

The Role of Eco – Innovation in Mediating the Relationship Between Financial Literacy and Sustainability of UMKM in Central Java

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Abstract

The micro, small, and medium enterprises sector is the driving force of a country's economy, but along with the times there are still many problems that occur and have not been resolved, one of which is financial knowledge and innovations. The purpose of this study is to investigate and test the sustainability of MSMEs with Financial Literacy and Innovation. Study This uses a quantitative approach, research data in the form of primary data through questionnaires and taking population as well as research samples from the actors or managers of MSMEs as many as 433 respondents. The sampling method used was purposive sampling technique. The independent variable in this study is financial literacy, the intervening variable is eco-innovation and the dependent variable is the sustainability of MSMEs. The method used in analyzing the data is simple linear regression analysis with SPSS version 24 software. The results of the classical assumption test are normal, multicollinearity does not occur, heteroscedasticity does not occur. The results of this study prove that financial literacy has a significant positive effect on the sustainability of MSMEs, and financial literacy has a significant positive effect on eco-innovation. Meanwhile, eco - innovation has a significant positive effect on the sustainability of MSMEs, and eco - innovation has a positive and insignificant effect in mediating financial literacy on the sustainability of MSME.

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INTRODUCTION

The existence of the Micro, Small and Medium Enterprises (MSMEs) sector in a country has contributed a lot of positive contributions to economic development in the country, especially in Indonesia. The role of MSMEs is believed to be able to drive the economy of a country according to a survey conducted by the Financial Services Authority (OJK) which states that the contribution of MSMEs in Indonesia has proven significant for the economy in the national realm by contributing 60% of gross domestic product and absorbing 97% of the national workforce (OJK Press Release: SP-38/DKNS/OJK/5/107) in the journal (Aribawa, 2016).

MSMEs are productive businesses owned by individuals or business entities that have met the criteria as micro businesses. The MSME sector is also able to reduce the poverty rate of a country because it can provide jobs for those with low education such as elementary school/junior high school/high school graduates who cannot work in offices like most people.

The background of this study highlights the importance of the Micro, Small, and Medium Enterprises (MSMEs) sector in economic development in Indonesia. MSMEs make a significant contribution to the national Gross Domestic Product (GDP) and absorb the majority of the workforce. However, this sector still faces various challenges, especially in terms of financial literacy and innovation.

Previous studies that form the basis of this study include examining the effect of financial literacy on the sustainability of MSMEs (Idawati & Pratama, 2020; Widayanti et al., 2017; Aribawa, 2016). These studies show that good financial literacy allows MSME entrepreneurs to manage finances better, increase transparency, and support more effective business decision-making.

In addition, eco-innovation is the focus of this study as a factor that can mediate the relationship between financial literacy and MSME sustainability. Several previous studies have stated that green innovation can help MSMEs develop by paying attention to environmental aspects (Kuncoro, 2017; Susanti, 2017). However, this study attempts to test whether eco-innovation actually plays a significant mediating role in the relationship.

Overall, this study develops previous studies by adding eco-innovation variables as factors that can strengthen the impact of financial literacy on the sustainability of MSMEs. The results of this study are expected to provide new insights for MSME actors in increasing their competitiveness and business sustainability amidst increasingly complex economic developments.

The sustainability of MSMEs is very important for the future of the economy, both the country and the business sector itself, because it shows the ability of an MSME to achieve business goals and increase long-term value for business owners or people who invest in the business. By integrating the economy, social, and environment into the strategy of the business unit, but the reality is that MSMEs often experience delays in their development, the first is because they often face closed loop problems, namely conventional problems that are not completely resolved, for example, problems with HR capacity, cost ownership, and various other problems related to the management of MSMEs, the second is due to lack of knowledge in terms of economics, especially in terms of marketing and accounting (finance). So it is difficult for MSMEs to develop into larger businesses and be able to compete with other companies in Indonesia.

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Islam encourages its adherents in the principles of Islamic economics, namely to continue to produce and pursue all forms of economic activities such as trade, industry, agriculture and many more, because whatever our actions in terms of producing objects or services that are useful for fellow human beings or the environment are good deeds for us.

Allah will not change the condition of a people until that people tries to change it themselves. What is found in the Al-Quran is Surah Ar - Ra'ad verse 11 which means "For humans there are angels

who always follow them in turns, in front of and behind them, they guard them by Allah's command. Indeed, Allah will not change the condition of a people until they change the condition of themselves. And if Allah wants evil for a people, then no one can refuse it; and there is no protector for them except Him."

One of the problems that often occurs in MSMEs is not having transparent and organized financial information, one of the causes is the low interest in recording and bookkeeping every transaction that has been carried out by the business unit so that MSME actors have difficulty monitoring the development of their business. Therefore, in order to develop MSMEs to support economic growth, it is by improving financial management capabilities and expanding financial access for MSMEs. This method is through financial literacy or financial knowledge, so that management and accountability can be better accounted for like a large company and can see the sustainability of an MSME in the future, whether the business can develop its products or not. Financial literacy skills have many benefits, namely being able to make decisions based on financial information and minimizing the possibility of fraud in the company. Financial literacy causes companies to make financial reports for their companies more often, frequent financial reports in the company will make the company have a high level of profitability than companies that rarely make their financial statement.

