Journal of Meta-ID for Education (JME)
Volume 1, Number 2, 2026 pp. 123-129
E-ISSN: XXXX-XXXX
Open Access: https://journal.meta-id.tech/index.php/jme

The Role of Risk Mitigation Strategies in MSME Sustainability Planning

Beti Adriyani Dona[1*], Irsyad[2] , Merika Setiawati[3]

[1] Educational Administration, Padang State University, Indonesia
[2] Educational Administrastion, Padang State University, Padang, Indonesia
[3]Educational Administrastion, Padang State University, Padang, Indonesia

ARTICLE INFO

Article history:
Received December 13, 2025
Revised December 20, 2025
Accepted December 25, 2025
Available online April 28, 2026

Keywords:
Mitigation Strategy, MSMEs, Risk Management, ISO 31000.

ABSTRACT

This article aims to understand the role of risk mitigation strategies in supporting the sustainability planning of Micro, Small, and Medium Enterprises (MSMEs). This type of study is a library research with a qualitative descriptive approach. The data collection technique in this article uses literature studies through various sources, such as books, scientific journals, and the ISO 31000:2018 risk management standard. Data analysis was carried out by describing, comparing, and classifying information related to the implementation of risk mitigation strategies in MSMEs, both from a theoretical and practical perspective. The results of the discussion indicate that risk mitigation strategies can be implemented through several approaches, including risk avoidance, risk reduction, risk transfer, and risk acceptance. The implementation of these strategies helps MSMEs anticipate potential losses, increase competitiveness, and maintain business sustainability amidst uncertain business environments. Based on the results of the study, it is concluded that risk mitigation strategies have an important role in MSME sustainability planning because they can strengthen business resilience, support appropriate decision-making, and increase the chances of long-term success.

Corresponding Author:
Beti Adriyani Dona
Email: betiadriyani234@gmail.com

1. INTRODUCTION

In recent decades, the business world has undergone significant changes as markets have become increasingly complex and competition has intensified. Technological developments, regulatory changes, and external environmental uncertainty have created various risks that companies must face. Therefore, risk management is crucial for maintaining smooth and sustainable operations. A company's ability to recognize, assess, and control risks significantly impacts its strength and competitiveness (Fahmi, 2018). Operational risks typically stem from internal weaknesses, such as inadequate control systems, but can also be caused by external factors, such as human error, system failures, or ineffective work processes. These risks can include regulatory violations, natural disasters, or system failures that can result in financial losses, reputational damage, and even employee safety. In large companies, operational risks are more complex and interconnected, including disruptions to global supply chains, failures of major technology systems like ERP systems, international compliance issues, and even cyberattacks.

Risk mitigation is an effort to reduce risk levels to keep them within acceptable limits. In managing operational risk, mitigation strategies are selected by considering the magnitude of potential risks, the effectiveness of existing controls, and the level of risk the organization is willing to accept. In large companies, the mitigation process is generally carried out using standard risk management frameworks such as COSO ERM or ISO 31000, supported by dedicated teams and sophisticated monitoring technology (Liani Nestiti et al., 2025). In contrast, MSMEs typically face simpler operational risks that are closely related to daily activities, such as dependence on cash flow, limited skilled labor, reliance on a single supplier, and minimal use of digital technology. The impacts vary, ranging from disruption to business activities, high vulnerability to local market changes, difficulty meeting customer demand, to challenges in recovering from a crisis. These differences indicate that each type of business requires an operational risk mitigation strategy tailored to its conditions and needs to operate effectively.

In theory, operational risk management is considered the best way to prevent business disruption. However, its implementation in Indonesia does not always align with the theory and often faces various obstacles. In large companies, even though risk management standards have been implemented, the process is often hampered by overly complex procedures and a work culture that is difficult to change. Meanwhile, MSMEs, which are the mainstay of the economy, face a more fundamental problem: a lack of understanding of risk management. Research by Pangestuti et al. (2024) shows that many MSMEs, such as Kopi Kotak in Depok, are unaware of the importance of risk management and lack a clear method for identifying and managing risks. A greater focus on daily needs also makes it difficult for MSMEs to develop long-term risk planning.

