 0.981; use of e-commerce of 1.007 and 0.993; product innovation of 1.004 and 0.996. Each independent variable has a VIF value < 10 and a tolerance value ≥ 0.10. This means that the independent variables in this study do not have multicollinearity symptoms.

The heteroscedasticity test uses the Glejser test which results in the significance value of each variable in order, namely 0.371, 0.788, 0.364, and 0.313. This value shows a significance value greater than 0.05 so that there are no symptoms of heteroscedasticity. The linearity test produces a significance value of deviation from linearity > 0.05 so that the linearity test is fulfilled.

Multiple Linear Regression Analysis

Multiple linear regression analysis aims to determine the effect of independent variables on the dependent variable.

Table 4. Multiple Linear Regression Analysis Results

Model	Standardized Coefficient Beta	t _{count}	Sig.
financial literacy (X ₁)	0,164	1,610	0,112
financial management behavior (X ₂)	-0,126	-	0,221
e-commerce usage (X ₃)	0,311	1,234	0,003
product innovation (X ₄)	0,247	3,058	0,017
Constant	32,486	2,430	
Adjusted R Square	0,169		
F _{calculate}	5,126		
F _{sig}	0,001		

Source: Processed data (2025)

Based on table 4, the multiple linear regression equation is obtained as follows:

$$Y = 32.486 + 0.164X_1 - 0.126X_2 + 0.311X_3 + 0.247X_4 + e$$

From the equation above, it produces a constant value of 32.486 which has a positive coefficient sign. This means that even if respondents do not have knowledge about financial literacy, financial management behavior, use of e-commerce, and product innovation, the performance of micro businesses will remain positive. The coefficient of the financial literacy variable (X₁) is 0.164, meaning that the higher the level of financial literacy by business actors, the more their business performance will increase. The coefficient of the financial management behavior variable is -0.126,

meaning that the lower the financial management behavior by business actors, the more their business performance will increase. The coefficient of the e-commerce usage variable is 0.311, meaning that the better the use of e-commerce by business actors, the more their business performance will increase. The coefficient of the product innovation variable is 0.247, meaning that the better the business actors do in product innovation, the more their business performance will increase.

Goodness of Fit Test

Table 4 shows that the F_{count} value is 5.126 with a significance level of 0.001 and the F_{table} value is 2.49. So it can be concluded that the $F_{count} > F_{table}$ value is $5.126 > 2.49$ and a significance value of $0.001 \leq 0.05$. This means that financial literacy variables, financial management behavior, e-commerce usage, and product innovation significantly affect micro business performance. While the coefficient of determination (Adjusted R^2) in table 4 shows a value of 0.169. This means that the variables of financial literacy, financial management behavior, e-commerce usage, and product innovation affect micro business performance together by 16.9% and the remaining 83.1% is influenced by other variables outside the study.

Hypothesis Testing

Hypothesis testing is done using the t test. In the first hypothesis based on table 4, the financial literacy variable has a t_{count} value of $1.610 < t_{(table)}$ of 1.665 and a significance level of $0.112 > 0.05$. This means that the first hypothesis **is rejected**. In the second hypothesis, the financial management behavior variable has a t_{count} value of $-1.234 < t_{(table)}$ of 1.665 and a significance level of $0.221 > 0.05$. This means that the second hypothesis **is rejected**. In the third hypothesis, the variable use of e-commerce has a t_{count} value of $3.058 > t_{(table)}$ of 1.665 and a significance level of $0.003 \leq 0.05$. This means that the third hypothesis **is accepted**. In the fourth hypothesis, the product innovation variable has a t_{count} value of $2.430 > t_{(table)}$ of 1.665 and a significance level of $0.017 \leq 0.05$. This means that the fourth hypothesis **is accepted**.

DISCUSSION

The Effect of Financial Literacy on Micro Business Performance

The first hypothesis states that financial literacy has a positive effect on micro business performance, in this study it is rejected. This means that financial literacy has no effect on micro business performance. Financial literacy possessed by micro business actors cannot improve business performance.

Financial literacy can have an effect on improving business performance if business actors have a high level of literacy and use their literacy to run their business. Most respondents in this study did not have good financial literacy. Poor financial literacy can be reflected in respondents who do not have financial planning knowledge, do not know credit requirements, and have not mastered financial terms such as investment. Financial literacy has no effect on micro business performance because the majority of respondents have a low level of education (elementary school), so that understanding of financial literacy is not as optimal as respondents who have a high level of education. The existence of a low level of education can also cause mistakes in understanding financial literacy. This causes the financial literacy they do not have an impact on their business performance.

The research results are in line with [Fitria et al. \(2021\)](#), namely financial literacy has no effect on performance. The results of the study found the fact that knowledge about the time value of money is still relatively low, the existing capital in MSMEs does not develop because the money previously obtained is not invested properly. However, this research is not in line with the research of [Kusuma et al. \(2021\)](#) and [Idawati & Pratama \(2020\)](#) which have the results that financial literacy affects the performance of MSMEs.