Research on the effect of financial literacy on the sustainability of MSMEs has been widely conducted by previous researchers, namely (Idawati & Pratama, 2020) (Widayanti, Damayanti, & Marwanti, 2017), (Ambarwati & Zuraida, 2020), (Aribawa, 2016), (Rumini & Martadiani, 2020) who said that there is a significant influence between financial literacy on the sustainability of MSMEs. The Micro, Small, and Medium Enterprises sector must develop its business by updating innovations in existing products or processes following developments in the current era because innovation in business life is the soul of a company to be able to continue to develop. When compared to large companies, it is very possible that MSMEs can be more flexible in adapting to environmental changes, because MSMEs use more domestic materials from Indonesia than imports from abroad. If a company or MSME is unable to adapt to the times, then slowly the company will be eliminated from this very tight business competition.

There is a trend of product or process innovation that aims to provide added value for companies and consumers by paying attention to the environmental impact in the current era, namely eco-innovation or green innovation, where now, as time goes by, people's activities are shifting to using an environmentally friendly lifestyle (green lifestyle).

Currently, human awareness is increasing regarding the great benefits of implementing a green lifestyle or eco-innovation (green innovation) in living life, because green innovation provides many benefits not only for humans but also for the earth which supports sustainable life.

This study refers to the research conducted by (Kuncoro, 2017) that eco-innovation activities are more passive. They only react if they receive direction or regulations from those who ask MSME actors to consider environmental aspects. (Susanti, 2017) in her research said that the green product strategy can play a role in increasing the development of MSMEs in Bandar Lampung. What is different in this study is that eco-innovation is used as an intervening variable and adds financial literacy as an independent variable. The use of financial literacy refers to the journal (Widayanti et al., 2017), where financial literacy has an important role in business sustainability both now and in the future. Meanwhile, eco-innovation in the intervening variable shows that financial literacy can increase the sustainability of MSMEs if followed by green products. Innovation renewal into eco-innovation in a company can cause changes in the cash flow of the company's financial report, if we are not careful in looking at the financial report or do not have knowledge about finance, it could be that the innovation change has an undesirable impact, namely making the company at the BEP (break event point) or even loss because innovation also requires costs - costs that are sometimes relatively large.

Stakeholder theory first emerged because of the development of the understanding that a company is not an entity that only operates for its interests but can also provide benefits to its stakeholders. There is an idea that a company has stakeholders then it becomes something that is widely discussed through management literature both academic and professional. The first study that reveals stakeholders is (Freeman & McVea, 2005). Stakeholder theory encourages a broadening of focus that shifts design, planning, and implementation efforts beyond downstream participants to other actors who influence complex issues (Hodgkins, 2019). After that, many studies have discussed stakeholder theory. Thus, the sustainability of a company is greatly influenced by the support of the

company's stakeholders such as: shareholders, employees, creditors, consumers, suppliers, communities, etc.

This is reinforced by De Wit and Meyer (Duran and Radojicic, 2004, p14) through the Binus.ac.id article that shareholders, employees, suppliers, banks, consumers, government and communities play an important role in the organization. The main idea of stakeholder theory is that businesses should create value for all stakeholders – those who can affect or are affected by the realization of the organization's goals (broad definition) or those without whose support the organization would not exist (narrow definition) (Dmytriyev, 2021). According to Meek and Gray (1988) in the journal (Puspita, 2014), the growing consensus in stakeholder theory is that accounting profit is only a measure of returns for shareholders, while value added is a more accurate measure created by stakeholders and then distributed to the same stakeholders.

Business sustainability is a state or condition of a business where there are ways to maintain, develop, and protect resources and meet the needs that exist in the company. These methods come from personal experience, and others based on the economic conditions that are currently occurring in the business world. Thus, business sustainability is a form of consistency in business conditions. Where this includes growth, development, strategies to maintain business sustainability and business development (Widayanti et al., 2017).

Entrepreneurship development through the development of small and medium enterprises (SMEs) needs to be improved to strengthen the independence and welfare of the community. The government has taken this strategy by creating many programs that support SMEs to increase their competitive advantage. The importance of the role of SMEs in economic development, especially in absorbing labor and the rate of economic growth (Tikno, 2019). The potential of the creative economy is developed by SMEs (Micro, Small, and Medium Entrepreneurship). SMEs can absorb a large workforce, thus providing opportunities for a business to grow and compete with large companies that use larger financial capital. SMEs have proven to be able to survive and become the main wheels of the economy, especially in Indonesia after the 1998 economic crisis (Siswanto, 2018).

Financial literacy is the ability or skill to use financial knowledge effectively to manage financial resources to achieve prosperity. Financial knowledge is also basic knowledge needed by the entire community because with financial literacy we can make effective and appropriate decisions in the use and management of finances. There are three indicator components according to the OECD that are used to measure the magnitude of the financial literacy index in the journal (Sakinah & Mudakir, 2018), namely:

Financial knowledge index: measured by the total score of respondents' answers related to general knowledge of business and personal finance. Financial attitude index: measured by the total score of respondents' answers related to the concept of orientation towards business and personal finances. Financial behavior index: measured by the total score of respondents' answers related to the concepts of organizing, spending, saving and wasting. Financial literacy research focuses on why, how, and when people acquire financial knowledge, form financial attitudes, and adjust financial behavior in MSMEs (Muñoz-Murillo, 2020). Financial literacy has been defined as the knowledge and cognitive abilities needed to manage finances and make effective decisions about financial matters. Previous researchers defined financial literacy as “an individual’s ability to make effective judgments and decisions about the use and management of money” (Ye, 2019).

