

Analysis of Risk Management and Entrepreneurship Orientation Towards the Sustainability of MSME Businesses

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ARTICLE INFO

Keywords: Risk Management, Entrepreneurial Orientation, Business Sustainability, MSMEs.

Received : 16, January

Revised : 18, February

Accepted: 17, March

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ABSTRACT

The aim of this research is to analyze the influence of risk management and entrepreneurial orientation on the sustainability of MSME businesses. This research uses quantitative methods with the research population being the Gold Mutiara MSMEs in Mataram City, totaling 60 MSMEs, of which 56 MSMEs were sampled. Data analysis in this study used SPSS 25. The results of this study show that the variables of risk management and entrepreneurial orientation have a positive effect on the sustainability of the Emas Mutiara MSME business in Mataram City. Based on these findings, it is recommended that Emas Mutiara MSMEs practice risk management and entrepreneurial orientation to improve the sustainability of MSME businesses.

INTRODUCTION

Micro, small and medium enterprises (MSMEs) have an important role in the economy because they absorb a lot of innovation workers for social and economic growth (Lima et al., 2023). In the business world, including MSMEs, risks will always be encountered due to uncertainty which causes losses and can directly affect daily operations (Jikrillah et al., 2021). MSMEs have several risks that cause company goals not to be achieved in the form of capital risks that cause bankruptcy, operational disruption and financial losses. In maintaining the sustainability of MSMEs, a strategy is needed in the form of an entrepreneurial orientation to develop entrepreneurial thinking in decision making, proposing innovation, taking risks, acting proactively and competing aggressively. (Arabeche et al., 2022). MSMEs that act in supporting business continuity require good performance as defined by Ajzen in 1985 that Planned behavior relates to efforts to do something specific that are related to actual performance (Ajzen, 1991a). According to (Ajzen, 1991) the behavior carried out, success can be determined. The theory of planned behavior focuses on the views and beliefs that influence a person's actions or decisions (Bangun et al., 2023).

Micro, small and medium enterprises (MSMEs) rarely carry out risk management and strategy in their business can cause businesses to close and not last long (Jikrillah et al., 2021) including the pearl gold business. Failure to see risks and competition due to lack of innovation can lead to an inability to carry out planned actions and business continuity will certainly be disrupted, meanwhile, exaggerating risks or not knowing the possibility of controlling risks can make MSMEs reluctant to take action (Gaschi-Uciecha, 2019). In taking action, risks are adjusted to the limitations and needs of MSMEs, risks can be detected early thereby reducing the impact that arises by managing risks in business activities (Gaschi-Uciecha, 2019).

entrepreneurial orientation so that it is able to build the dynamic capabilities of MSMEs. Entrepreneurial orientation also provides a framework in the strategy making process by proposing innovation, taking risks and acting proactively to compete aggressively with competitors (Arabeche et al., 2022). Risk management accompanied by an entrepreneurial orientation can reduce and minimize losses considering the many risks and competition faced by MSMEs which are quite diverse. Risk management begins by identifying possible threats and then implementing a process to eliminate them. The entrepreneurial orientation begins with decision making (Arabeche et al., 2022).

Sustainability is gradually becoming important for MSMEs due to intense competition from both large companies and supervision from various stakeholders (Lima et al., 2023). MSMEs need risk management and business innovation with an entrepreneurial orientation as a strategy in dealing with institutions in anticipating risks that have an impact on how long the business lasts directly or indirectly. To reduce risks and face competition in the business world, MSMEs need risk control or risk management and entrepreneurial orientation for the sustainability of MSME businesses (Jikrillah et al., 2021). Several studies consider the level of innovation in products and management systems as well as the sustainability and longevity of MSMEs as important indicators (Prasanna et al., 2019).

LITERATURE REVIEW

Theory of Planned Behavior

The theory of planned behavior is needed because of the limitations of the original model in dealing with human behavior that has incomplete will. Factors influencing action in urgent situations. The central factor in this theory is the individual's intention to carry out certain behavior. Intention is assumed to be a factor in capturing a motivation that can influence behavior (Ajzen, 1991). This theory can explain behavior that requires planning, planning theory analyzes subjective norms attitudes, behavioral control perceived by consumers, behavioral control can show how behavior can be controlled (Bangun et al., 2023). The importance of behavioral control to some extent determines the achievement of behavior (Ajzen, 1991). The performance of a behavior is a combination of intention and perceived behavioral control (Ajzen, 1991). Ajzen (1991) explains that there are three determining factors in behavior.

