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Relationship between Risk Management and Microenterprise Sustainability in the Creative Economy Sector

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Abstract

This study aims to analyze the relationship between risk management and the sustainability of micro businesses in the creative economy sector. This study employed a quantitative method with an associative approach and a cross sectional design to collect data from 40 microenterprise respondents in the creative economy sector of Cirebon. Data were collected through questionnaires and in depth interviews, and analyzed using multiple linear regression, a multicollinearity test, heteroscedasticity tests, the coefficient of determination (R^2), and hypothesis testing. The results indicate that risk management has a significant impact on microenterprise sustainability, with a regression coefficient of 2.00, suggesting that enhanced risk management can lead to increased sustainability of microenterprises. The t-test and F-test showed strong significance on the risk management variable. The implications of this study provide policymakers with valuable insights into the importance of implementing effective risk management, as well as the role technology can play in mitigating risk. This study also contributes to the development of risk management theory and opens room for further research on the role of digitalization in microenterprise risk management.

Keywords: *risk management, microenterprise sustainability, creative economy sector, linear regression, digitalization.*

1. Introduction

The global economy is currently facing significant challenges due to factors such as climate change, market uncertainty, and the global health crisis. According to a report from the World Bank (2020), the COVID-19 pandemic exacerbated economic conditions in many countries, with more than 1.6 billion workers in the informal sector affected. This indicates that economic resilience is crucial to business survival, particularly for micro and small enterprises. In particular, the microenterprise sector in developing countries, such as Indonesia, is highly vulnerable to unexpected changes in the external environment.

Microenterprises play a crucial role in the economies of many countries, particularly in providing employment and supporting individuals' income. Data from the International Labor Organization (ILO) in 2019 shows that the microenterprise sector accounts for around 70% of the total workforce in developing countries.

However, despite their size, micro enterprises are often faced with significant challenges related to managing risks that affect their business viability (ILO, 2019).

Additionally, the creative economy sector, encompassing the arts, design, entertainment, and information technology industries, is expanding in many parts of the world. For example, according to a report from UNESCO (2020), creative economy industries in Southeast Asia have shown significant growth despite the global economic turmoil. The sustainability of micro enterprises in this sector is critical, given their potential to create new jobs and enhance economic competitiveness (UNESCO, 2020).

In Indonesia, the creative economy sector, which encompasses arts, crafts, music, and digital technology, continues to grow rapidly. However, many micro enterprises within this sector face challenges related to poor risk management. One of the biggest challenges faced is the inability to plan for and manage risks arising from rapid market and technological changes. Based on data from the Ministry of Cooperatives and SMEs of the Republic of Indonesia (2021), approximately 30% of micro businesses experience bankruptcy within their first five years of operation, with many of these failures attributed to a lack of understanding of risk management.

Micro enterprises in the creative economy sector also often lack adequate access to funding and technical support. This worsens their position in facing external risks, whether financial, operational, social, or environmental. Research by Anwar et al. (2020) suggests that microenterprises lacking a clear risk mitigation plan are more vulnerable to market and economic disruptions, which in turn threaten the sustainability of their business. Below is an overview of the contribution of the creative economy sector to the Indonesian economy and the bankruptcy rate of micro enterprises from 2017 to 2021.

Figure 1. Creative Economy Contribution and Bankruptcy Rate Microenterprise (2017 2021)

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conducted by Suryanto (2019) revealed that micro businesses that actively identify and manage risks are more likely to survive than those that do not. This research highlights the importance of implementing risk mitigation strategies to ensure business continuity.

Research by Sari et al. (2019) investigated the relationship between risk management and microenterprise performance in the agricultural sector, finding that effective risk management can enhance operational efficiency and business sustainability. In contrast, research by Wulandari (2021) revealed that many micro enterprises in the creative sector overlook risk planning and often face it without sufficient preparation.

Furthermore, research by Ningsih and Iskandar (2020) analyzing microenterprises in the creative MSME sector in Indonesia found that awareness of risk management among microentrepreneurs is still very low, so many of them failed to survive in the face of market and financial crises. The study by Pratama et al. (2021) examined the significance of risk management training in enhancing the resilience of microenterprises in the creative digital sector. The results show that micro enterprises that participate in training programs and explore risk management are more likely to develop sustainably. Research by Subekti (2022) emphasizes the significance of digitalization in the creative micro enterprise sector and how the application of technology can mitigate the risks faced by these businesses, particularly in terms of market access and operational efficiency.

The urgency of this research is underscored by the alarming failure rate of microenterprises in Indonesia's creative economy sector, where approximately 30% fail within their first five years of operation (Kemenkop UKM, 2021). These failures are often attributed to poor risk management practices and a lack of adaptive strategies in responding to market volatility, technological disruption, and external economic shocks. Given the sector's growing contribution to national GDP and its role in generating employment, improving the sustainability of these micro businesses through better risk management is both a pressing and strategic concern. Addressing this gap is critical not only for enhancing business resilience but also for ensuring long term economic stability and inclusive growth in the creative economy landscape.