Eco-Innovation is a reciprocal relationship between business and the environment. Activities should avoid negative impacts on the environment and concentrate on activities that are positive for the environment. Eco-Innovation has become a trend in the field of innovation and is sometimes referred to as the development of new products and processes that create customer and business value by reducing negative impacts on the environment (Kuo, 2022).

Eco-innovation is one of the innovations in the literature by Claude Fussler and Peter James which states that new products and processes that provide added value to customers and businesses but significantly reduce environmental impacts. According to Chen (2012) in the journal (Kuncoro, 2017) eco-innovation is divided into two, namely proactive innovation and reactive innovation.

Proactive innovation is active innovation that relates to the environment to take new product initiatives to capture competitive opportunities, lead the market, or gain competitive advantage. Reactive innovation is passive innovation related to the environment to comply with existing environmental regulations, adapt to stakeholder demands and environmental changes, or respond to challenges from business competitors. Green innovation (EI) has increased in the strategic agenda of companies due to increasing pressure to reduce the environmental impact of the MSME industry (Demirel, 2019).

The theoretical framework below is a description of the influence of financial literacy and eco-innovation on the sustainability of MSMEs. Financial knowledge is very important in a business because if the manager does not understand the basics of financial knowledge such as financial reports, it will be very difficult for a company to advance and be able to compete, because the manager does not have transparent and organized financial information so that he does not know the development of his business whether it is increasing or decreasing.

Financial knowledge will also affect eco-innovation because if the company is going to develop a new innovation, the company can see the flow/graph of the development of the financial report first. So that the next innovation steps that we will take can produce satisfactory results. If our financial graph increases, the company can easily make new innovations such as eco-innovation, but if the company experiences a decline in its sales as seen from the financial graph, the company will have difficulty in realizing innovations.

Eco-innovation can also support the sustainability of a business because people are now aware of the importance of protecting the environment, thus reducing products that are not environmentally friendly and the government also makes regulations for companies to reduce waste that can damage the environment.

For example, the use of plastic bags is now reduced and replaced with cloth bags because plastic will create a lot of waste, and plastic is not easily decomposed by the soil.

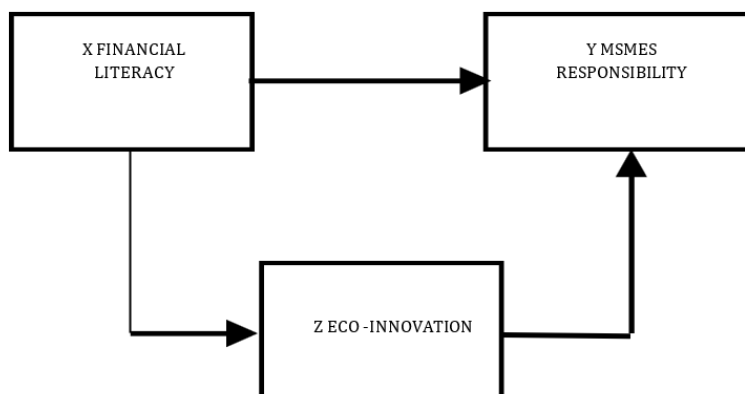


Figure 1. Theoretical Thinking Framework

The formulation of the hypothesis proposed in this study aims to test the influence of financial literacy and eco-innovation on the sustainability of MSMEs. Based on this thinking, the hypothesis proposed in the study is as follows:

The effect of financial literacy on the sustainability of MSMEs Financial knowledge has an influence, namely the more knowledge gained about financial knowledge, the longer the period for the sustainability of an MSME. One of the basic knowledge areas of finance is being able to read, create, and be able to make decisions from financial reports (profit and loss statements, cash flow statements, balance sheets, etc.) both for the short term and the long term which are useful for business sustainability.

If a company has sufficient financial knowledge, its management and accountability can be properly accounted for and business sustainability is more assured, as befits a large company. Through stakeholder theory, the relationship between financial literacy and the sustainability of MSMEs is the improvement of the quality of financial reports seen from the human resources in the company or existing stakeholders. Improving financial quality is done by providing sufficient financial knowledge training for business owners and employees who are responsible for the company's finances. Therefore, it will improve the sustainability of a company and improve the welfare of all existing stakeholders. The results of the study conducted by (Widayanti et al., 2017) stated that financial literacy has an effect on the sustainability of MSMEs, so the hypothesis made is as follows.

H1: financial literacy has a positive effect on the sustainability of MSMEs

Financial knowledge will also affect green innovation because the flow of financial reports is very important for a company's decision-making so that it can or cannot realize new innovations for business sustainability and can compete with existing competitors. Through stakeholder theory, the relationship between financial literacy and eco-innovation is if the graph of the financial report

experiences a significant increase in profit and the financial report can be accounted for, then the company can carry out eco-innovation. If this can be implemented, then the stakeholders and the government will benefit because the government has implemented green innovation for existing companies, and consumers who understand the importance of green innovation will be very happy if the targeted company has implemented eco-innovation. Therefore, the hypothesis is made as follows:

H2: financial literacy affects eco-innovation

Eco-innovation (green innovation) is an innovation that is trending in the world because many people and governments are involved. As time goes by, they are increasingly aware of the importance of protecting the environment. Many companies and government offices have implemented this green innovation idea but there are still some that do not implement it and will only implement it if they get direction from regulations or input from the company's customers. If we implement eco-innovation early on, business sustainability will be guaranteed because there are still few competitors who implement eco-innovation. Through stakeholder theory, the relationship between eco-innovation and the sustainability of MSMEs is that if a company has implemented eco-innovation, there will be many benefits for stakeholders, especially for owners and shareholders because companies that have implemented eco-innovation will certainly be prioritized and considered special by consumers and other regulators. In a study conducted by (Kuncoro, 2017) it was stated that green innovation is passive. According to (Susanti, 2017) green innovation strategy is able to develop a company. So the hypothesis made is as follows:

H3: Eco-innovation has a positive effect on the sustainability of MSMEs.