The Effect of Financial Management Behavior on Micro Business Performance

The second hypothesis states that financial management behavior has a positive effect on micro business performance, in this study it is rejected. This means that financial management behavior has no effect on micro business performance. Financial management behavior is not used to improve business performance

Financial management is all company activities related to how to obtain funds, use funds, and manage assets according to overall company goals ([Febriana, 2021](#)). Financial management behavior can be linked to the Resourced Based View Theory, financial management behavior becomes an intangible resource that can be controlled by the business so that it supports the running of the business to achieve performance growth for MSMEs. Good financial management behavior can increase the efficiency of resource use and increase business profitability.

Financial management behavior has no effect on micro business performance because the majority of respondents have a low level of education (elementary school). A low level of education leads to an understanding of finance that is not optimal and has the potential for misunderstanding, resulting in inappropriate financial behavior by business actors. Business actors also do not separate business finances from their personal finances. This causes financial behavior to have no effect on business performance. Most of the respondents in this study have not carried out financial management behavior optimally. Financial management behavior that has not been maximized can be reflected in the number of respondents who have not budgeted, recorded every transaction, and kept proof of business expenses and income. The lack of role of the local government in conducting financial management training is also a factor in the low understanding of financial management.

The results of this study are in line with [Fitria et al. \(2021\)](#) which states that financial behavior has no effect on performance. The better the financial management behavior of a business, it does not affect the good or bad business performance. Financial management cannot be separated from financial literacy, decision making in managing finances also requires good financial knowledge. However, this research is not in line with [Mali'\(2023\)](#)'s research which states that the performance of MSMEs has increased related to financial management, the things that MSMEs do are to be more selective in finding sources of funds, and efficient in their use.

The Effect of E-commerce Use on Micro Business Performance

The third hypothesis states that the use of e-commerce has a positive effect on micro business performance, in this study it is accepted. This means that the higher the use of e-commerce, the higher the performance of micro businesses in the Purbalingga Batik Craftsmen Association. The use of e-commerce can expand market share and increase sales of business products.

The use of e-commerce can have an effect on improving business performance if the knowledge of business actors in adapting e-commerce is high. In addition, the maximization of e-commerce technology is also influenced by high interest in using e-commerce by customers. The use of e-commerce affects business performance because the interest in using e-commerce among customers and batik crafters in the association is high. All respondents in this study use social media

to support their business and consumers have a high interest in e-commerce as a medium for buying products.

The results of this study are in line with [Wahyuni et al. \(2021\)](#) which states that e-commerce has a positive effect on the performance of MSMEs. This can be interpreted that the higher the use of technology such as e-commerce, the more it will improve the performance of MSMEs. In running their business, business actors take advantage of e-commerce. The use of e-commerce can facilitate buying and selling so as to increase sales effectiveness. In contrast to [Prasetyo & Farida\(2022\)](#), 's research it shows that e-commerce has no effect on the performance of MSMEs. This is because business actors have not been able to maximize the existence of e-commerce so that they have not been able to increase their sales [\(Subagio & Saraswati, 2020\)](#).

The Effect of Product Innovation on Micro Business Performance

The fourth hypothesis states that product innovation has a positive effect on micro business performance, in this study it is accepted. This means that the higher the product innovation carried out by business actors, the higher the performance of micro businesses in the Purbalingga Batik Craftsmen Association. MSMEs that are able to innovate their products will find it easier to compete in the market and attract new customers.

Product innovation is creating new products that can fulfill needs. Product innovation can have an effect on improving business performance if business actors understand the needs of the market, customers, or users. Respondents in this study carry out product innovation well because they always make their products more diverse so that they create many choices. Crafters make product innovations by making batik into a variety of items such as blangkon, tablecloths, and others. The role of the local government in conducting batik training and also providing tool assistance can help crafters to innovate products.

The results of this study are in line with [Lie et al. \(2022\)](#) which states that product innovation has a significant effect on the performance of MSMEs. This means that businesses that have product innovation will make their business performance better. Consumers also benefit from innovation, namely avoiding saturation. In contrast to the results of research conducted by [Nizam et al. \(2020\)](#) that product innovation has no significant effect on marketing performance in MSMEs.

CONCLUSION

The results of this study conclude that financial literacy has no effect on the performance of micro businesses in Purbalingga Regency. Financial literacy owned by micro business actors cannot improve business performance. Financial management behavior has no effect on the performance of micro businesses in Purbalingga Regency. financial management behavior is not used to improve business performance. The use of e-commerce has a positive effect on the performance of micro businesses in Purbalingga Regency. The higher the use of e-commerce, the higher the performance of micro businesses in the Purbalingga Batik Craftsmen Association. Product innovation has a positive effect on the performance of micro businesses in Purbalingga Regency. The higher the product innovation carried out by business actors, the higher the micro business performance.

The results of this study are limited to the variables of financial literacy, financial management behavior, e-commerce usage, and product innovation by 16.9% and the remaining 83.1% is explained by other variables. It is expected that further research will be able to add other variables outside the study, such as marketing strategy, product quality, people's business credit, and others. Future research is also expected to further develop question instruments on questionnaires to avoid the potential or possibility of bias by using open questions.

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