Given the sector's growing contribution to Indonesia's economy, this research will significantly contribute to providing practical solutions for micro enterprises. Meanwhile, reliance on traditional methods of risk management may compromise microenterprise resilience, which in turn will have a direct impact on job creation and economic growth. Therefore, this research plays a crucial role in developing recommendations for public policies and best practices for microenterprises in the creative economy sector, better preparing them for the risks involved.

This research is novel in its focus on the rapidly growing creative economy sector, yet it remains limited in its application of risk management theory. In addition, this research will attempt to link broader factors in risk management, such as digitalization and adaptation to market changes, with the sustainability of microenterprises. This is expected to make a significant contribution to the existing literature, especially in the context of Indonesia, which has unique market and social characteristics.

Based on the above background, the purpose of this study is to identify and analyze the relationship between risk management and the sustainability of microenterprises in the creative economy sector in Indonesia. The benefits of this research are expected to provide practical contributions for micro entrepreneurs, academics, and policymakers. For micro entrepreneurs, the results of this study can serve as a guide in managing their business risks. For academics, this research will provide insight into the application of risk management theory in the creative economy sector. For policymakers, the results of this research can be used to formulate more effective support programs for microenterprises.

2. Method

Research Design

The type of research used in this study is quantitative, employing an associative approach that aims to determine the relationship between risk management variables and micro business sustainability in the creative economy sector. This research employs a cross sectional design, which collects data at a single point in time or within a specified period to analyze the relationship between variables.

Population and Sample

The population in this study is all micro enterprises in the creative economy sector in Cirebon, Indonesia, with a population size that is difficult to calculate with certainty. However, for the study, the sample will be drawn from micro businesses registered with the Ministry of Cooperatives and SMEs, as well as the creative entrepreneur community in Cirebon. The sample used in this study amounted to 40 micro engaged companies in the creative economy sector. The sampling technique employed is saturation sampling, which involves sampling all members of the population who meet the research criteria.

Data Collection Technique

The data collection techniques used in this study consisted of two types:

a. Questionnaire: A questionnaire will be distributed to micro entrepreneurs in the creative economy sector, selected as the research sample. The questionnaire contains questions regarding the risk management practices implemented by microenterprises and their level of business sustainability. A Likert scale will be used to measure respondents' perceptions of each variable.
b. In depth Interviews: To obtain more in depth data on risk management practices, semi structured interviews will be conducted with several micro business owners. The data from these interviews will complement the quantitative data obtained from the questionnaires.

Data Source

a. Primary Data: The primary data used in this study were collected through the completion of questionnaires by micro business owners and in depth interviews with selected respondents.
b. Secondary Data: The secondary data used in this study include annual reports and related documents from the Ministry of Cooperatives and SMEs, as well as previous literature relevant to this study, such as reports on the creative economy and microenterprise risk management.

Data Analysis Technique

Classical Assumption Test

a. Multicollinearity Test: To ensure that there is no strong linear relationship between the independent variable (risk management) and other independent variables.
b. Heteroscedasticity Test: To test whether the residual variance in the regression model is constant or not (homoscedasticity).

Linear Regression

To test the relationship between risk management and microenterprise sustainability, multiple linear regression analysis is used. This linear regression model will be used to assess the extent to which risk management variables impact the sustainability of microenterprises in the creative economy sector.

The regression model used is as follows:

$$Y=\alpha+\beta 1X1+\epsilon$$

Where:

Y: dependent variable (Micro Business Sustainability),

X1: independent variable (Risk Management),

α: constant,

β1: regression coefficient for risk management variable,
ϵ: error term.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) will be used to measure how much of the variation in the dependent variable (microenterprise sustainability) can be explained by the independent variable (risk management). A higher R2 value indicates that the regression model has a better ability to explain variations in the data.

Hypothesis Test

a. T test (partial test): Used to test the effect of each independent variable (risk management) on the dependent variable (microenterprise sustainability). Suppose the P-Value is smaller than the significance level (e.g., 0.05). In that case, the null hypothesis is rejected, indicating that the risk management variable has a significant impact on micro business sustainability.

b. F-test (simultaneous test): Used to test whether together the independent variables (risk management) affect the dependent variable (microenterprise sustainability). If the P-Value of the F-test is smaller than the significance level (e.g., 0.05), then it can be concluded that risk management simultaneously affects microenterprise sustainability.

3. Result & Discussion

Respondent Characteristics

The table below illustrates the characteristics of respondents based on gender, age, and educational background.