The sustainability of a business is seen from the company's financial knowledge and the innovations that will be carried out. If the company's financial report graph increases and is able to realize innovations that aim to develop business sustainability, then the company will realize it, and vice versa, if the company's financial report graph always decreases, it will be difficult to realize new innovations. Where the innovation also requires large capital in its implementation. Financial literacy can improve the sustainability of MSMEs if supported by eco-innovation, thus based on stakeholder theory, in addition to eco-innovation providing benefits for consumers and regulators, the profits that will be obtained from the surge in buyers will benefit owners and shareholders and this can affect the sustainability of MSMEs. So the hypothesis made is as follows:

H4: Eco-innovation has an influence in mediating financial literacy toward the sustainability of MSMEs.

METHOD

The population in this study is MSMEs in Central Java. The total number of MSMEs in Central Java according to the City Cooperatives and Micro Enterprises Service (jatengprov.go.id) in 2020 was 4,174,210 MSME actors. The considerations for selecting these MSMEs were to review each person's financial knowledge, whether they were well-literate or not and to review whether the company had implemented eco-innovation. The sample in this study was 400 actors of all types of MSMEs in Central Java consisting of Semarang City, Demak Regency, Pati Regency, and Pemalang Regency. The basis for consideration was because the area already had many MSMEs so that it could represent Central Java Province. The sampling technique in this study was using the purposive sampling method with the following criteria:

- a) The business has been running for at least 2 years
- b) Monthly income of at least IDR 1,000,000

Descriptive statistics used in research to find out the picture in the research variables including mean, median, mode, standard deviation, maximum, and minimum. Descriptive statistical analysis was very important in research because it contains numerical data so that its presentation can be more easily understood by the reader. This study used SPSS analysis techniques.

Indirect testing in this study uses the Sobel test to determine the effect of the intervening variable (Z), namely the effect of the financial literacy variable on the MSME sustainability variable through the eco-innovation variable. If the calculated t result > t table value, then there is a mediation effect. The Sobel test equation model can be formulated as follows:

b : Path Z to Y
 ab = c-c' with c : X to Y and c' : X
 to Y through Z
 sa : Standard coefficient a sb : Standard coefficient b
 Sab : Standard error of indirect effect

In order to find out the significance of the indirect effect, it is necessary to calculate the t value with the ab coefficient, the following is the t value formula: If the calculated t value is greater than the t table value, then there is a mediation effect (Imam Ghozali, 2018:245)

RESULT AND DISCUSSION

From the results, each variable can be explained in detail as follows: The MSME sustainability variable consists of eight questions with a Likert scale of 1-5. The MSME sustainability variable has a minimum value of 16 and a maximum value of 35. The mean value is 28.18 with a standard deviation of 3.995 and a variance of 15.958.

Financial literacy variables consist of:

$$S = \sqrt{b^2s^2 + a^2sb^2}$$

Information:

a : Path X ke Z

Among nine questions with a Likert scale of 1-5. The financial literacy variable has a minimum value of 9 and a maximum value of 30. The mean value is 21.3 with a standard deviation of 4.300 and a variance of 18.488.

The eco-innovation variable consists of seven questions with a Likert scale of 1-5. The eco-innovation variable has a minimum value of 6 and a maximum value of 30. The mean value is 23.91 with a standard deviation of 4.055 and a variance of 16.444.

Table 1. Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
MSMEs Sustainability	433	16	35	28,28	3,995	15,958
Financial Literacy	433	9	20	21,03	4,300	18,488
Eco-Innovation	433	6	30	23,91	4,055	16,444
Valid N (listwise)	433					

Source: Data primer processed SPSS ver. 24, 2021

Data Quality Test

Validity Test

Validity test is to show the decision and accuracy of the tool in measuring. In other words, it functions to test the validity or otherwise of the questions collected and used in measuring the variables being studied. This test uses Pearson correlation, namely by calculating the correlation of each existing question. Validity test can also be done by comparing r table with r count. This study has a significant level of 0.01 and df (433-2 = 431), then the r table is obtained at 0.098 by reading the r product moment table. Where the test criteria are as follows:

- a. If the correlation coefficient r count > r table then it is declared valid.
- b. If the correlation coefficient r count < r table then it is declared invalid
- c. Validity test result

Tabel 2. Validity Test Result

No	Variable	Indicator	r count	r table	Result
1	MSME Sustainability	1	0,609	0,098	Valid
		2	0,597	0,098	Valid
		3	0,676	0,098	Valid
		4	0,673	0,098	Valid
		5	0,590	0,098	Valid
		6	0,654	0,098	Valid
		7	0,683	0,098	Valid
2	Financial Literacy	1	0,967	0,098	Valid
		2	0,825	0,098	Valid
		3	0,675	0,098	Valid
		4	0,888	0,098	Valid
3	Eco – Innovation	1	0,788	0,098	Valid
		2	0,749	0,098	Valid
		3	0,805	0,098	Valid
		4	0,738	0,098	Valid
		5	0,662	0,098	Valid
		6	0,688	0,098	Valid

Source: Primary Data proceed by SPSS ver. 24, 2021

The results in the table above show that the results of the validity test on all indicators are valid, which means that the questionnaire can provide precise and accurate measurement results in accordance with what is intended in this study.