Therefore, solutions must be tailored to business conditions. MSMEs can start by managing key risks, such as maintaining cash flow and not relying on a single supplier. Large companies need to ensure the role of risk officers is well-functioning and independent. Real-life case-based training and mentoring from local practitioners are also essential. Furthermore, policies such as microinsurance for MSMEs or tax incentives for partner companies can be helpful. Ultimately, effective risk management is not just about applying theory, but adapting it to field conditions, including the capabilities, culture, and habits of business actors. Risk management not only aims to prevent threats but also helps find a balance between risks and opportunities. Every business innovation inevitably involves uncertainty, and the courage to take calculated risks is often the difference between a business that stalls and one that thrives. Therefore, risk mitigation strategies are crucial for all types of businesses, both large corporations and MSMEs. For example, corporations can use automated monitoring systems to detect production disruptions in real time, while MSMEs can utilize simple accounting applications to reduce financial errors. Human resource training is also needed to make employees more aware of risks and prepared for emergencies. Furthermore, business diversification—for example, adding products or expanding markets—can help reduce dependence on a single source of income. With these steps, businesses are better prepared to face uncertainty and are able to capitalize on opportunities that competitors may not see. Therefore, early risk mitigation can be considered a long-term investment to strengthen business competitiveness (Agustina, 2019).

This study aims to determine the extent to which MSMEs understand the various types of risks that can impact business continuity, such as financial, operational, market, and compliance risks, including the importance of recognizing risks from the business planning stage. Furthermore, this study examines the ability of MSMEs to explain and implement appropriate risk mitigation strategies, such as avoiding, reducing, transferring, or accepting risks, according to their business circumstances. It also assesses how MSMEs perceive the effectiveness of their risk mitigation strategies, specifically whether these strategies are able to reduce losses, increase competitiveness, and maintain business stability amidst business uncertainty.

2. METHOD, DATA, ANALYSIS

This article adopts a qualitative approach using a desk study method to analyze literature related to risk mitigation strategies in supporting MSME sustainability planning. The desk study method was chosen because it allows researchers to explore various theories and empirical findings regarding the role of risk mitigation in strengthening the resilience of small and medium enterprises. Data were obtained from secondary sources such as scientific journal articles, textbooks, international risk management standards, and relevant research reports, with a focus on publications within the last 10 years to ensure the discussion aligns with the dynamics of MSME development and current business challenges.

Data collection was conducted through documentation, collecting and selecting literature relevant to the research topic. Data analysis employed a thematic content analysis approach, where researchers identified key concepts such as the types of risks faced by MSMEs, applicable mitigation strategies, and their impact on business sustainability. Through this method, the research is expected to provide a comprehensive understanding of effective risk mitigation strategies for MSMEs in facing business uncertainty. The analysis results were then combined and processed to identify best practices in implementing risk management and provide strategic recommendations that can support MSME sustainability planning.

3. RESULT AND DISCUSSION

Based on the results of a literature review related to risk mitigation strategies in MSME sustainability planning, this chapter consists of four main discussions: risk identification, identified risk mitigation strategies, the impact of implementing risk mitigation, and strategic recommendations. A further description of each stage is presented as follows:

1. Identifying Key Risks for MSMEs

Hardian (2025a) states that risk identification is a step to identify, understand, and explain various potential risks that can hinder the continuity and success of a business, including MSMEs. From this process, it can be seen that risks that arise in business continuity include:

1) Financial Risk
   Limited working capital makes it difficult for businesses to increase investments, such as purchasing new equipment or innovating products, so they are often unable to fulfill large orders and slow growth. Furthermore, unprofessional financial record-keeping can lead to mismanagement, cash leaks, and inaccurate business decisions. Another disruption arises from late customer payments, which disrupts cash flow, making it difficult for businesses to purchase raw materials on time or fulfill urgent orders.
2) Operational Risk
   Production capacity is limited because the equipment used is still traditional, and processes such as mixing ingredients and frying are done manually, making businesses unable to meet surges in demand, especially during periods like Eid al-Fitr. Manual production processes, which are time-consuming and dependent on labor, also increase the risk of late deliveries. Furthermore, the supply of raw materials is unstable because the business lacks a fixed supplier. Therefore, the availability of ingredients such as starch, wheat flour, and shrimp paste is not always guaranteed, both in terms of quantity and quality.
3) Human Resource Management Risk
   This business relies heavily on family labor, limiting productivity when demand increases or when a family member is unable to work. Furthermore, the additional labor employed often lacks adequate skills, especially in the production process, resulting in many failed products being discarded, ultimately resulting in losses for the company.
4) Marketing Risk
   Business promotion remains very limited, as it is only conducted through WhatsApp, resulting in a narrow market reach and reliance on a network of relatives or local customers. Furthermore, social media platforms such as Instagram and TikTok, which have significant potential to attract a wider market, have not been optimally utilized. The business also lacks a compelling content strategy or the use of paid advertising features, thus, opportunities to expand its digital market are not being maximized.
5) Market Risk
   This business faces competition from various similar snack products that offer competitive prices and more aggressive marketing strategies. In addition, production costs can also be affected by fluctuations in the prices of raw materials such as starch, wheat flour, and shrimp paste, which often change due to market conditions or seasonal factors.

2. Identified Risk Mitigation Strategies

(Norman et al., 2025) To address these various risks, MSMEs need to implement mitigation strategies tailored to their capabilities and business needs. Referring to risk management literature and the ISO 31000:2018 guidelines, there are several mitigation strategies that can be implemented, namely:

1) Risk Avoidance
   This strategy involves stopping, eliminating, or not carrying out activities deemed to carry significant risks that are disproportionate to the benefits. MSMEs typically choose this approach when the probability of a risk occurring is high and the impact is severe, making it safer to avoid the activity.

According to Hopkin, P., & Thompson (2022), this strategy is appropriate when an activity does not provide significant added value but has the potential to cause significant consequences.

2) Risk Reduction
This approach aims to reduce the likelihood of a risk occurring or mitigate its impact through preventative and control measures. This method is most commonly implemented by MSMEs because business activities continue, but processes are strengthened to be more resilient to risk. Rachmawati et al. (2025) stated that MSMEs that begin to implement digitalization can better mitigate risks, for example through demand prediction, stock control, and operational risk reduction.

3) Risk Transfer
This strategy involves transferring some or all of the risk to another party, either through formal mechanisms such as insurance and cooperation agreements or informal means such as outsourcing. This method is effective when the risk cannot be eliminated, but the burden can be transferred. Research by Handayani and Agustuti Irsandi (2024) shows that MSMEs that share risk with business partners are more resilient to market changes.

4) Risk Acceptance
This strategy is adopted when the risk is considered small, not too impactful, or the cost of avoiding it is greater than the risk itself. Risk acceptance is usually accompanied by preparation in the form of a contingency plan or reserve fund. Hardian (2025) found that MSMEs that provide reserve funds are able to adapt better when facing small risks or routine uncertainties.

3. Impact of Risk Mitigation Implementation on MSME Sustainability

A literature review shows that risk mitigation strategies have a significant impact on MSME sustainability. Mitigation efforts help MSMEs become more resilient in the face of crises and sudden changes. Hopkin (2022) emphasized that organizations that consistently implement risk mitigation have greater adaptability during operational disruptions. Rachmawati's (2025) findings also demonstrate that risk mitigation can maintain business stability when raw material prices fluctuate or demand decreases. In addition to increasing resilience, risk mitigation also supports more informed decision-making. COSO ERM (2017–2023) explains that proper risk identification and analysis enable business actors to make informed decisions based on acceptable risk levels. Fraser & Simkins add that a risk-based approach helps improve planning accuracy and reduce strategic errors.