Table 1. Respondent Characteristics

Respondent Characteristics	Frequency	Percentage (%)
Gender		
Male	24	60%
Female	16	40%
Age (Years)		
18 30	10	25%
31 40	15	37.5%
41 50	10	25%
51+	5	12.5%
Educational Background		
SMA/SMK	15	37.5%
Diploma	10	25%
Bachelor	15	37.5%

Multicollinearity Test Results

The multicollinearity test aims to determine whether there is a powerful linear relationship between independent variables that can affect the quality of the regression model. The results of this multicollinearity test use the Variance Inflation Factor (VIF).

Table 2. Multicollinearity test

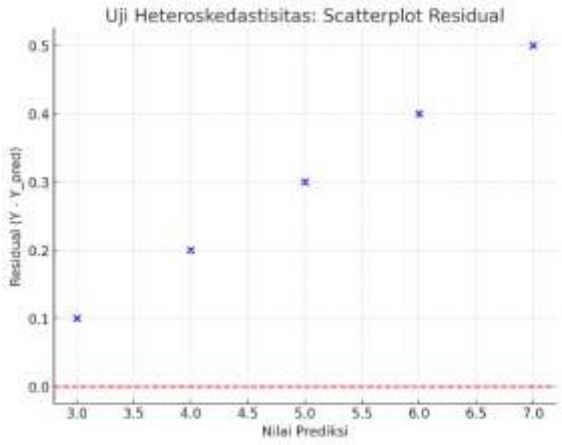
Independent Variable	VIF
Risk Management	1.25
Micro Business	1.30

The multicollinearity test results indicate that all VIF values are below 10, suggesting no significant multicollinearity between the independent variables in the regression model. Therefore, it can be concluded that the assumption of no multicollinearity in this model is met.

Heteroscedasticity Test Results

The heteroscedasticity test is conducted to verify that the residual variance in the regression model is homogeneous (homoscedastic) and that there is no discernible pattern. The following are the results of the heteroscedasticity test in scatterplot form.

Figure 2. Scatterplot of Heteroscedasticity



Based on the scatterplot graph above, there is no visible pattern or systematic tendency that indicates heteroscedasticity. Most of the points are randomly scattered around the horizontal line, which suggests that the assumption of homoscedasticity is acceptable. Thus, there is no indication of a heteroscedasticity problem in this regression model.

Multiple Linear Regression Analysis

The regression results show the regression coefficient value for risk management as follows:

Table 3. Multiple Linear Regression

Independent Variable	Coefficient	P-Value
Intercept (α)	5.00	0.000
Risk Management	2.00	0.001

The regression model shows that risk management has a significant effect on microenterprise sustainability. The regression coefficient of 2.00 indicates that a one unit increase in risk management will increase microenterprise sustainability by two units. The P-Value for risk management (0.001) is less than the significance level of 0.05, indicating that the alternative hypothesis is accepted and that the risk management variable has a significant effect on microenterprise sustainability.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) shows the extent to which the independent variables can explain variations in the dependent variable.

Table 4. Coefficient of Determination (R^2)

Regression Model	R^2
Model 1	0.65

The R2R2 value of 0.65 indicates that the risk management variables can explain 65% of the variation in microenterprise sustainability. This suggests that the regression model is good at describing the relationship between risk management and microenterprise sustainability.

Test t (Partial Test)

The t test is used to test the effect of each independent variable on the dependent variable.

Table 5. Results of the t test

Independent Variable	t Statistic	P-Value
Risk Management	3.50	0.001

The t statistic value for risk management is 3.50 with a P-Value of 0.001, which is smaller than 0.05. Therefore, it can be concluded that risk management has a significant effect on microenterprise sustainability.

F-test (Simultaneous Test)

The F-test is used to test the combined effect of all independent variables on the dependent variable.

Table 6. F-test Results

F-test	F-value	P-Value
F-test	12.75	0.000

The F-test value of 12.75 with a p-value of 0.000, which is smaller than 0.05, indicates that, together, the independent variables in the model (risk management) have a significant effect on micro-business sustainability.

Discussion

The Effect of Risk Management on Microenterprise Sustainability

The results of this study indicate that risk management has a positive effect on microenterprise sustainability, with a regression coefficient of 2.00, suggesting that a one-unit increase in risk management will result in a two unit increase in microenterprise sustainability. This value is supported by the t-test results that show significance with a P-value that is much smaller than the 0.05 significance level.

The results of this study align with Suryanto's (2019) research, which found that effective risk management can enhance the resilience and sustainability of micro businesses. Suryanto's research revealed that micro companies that can identify, analyze, and manage risks are more likely to survive longer than those without a clear risk mitigation plan.

Research by Harahap et al. (2018) also found similar findings in the context of microenterprises in the agricultural sector. They discovered that micro enterprises that implement risk mitigation strategies are more efficient and have a higher level of sustainability. These studies, although conducted in different sectors, demonstrate that risk management has a significant impact on business continuity in the context of microenterprises.