Reliability Test

Reliability test is needed for stability between observation results conducted in questionnaires at different times. In the reliability test using the Cronbach Alpha benchmark method where the value that appears > 0.6 then the variable is declared reliable.

Table 3. Reliability Test Result

No	Variable	Cronbach Alpha	Result
1	MSMEs Sustainability	0,793	Reliable
2	Financial Literacy	0,835	Reliable
3	Eco – Innovation	0,814	Reliable

Source: Primary data proceed by SPSS ver. 24, 2021

The results listed in table 4.10 above show that all variables have a Cronbach Alpha value > 0.6 , where the UMKM sustainability variable has a Cronbach Alpha of $0.793 > 0.6$. While the financial literacy variable has a Cronbach Alpha of $0.835 > 0.6$. And the eco-innovation variable has a Cronbach Alpha of $0.814 > 0.6$. It can be concluded that the questionnaire used in this study in describing the research variables is reliable. Reliable data can be obtained from respondents' answers that are carried out consistently

Classical Assumption Test and Data Normality Test

Data normality test is conducted with the aim of testing whether the regression model used, the interfering variables or residuals are normally or abnormally distributed. While a good regression model in a study has a normal distribution value or is close to normal. In this data normality test using the Kolmogorov Smirnov non-parametric statistical test, the data is said to be normal if the significant value is > 0.05 . The variables to be tested in this study are the dependent

variable, namely the sustainability of MSMEs, the independent variable, namely financial literacy and the intervening variable, namely eco-innovation. The data processed using SPSS version 24. The following are the results of the data normality test using the Kolmogorov Smirnov test:

Data Normality Test Result (Kolmogorov Smirnov)

Table 4. Data Normality Test Result

		Unstandardized Residual	
N		433	
Normal Parameters ^{a,b}	Mean	0,0000000	
	Std. Deviation	2,53729433	
Most Extreme Difference	Absolute	0,46	
	Positive	0,28	
	Negative	-0,46	
Test Statistic		0,46	
Asymp. Sig (2-tailed)		0,29 ^c	
Monte Carlo Sig. (2-tailed)	Sig	0,308	
	99% Confidence Interval	Lower Bound	0,296
		Upper Bound	0,320

Source: Primary Data proceed by SPSS ver. 24, 2021

From the results of the table above, it can be seen that the significance value obtained is 0.308 > 0.05. Therefore, it can be concluded that the data is normally distributed. This shows that the research questionnaire has passed the data normality test so that the existing data can be used further. In addition to the explanation above, it can also be seen with the p-plot graph. The following are the results of the data normality test using the p-plot graph:

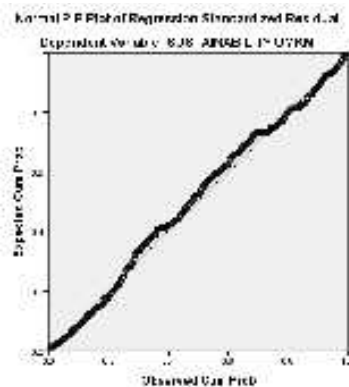


Figure 2: Data Normality Test Result Probability Plot

From figure 4.1 shows that the p-plot graph on the data spreads near the line or near the diagonal line and follows the direction of the line. It can be concluded that the data is normally distributed and is suitable for use in a study.

Multicollinearity test

Multicollinearity test is conducted to determine whether the regression model finds correlation between independent variables. A good regression model should not have correlation

between independent variables. If the tolerance value is > 0.1 then there is no correlation between independent variables and if $VIF < 10$ then there is no multicollinearity.

Table 5. Multicollinearity Test Result

No	Variable	Tolerance	VIF	Result
1	Financial Literacy	0,567	1,764	Multicollinearity not found
2	Eco – Innovation	0,567	1,764	Multicollinearity not found

Source: Primary data proceed by SPSS ver.24, 2021

The results above show that the financial literacy variable and the eco-innovation variable have the same tolerance value, namely $0.567 > 0.1$ and have the same value for VIF, namely $1.764 < 10$. Therefore, the conclusion obtained is that the data does not contain multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test is conducted to determine whether the regression model has a residual variance inequality from each observation. A good regression model is if there is no heteroscedasticity or commonly called homoscedasticity. This study uses the Glejser test, if the significant value is > 0.05 then the regression model does not experience heteroscedasticity.

Table 6. Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error			
1 (Constant)	3,542	0,441		8,028	0,000
Financial literacy	-0,023	0,022	-0,064	-1,021	0,308
Eco - innovation	-0,043	0,024	-0,115	-1,828	0,068

Source: Primary data proceed by SPSS ver.24, 2021

From the results above, it shows that the significance value obtained by each variable is more than 0.05. where the significance value of the financial literacy variable is $0.308 > 0.05$. The significance value of the eco-innovation variable is $0.068 > 0.05$. Therefore, it can be concluded that the data does not contain heteroscedasticity. In addition to the explanation above, it can also be seen with a scatterplot graph. The following are the results of the heteroscedasticity test using a scatterplot graph:

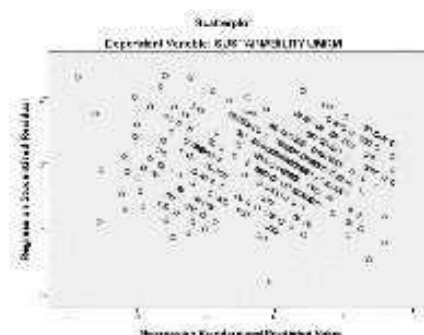


Figure 3: Heteroscedasticity test result (*Scatterplot graph*)

From the results of the image above, it shows that the points spread randomly and evenly around the 0 line and do not form a particular pattern. Therefore, the conclusion is that there is no heteroscedasticity in this regression model.