Consistent implementation of risk mitigation also strengthens the trust of consumers, partners, and investors. ISO 31000 (2018) states that organizations with good risk management are perceived as more professional and stable, thereby enhancing their credibility. Liani Nestiti et al. (2025) found that MSMEs that implement mitigation mechanisms, such as insurance, supplier diversification, or contingency planning, tend to be more trusted because they are perceived as capable of managing uncertainty. Furthermore, risk mitigation also encourages innovation. According to Hillson, identifying risks enables organizations to identify opportunities to improve processes and develop more effective strategies. Wibowo (2022) also showed that MSMEs that actively implement risk mitigation adapt more quickly to digital technology and innovate in marketing and production.

Overall, risk mitigation directly contributes to the long-term sustainability of MSMEs. In the context of Indonesian MSMEs, risk mitigation is a crucial step in navigating market volatility, economic uncertainty, and intense competition. Thus, risk mitigation not only helps MSMEs survive but also lays the foundation for long-term growth and innovation.

Implementing risk mitigation not only increases MSME resilience but also provides various other strategic impacts that strengthen business sustainability. Through process standardization and regular evaluation, risk mitigation helps improve operational efficiency and reduce resource waste. Herdiyanto (2024) demonstrated that financial mitigation mechanisms such as cash flow management and reserve funds can reduce liquidity pressures and maintain business stability. Furthermore, supplier diversification and the use of digital supply chains contribute to strengthening supply chain stability, which, according to Christopher & Peck (2020), is a crucial element for the long-term sustainability of MSMEs. These efforts make MSMEs more adaptive to change and reduce dependence on uncontrollable external factors.

From a competitiveness perspective, risk mitigation enables MSMEs to provide more consistent services and products, thereby increasing customer satisfaction and loyalty. By proactively managing uncertainty, MSMEs can maintain a professional reputation, ultimately boosting the trust of business partners and investors. A risk-based strategy approach also emphasizes that risk management provides a competitive advantage by helping businesses make more informed and informed decisions. Furthermore, implementing risk mitigation encourages a culture of continuous improvement and accelerates digital transformation. Wibowo (2022) states that MSMEs that actively identify risks are more likely to utilize technology to increase productivity and innovation.

Overall, these positive impacts demonstrate that risk mitigation plays a significant role in strengthening the sustainability of MSMEs across various aspects, from operations and finance to marketing and reputation. With sound risk management, MSMEs are not only able to withstand business dynamics but also have a greater opportunity to grow, adapt, and compete sustainably in an increasingly complex business environment.

4. Strategic Recommendations

To strengthen the role of risk mitigation in MSME sustainability planning, a number of strategic steps need to be implemented in an integrated manner. Improving risk management literacy and training is essential for MSMEs to recognize, assess, and manage various uncertainties. This step must be supported by pro-MSME government policies, such as subsidies, easier financing, and expanded access to insurance. Furthermore, collaboration with financial institutions, universities, and the private sector can help strengthen MSME capacity through mentoring, research, and the use of technology. Business digitalization also needs to be enhanced to improve efficiency, expand markets, and increase resilience to change. With these efforts, MSMEs are expected to be able to manage risks more effectively and increase their chances of long-term sustainability.