- a. Attitude Towards Behavior is behavior that shows a level of having a good or unfavorable evaluation regarding certain behavior.
- b. Subjective Norm is an individual's view of the social pressure they experience to carry out or not carry out behavior. These norms are also determined by the expectations of people around them which can influence the individual and are also determined desires.
- c. Perceived Behavior Control is the perception of dealing with whether it is difficult or not to do something. This behavior is related to beliefs about the availability or not of the resources and opportunities needed to realize certain behavior through reflection on the past and anticipation of obstacles and threats.

Risk management

Risk management is a systematic process for identifying, evaluating and controlling risks related to the activities and activities of an organization (Susiloningtyas et al., 2023). Risk management is one part of the planning process by identifying major threats and developing plans to prevent and reduce the consequences (Kielbus & Karpisz, 2019). Planned risk management is required with positive behavior. As the theory of planned behavior can explain, behavior requires planning (Bangun et al., 2023). Risk management is not focused on large businesses but companies that are members of the MSME sector (Gaschi-Uciecha, 2019). In the ISO 31000 standard, risk management is future oriented so as to provide stable and long-term development in an organization's risk management process (Kielbus & Karpisz, 2019). Based on the ISO 31000:2018 risk management guidelines, the risk management process consists of: 1) risk identification, 2) risk analysis, 3) risk evaluation and 4) risk treatment (Jikrillah et al., 2021). Risk identification is a systematic process for recognizing and recording conditions that cause losses that hinder the achievement of business goals (Susiloningtyas et al., 2023). Risk analysis has the aim of understanding the nature and character of a risk based on its level with good consideration of sources, consequences, events, scenarios and effectiveness (Jikrillah et al., 2021). According to (Parviainen et al., 2021) risk evaluation, it includes consideration, comparison and prioritization of

alternatives that will be carried out to reduce risks based on the results of risk analysis. In risk treatment, options are determined for handling risks, planning, implementing, handling risks, assessing effectiveness, handling risks, as well as making decisions for subsequent actions to consider objectives and actions for further analysis.(Parviainen et al., 2021)

Entrepreneurial Orientation

Entrepreneurial orientation is a process of making strategies in taking entrepreneurial decisions and actions to achieve excellence in entrepreneurial thinking (Arabeche et al., 2022). Entrepreneurial Orientation is defined as “a firm strategic posture towards entrepreneurship”. MSMEs can apply entrepreneurial orientation as their entrepreneurial strategy and include it in a MSME business strategic plan, so that the business can develop significantly (Arabeche et al., 2022). Business requires actions that can influence skills, will and knowledge. In research (Bangun et al., 2023)there is a need for theories of planned action such as Rational Actin Theory which states that a person has complete control when there are no obstacles to acting and has no way to control behavior due to a lack of resources and skills. Entrepreneurial orientation is a process in making decisions to spread a mission (Abu-Rumman et al., 2021). According to (Abu-Rumman et al., 2021)entrepreneurial orientation, it is the basis for gaining competitive advantage because with an entrepreneurial orientation, MSMEs can renovate operations to keep up with new growth. Traditionally (Arabeche et al., 2022) entrepreneurial orientation is assessed using three criteria: innovation, risk taking, and proactiveness. Innovation is a creative ability to produce new product development followed by proactiveness which includes planning anticipation, risk taking added as aggressiveness in overcoming competition (Abu-Rumman et al., 2021). Entrepreneurial orientation allows organizations to remain aware of market trends and helps MSMEs to identify new potential and build new ventures and identify opportunities (Nuseir & Aljumah, 2022).

Business Sustainability

Sustainability develops because of a series of interconnected dilemmas involving basic living standards that enable the economy and growth in maintaining environmental integrity and effective governance of social and economic systems (Fisher et al., 2021). Sustainability is simply a capability that is maintained at a certain level (Moore et al., 2017). Business continuity can be successful with proper control, (Ajzen, 1991)stating that with control, a person will later believe that success is determined by behavior and success is a possibility that is felt when achieving certain goals. There is a long-term impact on the health of the business so it is important to maintain the application of the evidence and the results produced (Moore et al., 2017). Organizations aiming for sustainability tend to carry out sustainability management by reducing risks through integrating sustainability issues into core values to comply with regulatory requirements. (Wijethilake & Lama, 2019).Business continuity is a situation in which there are ways to maintain, protect, develop and meet business needs (Rosani et al., 2022). The competitiveness and sustainability of modern organizations depends on Innovation and is related to the

implementation of something superior or new. Emerging sustainability issues, such as the threat of climate change, overpopulation, and the emergence of unpredictable sustainability risks, continue to influence sustainable growth (Bui & de Villiers, 2017; Wijethilake, Munir, & Appuhami, 2017).