Simple Linear Regression Analysis

The data analysis technique using simple linear regression aims to determine the effect of financial literacy on the sustainability of MSMEs. Based on the calculation results, the following results are obtained.

Table 7. Simple Linear Regression Analysis X Towards Z

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant)	10,865	0,734		14,802	0,000
Financial Literacy	0,621	0,034	0,658	18,145	0,000

Source: Primary data proceed SPSS ver.24, 2021

From the results above show the results of the calculation obtained from the effect of the financial literacy variable on the Eco -Innovation variable, so a simple linear regression equation can be arranged as follows:

$$Z = 10,865 + 0,621X + \epsilon$$

The simple linear regression equation can be explained that the constant in the regression equation in Table 4.14 has a value of 10.685 shows the intervening variable, namely Eco - innovation. If the independent variable, the Financial Literacy is zero, the Eco -Innovation value is the same as the amount of the constant which is 10,685.

The coefficient value of the Financial Literacy to the eco - innovation obtained is 0.621, each increase in the financial literacy variable will increase the eco -innovation by 0.621. This can be said that the higher the financial literacy, the higher the eco - innovation.

Table 8. Simple Linear Regression Analysis of X and Z towards Y

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant)	9,757	0,750		13,000	0,000
Financial literacy	0,356	0,038	0,383	9,423	0,000
Eco - innovation	0,457	0,40	0,464	11,410	0,000

Source: Primary data proceed by SPSS ver.24, 2021

From the results above, it shows the results of the calculations obtained from the influence of the Financial Literacy variable and the Eco - innovation variable on the sustainability of MSMEs, so a simple linear regression equation can be compiled as follows:

$$Y = 9,757 + 0,356 X + 0,457 Z + \epsilon$$

The simple linear regression equation can be explained that the constant in the regression equation in Table 4.15 has a value of 9.757 shows the dependent variable, namely the sustainability of MSMEs. If the independent variable and intervening variable are zero, the sustainability value of MSMEs is the same as the amount of the constant which is 9,757. The coefficient value of the Financial Literacy and Eco variables - innovation to the sustainability of MSMEs obtained is 0.356 and 0.457, each increase in the financial literacy and ECO variables will increase sustainability by the coefficient value. This can be said that the higher the financial literacy and eco-innovation, it will increase the opportunity for MSME sustainability

Model Goodness of Fit Test

Simultaneous Significance Test (F Statistic Test)

Statistic F test is a test that shows whether the independent variable and intervening variable have a simultaneous effect on the dependent variable. Statistic F test was carried out to determine the feasibility of the regression model used in the study, the level of significance in this study was 0.05. This can be seen from:

- Ha: If sig. $\alpha < 0.05$ then the independent variable and/or intervening variable simultaneously has an influence on the dependent variable
- H0: If sig. $\alpha > 0.05$ then the independent variable and/or intervening variable simultaneously have no effect on the dependent variable.

Statistic F Test Results

Table 9. Statistic F Test Result

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4112,793	2	2056,396	317,943	0,000 ^b
Residual	2781,157	430	6,468		
Total	6893,949	432			

Source: Primary data proceed by SPSS ver.24, 2021

The results obtained from the table above indicate that the significance value obtained is $0,000 < 0.05$ and therefore HA is accepted and H0 is rejected. This can be concluded that the independent variable, namely financial literacy and intervening variables, namely Eco - innovation affects the dependent variable, namely the sustainability of MSMEs.

Coefficient of determination Test (Adjust R Square)

The coefficient of determination (R^2) is used to know the level of influence of independent variables and/or intervening variables on the dependent variable. The value of R^2 is between zero up to one. The following are the results of the calculation of the coefficient of determination with SPSS VER.24.

Table 10. Coefficient of Determination Test Result (Adjust R2)

Model	R	R Square	Adjust R Square	Std. Error of the Estimate
1	0,772 ^a	0,597	0,595	2,543

Source: Primary data proceed by SPSS ver.24, 2021

The results obtained from the calculations in the table above indicate that the coefficient of determination (adjust R2) is 0.595 or 59.5%. This shows that the sustainability of MSMEs can be explained at 59.5% by independent variables, namely financial literacy and intervening variables, namely Eco-innovation. While the other 40.5% are explained by other variables that have not been conducted by research by this research.

Hypothesis Testing

Partial Test (t Statistic Test)

The t statistic test or t-test is used to determine the effect of the independent variable partially affecting the dependent variable and/or intervening variable with the assumption that the independent variable is constant. The following are the results of the t-test in this study.