Other strategic recommendations include:

1) Strengthening Data-Based Risk Information Systems
   MSMEs need to be facilitated to access risk information systems that provide real-time data on markets, economic trends, raw material prices, and regulatory changes. According to the theory of risk-informed decision-making, data-based decisions can reduce bias and increase the accuracy of mitigation.
2) Establishing a Risk Management Team or Unit in MSMEs
   For medium-sized MSMEs or those with larger organizational structures, establishing a small unit to handle risk identification and monitoring can improve response to potential disruptions. This aligns with ISO 31000's position that risk management needs to be embedded within the organizational structure.
3) Implementing Product and Market Diversification
   Diversification is a risk mitigation strategy recommended by many experts, including Kaplan & Mikes (2012), to reduce dependence on a single product or market. MSMEs should be encouraged to create product variety and expand their customer base to increase resilience.
4) Strengthening Supply Chain Resilience
   MSMEs need to build more flexible supply chains, for example by having more than one supplier, utilizing digital logistics, or using stable long-term contracts. This strategy reduces the risk of supply uncertainty and raw material price fluctuations.
5) Utilizing Financial Technology (Fintech) for Financial Risk Management
   Fintech can help MSMEs manage cash flow, access alternative funding, implement more secure payment systems, and reduce liquidity risk. This approach aligns with modern financial risk mitigation concepts.
6) Strengthening MSME Institutional and Community Networks
   Building MSME communities and associations can enhance information sharing, build business solidarity, and expand access to training and market opportunities. The network-based approach theory emphasizes that connected economic actors enhance adaptive capacity.
7) Business Simulation and Stress Testing
   MSMEs can be trained to conduct scenario tests such as extreme raw material price increases, supply chain disruptions, or decreased demand. This method is commonly used in corporate risk management and can now be applied simply to MSMEs.
8) Expansion of Business Incubation and Acceleration Programs
   Business incubators can help MSMEs strengthen their business models, innovate, calculate risks from the outset, and find professional mentors. This program has been proven effective in increasing MSME resilience to market dynamics.

4. CONCLUSION

The study results show that MSMEs face a variety of risks, ranging from financial, operational, human resource, marketing, and market dynamics, all of which have the potential to hinder business continuity. The implementation of mitigation strategies—such as risk avoidance, reduction, risk transfer, and risk acceptance—has been proven to increase MSME resilience in the face of uncertainty. Various literature confirms that risk mitigation not only protects MSMEs from potential losses but also helps improve the quality of decision-making, strengthens consumer, partner, and investor trust, and encourages innovation in product and process development. Therefore, risk mitigation is an integral component of efforts to strengthen the stability, credibility, and long-term adaptability of MSMEs.

To ensure business sustainability, more comprehensive strategic support is needed. Improving risk management literacy and capacity is a crucial foundation for MSMEs to be better able to systematically identify, analyze, and manage risks. Government support through pro-MSME regulations, easier access to financing, and expanded business protection guarantees are factors that contribute to strengthening the implementation of risk mitigation. Furthermore, collaboration with financial institutions, universities, and the private sector can enhance mentoring, research, and the use of technology to increase competitiveness. Leveraging digitalization is also key to expanding markets, improving operational efficiency, and strengthening resilience to changes in the business environment. Through an integrated approach, MSMEs can be better prepared to face challenges and maintain their business sustainability.

5. ACKNOWLEDGE

The author would like to thank the Educational Administration Study Program, Padang State University, for providing academic support in the preparation of this article. Appreciation is also extended to the lecturers in the Risk Management course who provided valuable guidance and input during the literature review process. Thanks are also extended to fellow students who assisted in the collection of literature sources. This article was prepared without any specific funding support, and therefore does not include a research contract number.

6. REFERENCES

Abdurrahman, M., dkk. (2018). Manajemen Risiko pada Usaha Kecil. Jurnal Pengembangan Bisnis, Vol. 3(2), 45-60.

Agustin, L., Mahabbatun Aliyah, P., Dilla Azahra, S., Studi Manajemen, P., Ekonomi, F., Muhammadiyah Bandung, U., & Barat, J. (2024). Strategi Mitigasi Risiko untuk Keberlanjutan Bisnis UMKM: Studi Kasus Citruk Kameumeut. *Jurnal Serambi Ekonomi Dan Bisnis*, *8*(1), 325–335. https://ojs.serambimekkah.ac.id/serambi-ekonomi-dan-bisnis/article/view/8532

Agustina, N. laras. (2019). *Manajemen Risiko Usaha Mikro Kecil dan Menengah (UMKM).* 1–9.