Hypothesis

Risk management is very important in business implementation for further business continuity and is an important part of the overall business that leads to success (Kiełbus & Karpisz, 2019). The research (Islam & Tedford, 2012) found that risks that can have a negative impact can endanger the sustainability and growth of MSMEs. There is no systematic risk management strategy in most MSMEs, one of the reasons why MSMEs in developing countries need help to grow and remain sustainable is because of their inability to manage risk effectively (AL-Dosari & Fetais, 2023). According to (Mthiyane et al., 2022) failure to manage risk in MSMEs, this is one of the reasons why MSMEs have difficulty growing and being sustainable. Business in organizations can take place when risk management principles are carried out proactively. (Wijethilake & Lama, 2019)

H1: Therefore, it is hypothesized that risk management influences business sustainability.

MSMEs can benefit from implementing an Entrepreneurial Orientation from a conceptual point of view because the rapidly changing environment makes the future income of MSMEs unclear, requiring MSMEs to look for new opportunities. Entrepreneurial orientation is a market driver that is utilized by businesses to develop business and market prospects in various industries, including MSMEs (Arabeche et al., 2022). Entrepreneurial orientation, a process of implementing strategies that provides a framework for MSMEs to make entrepreneurial decisions to take action to achieve competitive advantage, is one of the techniques for developing entrepreneurial thinking (Arabeche et al., 2022). The ability to develop innovation in MSMEs is an important element for sustainable transformation in an uncertain business environment, so innovation is very important to achieve business sustainability (Imran et al., 2019). Entrepreneurial orientation has an important role in the success of MSMEs, apart from that in research (Nuseir & Aljumah, 2022) MSMEs are required to be adaptive, innovative and able to continue by providing business solutions that suit their wishes.

H2: So it is hypothesized that entrepreneurial orientation influences the sustainability of MSMEs.

METHODOLOGY

The population of this study consisted of MSMEs from gold and pearl craftsmen in Mataram City. Data was collected from November to December 2023 to obtain samples from craftsmen. This research method uses a quantitative research design through a survey approach. The research population consists of 60 Emas Mutiara MSMEs with 57 samples. The instrument for data collection used a questionnaire with the Guttman scale. Data was obtained through a questionnaire filled out by gold and pearl

MSMEs. Data processing was carried out using SPSS (*Statistical Package for the Socia Science*) software using multiple linear regression analysis by inputting data from the questionnaire and analyzing it further. The findings will be interpreted and used to determine the influence of risk management variables and entrepreneurial orientation on the sustainability of Emas Mutiara MSMEs.

RESEARCH RESULTS

In this research, it was found that there was a significant influence of variables, namely risk management and entrepreneurial orientation, on the sustainability of Mutiara Gold MSMEs in Mataram City. This research questionnaire was designed by considering the literature regarding the relevance and accuracy of questions on the variables of risk management, entrepreneurial orientation and business sustainability. Following are the results of the research. based on the results of the questionnaire.

Validity Test of Risk Management Variables

Basically, data is said to be valid if *the person correlation value* > *r table* value in the validity test results shows that the questionnaire items are consistently valid. The table's *r* value depends on the level of significance and the number of data pairs. In this study, the *r* table was found to be 0.220 with a value of *n* = 57 with the formula *df* = *n*-2 at a significance level = 0.05.

Table 1. Validity of the Risk Management Questionnaire

Question	Person Correlation Value	r value Table	Information
X1.1	0.487	0.220	Valid
X1.2	0.429	0.220	Valid
X1.3	0.376	0.220	Valid
X1.4	0.642	0.220	Valid
X1.5	0.467	0.220	Valid
X1.6	0.524	0.220	Valid
X1.7	0.585	0.220	Valid
X1.8	0.531	0.220	Valid
X1.9	0,473	0.220	Valid

The table above shows that the person correlation value > table R value and shows that the questions related to risk management are valid.