Table 11. T Statistic Test Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant)	9,757	0,750		13,009	0,000
X → Y	0,356	0,038	0,383	9,423	0,000
X → Z	0,621	0,034	0,658	18,145	0,000
Z → Y	0,457	0,040	0,464	11,410	0,000

Source: Primary data proceed by SPSS ver.24, 2021

Based on the table above, the calculation results are as follows:

- The influence of financial literacy on the sustainability of MSMEs Based on the results of the t-test, the regression coefficient is 0.356 with a positive direction and a significant value of 0.000 which is smaller than 0.05. Thus, the hypothesis that financial literacy has a significant positive effect on the sustainability of MSMEs is accepted.
- The influence of financial literacy on eco-innovation Based on the results of the t-test, the regression coefficient is 0.621 with a positive direction and a significant value of 0.000 which is smaller than 0.05. Thus, the hypothesis stating that financial literacy has a significant positive effect on eco-innovation is accepted.
- The influence of eco-innovation on the sustainability of MSMEs Based on the results of the t-test, the regression coefficient is 0.457 with a positive direction and a significant value of 0.000 which is smaller than 0.05. Thus, the hypothesis stating that eco-innovation has a significant positive effect on the sustainability of MSMEs is accepted.

Indirect Testing

Indirect testing in this study uses the Sobel test with the aim of determining the effect of the intervening variable, namely eco-innovation, in mediating the independent variable, namely financial literacy, on the dependent variable, namely the sustainability of MSMEs. If the Sobel test result is > critical ratio, then there is a mediation effect.

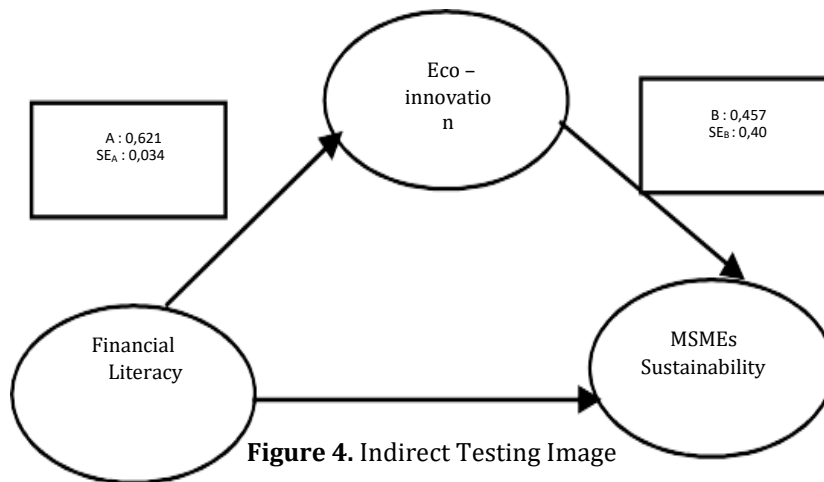


Figure 4. Indirect Testing Image

The results obtained from the influence of the financial literacy variable on the eco-innovation variable and the eco-innovation variable on the MSME sustainability variable, the calculation for the Sobel test is as follows:

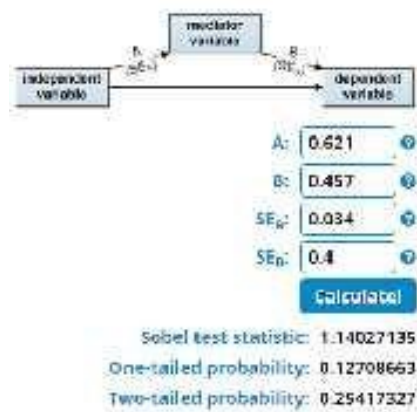


Figure 5. Indirect Testing Image
Source: Primary data proceed by, 2021

The Sobel test equation can be explained that the results of the Sobel test are $1.14 < 1.96$ from the critical ratio. So it can be concluded that there is no influence of the intervening variable in mediating the independent variable on the dependent variable.

Discussion

The Influence of Financial Literacy on the Sustainability of MSMEs

Financial literacy has a significant positive effect on the sustainability of MSMEs. From the results of the statistical t test (t test) that has been carried out, it has a regression coefficient of $0.000 < 0.05$, which means that if financial literacy increases or decreases, it also affects the sustainability of MSMEs. A positive coefficient indicates that the higher the financial literacy of the respondents, the higher the chances of MSME sustainability.

Financial literacy can be used as a benchmark for sustainability because with financial literacy, respondents can make decisions effectively and efficiently according to the needs required for future business sustainability, both in the short and long term, by analyzing financial reports that have been made by the owner or person in charge of the company. Whether the financial report has increased or decreased and can also review the highest income and expenses in any period, so that business owners can make several decision options that are in accordance with the real conditions of their business. Appropriate and correct financial reports according to SAK EMKM include financial position reports, profit and loss reports and notes to financial reports so that they can be used by internal and external parties such as investors, creditors, government, etc. in accordance with stakeholder theory.

The results of this study are in accordance with previous research, one of which is by (Widayanti et al., 2017) in his journal which states that financial literacy has an effect on the sustainability of MSMEs.

The influence of financial literacy on eco-innovation

Financial literacy has a significant positive effect on eco-innovation. From the results of the statistical t-test (t-test) that has been carried out, it has a regression coefficient of $0.000 > 0.05$, which means that if financial literacy increases or decreases, it also affects the eco-innovation variable. A positive coefficient indicates that the higher the respondent's financial literacy, the higher the level of eco-innovation.

Financial literacy can be used as a benchmark in decision making for eco-innovation as a business development that is owned whether it is effective and efficient as well as for business continuity, if the company wants to develop its products with other innovations such as eco-innovation (green innovation), then the company can see whether the company has the funds/capital to carry out the innovation through financial literacy, then if the company has implemented the eco-innovation, whether the development of sales and profits is increasing or decreasing. This can be seen through the financial reports that have been made and can be compared with the profits before and after the eco-innovation. This is in accordance with the stakeholder theory that owners, investors and employees take part in analyzing expenses before and after innovation.