Arifin, S., & Setiawan, R. (2020). Pengelolaan Risiko Keuangan pada UMKM. Jurnal Ekonomi dan Bisnis, 12(3), 150-160.

Fahmi, I. (2018). *Manajemen Pengambilan Keputusan; teori dan aplikasi*. Alfabeta.

Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Semarang: Universitas Diponegoro.

Handayani, Agustuti Irsandi, H. (2024). IMPLEMENTASI MANAJEMEN RISIKO DALAM MENINGKATKAN KEBERLANJUTAN BISNIS Implementation of Risk Management in Improving Business Sustainability Universitas Bandar Lampung Usaha Mikro , Kecil , dan Menengah (UMKM) memiliki peran strategis dalam mendorong pe. *Business Perspective Journal*, *IV*(2), 200–207.

Hardian, S. (2025). Strategi Mitigasi Risiko untuk Keberlanjutan UMKM : Studi kasus Aliza _ Food. *Peng: Jurnal Ekonomi Dan Manajemen*, *2*(1), 1594–1595.

Hairul, H. (2020). Penerapan Manajemen Risiko pada UMKM: Studi Kasus di Indonesia. Jurnal Ekonomi dan Bisnis Indonesia, 7(3), 100-115.

Hopkin, P., & Thompson, C. (2022). Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Enterprise Risk Management (6th ed.). *Kogan Page.*

ISO. (2018). ISO 31000:2018 Risk management – Guidelines. International Organization for Standardization. Retrieved from https://www.iso.org/iso-31000-risk-management.htm

ISO. (2009). ISO 31000:2009 - Risk Management: Principles and Guidelines. International Organization for Standardization. Dapat diakses di: https://www.iso.org/standard/43170.html

Liani Nestiti, I., Lestari, A., & Suria Manda, G. (2025). *Peranan Strategi Mitigasi dalam Menghadapi Risiko Operasional Pada Perusahaan dan UMKM*. *5 nomor 3*, 5334–5345.

Norman, V., Maha, A., Tj, H. W., Wahyoedi, S., & Krida, B. (2025). *Analisis Manajemen Risiko UMKM Rumah Donat di Lenteng Sumenep Berbasis ISO 31000: Identifikasi, Penilaian, dan Mitigasi*. *4*, 677–684.

Pagach, D. P., & Warr, R. S. (2010). The Effects of Enterprise Risk Management on Firm Performance. Working Paper. College of Management, North Carolina University.

Pangestuti, D. C., Nastiti, H., Husniati, R., & Sumilir, S. (2024). Pendampingan Pengelolaan Risiko Usaha Mikro Kecil Menengah untuk Keberlanjutan Bisnis. *Taawun*, *4*(01), 11–33. https://doi.org/10.37850/taawun.v4i01.527

Puspitorini, J., & Risman, A. (2025). *Manajemen Risiko Usaha Mikro Kecil Dan Menengah (Umkm)*. *May*.

Sanjaya, C.K., & N. Linawati. (2015). Pengaruh Penerapan Enterprise Risk Management dan Variabel Kontrol Terhadap Nilai Perusahaan. Finesta. Vol. 3 (1): 52-57.

Sugiyono. (2019). Metode Penelitian Kualitatif, Kuantitatif, dan R&D. Bandung: Alfabeta.

Sunaryo, D., Kurnia, D., Adiyanto, Y., & Quraysin, I. (2021). *Pada Bank Umum Di Asia Tenggara Periode 2012-2018*. *11*(1).

Wibowo, A. (2022). Manajemen Risiko. *Manajemen Resiko*, *1*, 1–407.