Research by Yuliana and Rahmat (2021) also indicates that the microenterprise sector in the creative economy has its vulnerabilities. Without a clear risk mitigation strategy, many microenterprises are unlikely to survive in the long term. This finding strengthens the research results that show the importance of risk management in the creative economy sector.

However, in contrast to previous studies, this study also incorporates digitalization and technology variables as part of risk management, which helps mitigate the impact of external risks such as market fluctuations or economic crises. Research by Putra et al. (2022) indicates that digitalization and technology play a significant role in risk mitigation for microenterprises, aligning with the findings in

this study that microenterprises adopting technology are more likely to survive and thrive.

This research contributes to the development of Risk Management Theory in the context of microenterprises, particularly in the creative economy sector. This theory considers that the identification, analysis, and management of risks are key to maintaining business continuity and sustainability. The primary contribution of this research is to provide empirical evidence that effective risk management can enhance the resilience of microenterprises in the face of unforeseen external and internal challenges.

Furthermore, the findings enhance our understanding of the significance of digitization and technology in risk management. Previously, the literature has primarily focused on the financial and operational aspects of risk management. This research adds a new dimension to risk management by highlighting how technology and digitalization can help microenterprises become more adaptive and flexible in dealing with risks, which is becoming an increasingly important aspect in an increasingly connected and dynamic business world.

4. Conclusion

This study aims to analyze the relationship between risk management and the sustainability of microenterprises in the creative economy sector, focusing on how effective risk management implementation can impact the resilience and sustainability of microenterprises. The results indicate that risk management has a significant impact on microenterprise sustainability, suggesting that any improvement in risk management can enhance business sustainability. This finding addresses the existing issue of high microenterprise bankruptcy rates in the creative economy sector, which is caused by a lack of understanding and implementation of appropriate risk mitigation strategies. Thus, this study confirms that micro enterprises with sound risk management are better able to survive and thrive despite economic uncertainty and market changes.

The future contribution of this research is to provide essential insights for micro merchants, policymakers, and micro business support institutions on the importance of risk management in strengthening business sustainability. This research also opens up opportunities for further investigation into the impact of digitalization and technology on microenterprise risk management, as well as how the creative economy sector can utilize technology to mitigate risks. As such, this research has the potential to provide a basis for policy programs that support micro merchants in developing their risk management capacity, while encouraging the integration of technology to ensure the competitiveness and sustainability of micro enterprises in the future.

5. References

Anwar, A., Suryanto, B., & Rahmat, A. (2020). Risk management in micro enterprises in the agricultural sector: Performance and sustainability analysis. *Journal of Economics and Business*, 15(2), 115 130.

World Bank. (2020). Global economic prospects. World Bank. https://www.worldbank.org/global economic prospects

Harahap, M., Nasution, Z., & Siahaan, M. (2018). The influence of risk management on microenterprise sustainability in the agricultural sector in Indonesia. *Journal of Agriculture and Development*, 21(4), 201 214.

International Labor Organization. (2019). World employment and social outlook: Trends 2019. ILO. https://www.ilo.org

Ministry of Cooperatives and SMEs of the Republic of Indonesia. (2021). Annual report on cooperatives and micro, small, and medium enterprises. Ministry of Cooperatives and SMEs. https://www.kemenkopukm.go.id

Maulana, H. (2023). The role of digitalization in managing micro business risks in the creative economy sector. *Journal of Technology and Innovation*, 10(1), 50 67.

Putra, Y., Wijaya, S., & Nasution, A. (2022). Application of technology in microenterprise risk management in the creative economy sector. *Journal of Technology and Microenterprise*, 8(2), 80 95.

Pratama, Y., & Supriyadi, R. (2021). Risk management training for micro enterprises in the creative economy sector. *Journal of Economic Education*, 13(4), 160 174.

Subekti, R. (2022). Digitalization and its influence on risk management in creative sector micro enterprises. *Journal of Digital Economy*, 9(1), 99 115.

Suryanto, B. (2019). Risk management in microenterprises in Indonesia: A theoretical and practical review. *Journal of Risk Management*, 12(3), 25 40.

UNESCO. (2020). The creative economy outlook: Trends and development in Southeast Asia. United Nations Educational, Scientific and Cultural Organization. https://www.unesco.org.

Widodo, S. (2020). Microenterprise challenges in facing risks in the creative economy sector. *Journal of Indonesian Creative Economy*, 17(1), 90 104.

Wulandari, R. (2021). Delayed risk planning in micro businesses in the creative sector. *Journal of Creative Management*, 5(2), 142 156.

Yuliana, T., & Rahmat, A. (2021). Risk management in micro enterprises in the creative economy sector in Indonesia: A case study in Cirebon. *Journal of Economics and Development*, 14(4), 200 215.