The influence of eco-innovation on the sustainability of MSMEs

Eco-innovation has a significant positive effect on the sustainability of MSMEs. From the results of the statistical t-test (t-test) that has been carried out, it has a regression coefficient of $0.000 > 0.05$, which means that if eco-innovation increases or decreases, it also affects the sustainability of MSMEs. A positive coefficient indicates that the higher the eco-innovation, the higher the opportunity for MSME sustainability.

Eco-innovation is a green innovation that is currently being implemented on a large scale by the government, because of public awareness of the importance of the environment for the future. The use of hazardous emission gases, raw materials/production that are not environmentally friendly can reduce some of the qualities in the environment such as water, air, soil, etc. Therefore, the importance of eco-innovation in business sustainability in the future, because the green innovation being implemented by the government will continue even though its implementation begins step by step. This indirectly eco-innovation affects market orientation such as market demand for environmentally friendly products, by choosing environmentally friendly materials and producing little pollution when developing products or designs. This is in accordance with stakeholder theory, namely the government and society are involved in developing this green innovation in order to preserve the environment. The results of this study are in accordance with previous studies, one of which is by (Susanti, 2017) in her journal which states that green innovation strategies are able to develop a company.

The influence of eco-innovation in mediating financial literacy on the sustainability of MSMEs

Based on the results of the regression model 2, the value of the direct influence of financial literacy on the sustainability of MSMEs is 0.356. While the indirect influence of eco-innovation in mediating financial literacy on the sustainability of MSMEs is $0.621 \times 0.457 = 0.284$, which is less than 0.356. This means that the direct influence is greater than the indirect influence or can be seen from the Sobel test that has been carried out, namely the value of $1.14 < 1.96$ from the critical ratio value, meaning that the influence of eco-innovation does not have a significant effect in mediating financial literacy on the sustainability of MSMEs. So it can be concluded that eco-innovation cannot be used as an intervening variable.

Financial literacy can increase or decrease the chances of MSME sustainability without being mediated by eco-innovation. This is because the results of the regression test of the equation model 2 and the results of the Sobel test show that eco-innovation has a positive but insignificant effect in mediating financial literacy on the sustainability of MSMEs.

CONCLUSION AND RECOMMENDATION

The research that has been conducted on "Business Sustainability with Financial Literacy and Innovation" can draw several conclusions, namely: Financial literacy has been proven to have a significant positive effect on the sustainability of MSMEs. This shows that the higher or lower the financial literacy of the business owner, the more it has an influence on the sustainability of the business in the future. Financial literacy has been proven to have a significant positive effect on eco-innovation. This shows that the higher or lower the financial literacy of the business owner, the more it has an influence on the eco-innovation that has occurred or will be applied to its business products. Eco-innovation has been proven to have a significant positive effect on the sustainability of MSMEs. This shows that the implementation of eco-innovation carried out by business owners has an impact on the opportunities for business sustainability in the future. Eco-innovation has not been proven to mediate the relationship between financial literacy and the sustainability of MSMEs. This shows that financial literacy can affect business sustainability without carrying out eco-innovation carried out by business owners.

Contribution to the Literature

This study adds a new perspective to the study of MSME sustainability by integrating financial literacy and eco-innovation. Previous studies have focused more on the financial or innovation aspects separately, while this study examines the mediating role of eco-innovation in the relationship between financial literacy and MSME sustainability. This study supports stakeholder theory by showing that financial literacy and green innovation not only benefit business owners but also have a positive impact on other stakeholders such as consumers, investors, and the government.

The results of the study show that eco-innovation can increase the competitiveness of MSMEs by meeting market demands that are increasingly concerned about the environment. Most studies on financial literacy and green innovation still focus on large companies or the global context. This study provides empirical evidence on how these two factors influence the sustainability of MSMEs in Indonesia, especially in Central Java, which has its own economic and social characteristics.

Contribution to Business Practices

This study shows that good financial understanding allows MSMEs to make more informed decisions in financial management and long-term business planning. MSMEs can utilize the results of this study to improve financial records and the use of financial reports as a decision-making tool. The results of this study indicate that eco-innovation can support the sustainability of MSMEs. Therefore, business actors can consider environmentally friendly innovations in their products and business processes to be more adaptive to market trends. Large companies that are partners of MSMEs can also use these findings to encourage a more sustainable supply chain through incentive policies for MSMEs that implement eco-innovation.

This study is expected to provide practical implications for business owners in increasing the chances of business sustainability in the future. Increasing the chances of business sustainability can be done with several factors, namely financial literacy and various innovations (eco-innovation). Likewise, it is better for business owners to be able to make financial reports properly and in accordance with SAK EMKM because this can help in analysing company finances and can help in making decisions effectively and efficiently.

The researcher only used a questionnaire in the form of hard files and google forms without using other supporting materials such as interviews, so the researcher did not know the seriousness of the respondents in filling out the research questionnaire. Further research is expected to examine other factors that influence the sustainability of MSMEs, such as digital transformation variables, etc. It is recommended to distribute questionnaires with a longer period of time because it is to sort out which ones are best to be selected as respondents in the research sample. It consists of the conclusion, clarity of new findings, new theories and the possibility of future research development.

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