Table 2. Validity Test Results of the Entrepreneurship Orientation Questionnaire

Question	Person Correlation Value	r value Table	Information
X2.1	0.470	0.220	Valid
X2.2	0.658	0.220	Valid
X2.3	0.380	0.220	Valid
X2.4	0.510	0.220	Valid
X2.5	0.503	0.220	Valid

X2.6	0.491	0.220	Valid
X2.7	0.490	0.220	Valid
X2.8	0.546	0.220	Valid
X2.9	0.413	0.220	Valid

The table above shows that the person correlation value > R value. The table shows that questions related to entrepreneurial orientation are said to be valid.

Table 3. Results of Business Continuity Reliability Validity Test

Question	Person Correlation Value	r value Table	Information
Y1	0.822	0.220	Valid
Y2	0.823	0.220	Valid
Y3	0.321	0.220	Valid
Y4	0.398	0.220	Valid
Y5	0.299	0.220	Valid
Y6	0.778	0.220	Valid

The table above shows that *the person correlation value* > the R table value so that it shows that questions related to business sustainability are said to be valid.

Reliability Test

In this research, the method used to calculate reliability is *Cronbach's Alpha* to measure concepts or variables. In the three question variables, the three instruments are said to be reliable with a reliability alpha value close to 1.

Table 4. Reliability Test Results for Independent Variables and Dependent Variables

No	Variable	Cronbach's Alpha	Items	Information
1	Risk management	0.625	9	Reliable
2	Entrepreneurial Orientation	0.645	9	Reliable
3	Business Sustainability	0.625	6	Reliable

The table above shows that there are question items with *Cronbach's values* of 0.625 and 0.645 which are close to 1 so that business continuity items are said to be reliable.

Hypothesis Testing

F-Test

The F test here aims to test the influence of risk management variables and entrepreneurial orientation on business sustainability.

Table 6. F Test Results
ANOVA ^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11,340	2	5,670	5,184	,009 ^b
	Residual	59,059	54	1,094		
	Total	70,399	56			

Dependent Variable: Business Sustainability

Predictors: (Constant), Risk Management, Entrepreneurial Orientation

Primary data will be processed in 2024

Based on the results of calculations using the SPSS 25 program, a significance value of 0.009 was obtained and a significance value of 0.05. This means that risk management and entrepreneurial orientation together have an influence on business sustainability variables.

T-Test (Partial Test)

The T test functions to determine the significant influence of each independent variable on the dependent variable.

Table 7. T test
Coefficients ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,920	,531		7,386	,000
	Risk management	-,158	,077	-,282	-2,047	,046
	Entrepreneurial Orientation	,263	,084	,430	3,122	,003

Dependent Variable: Business Sustainability

Primary data processed in 2024

Conditions for making a hypothesis decision are accepted or rejected based on the magnitude of the significance value. If the significance is less than or equal to 0.05 (≤ 0.05) then H₀ is rejected, meaning there is a significant influence between the independent variable and the dependent variable and if the significance value of $t > 0.005$ then H₀ is accepted, meaning there is no significant influence between the independent variable and the variable dependent.

Hypothesis Testing Results

Table 8. Hypothesis Test Results

Hypothesis	Variable Relationships	Sign	Information
H1	Risk management => business continuity	0.003 < 0.05	Accepted

H2	Entrepreneurial Orientation => Business sustainability	0.046 < 0.05	Accepted
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H1. The relationship between risk management variables and business sustainability variables has a smaller significance coefficient value with alpha, namely $0.003 < 0.05$ (hypothesis accepted). This means that there is a significant positive influence of risk management on the sustainability of MSME businesses.

H2: The relationship between the entrepreneurial orientation variable and the business sustainability variable has a significant coefficient value of 0.046, meaning the significant coefficient value is smaller than the alpha value, namely 0.05 (the hypothesis is accepted), this means that there is a significant positive influence of entrepreneurial orientation on the business sustainability of the gold pearl MSMEs.

In the findings of this research, there is a significant positive influence of risk management on business sustainability, meaning that if risk management and entrepreneurial orientation can be carried out well, it will have an impact on business sustainability. The general aim of risk management is to eliminate the possible impact of risks on economic results. Apart from that, the results of these findings also found that entrepreneurial orientation has a significant influence on business sustainability, meaning that entrepreneurial orientation has an impact on business sustainability by developing business ideas in MSMEs. Skills in risk management by carrying out risk identification, risk analysis, risk evaluation and risk treatment supported by entrepreneurial orientation by being innovative, proactive and brave in taking risks in MSME businesses certainly determine the success of a business.

The results of this research confirm the findings of a number of previous studies, one of which (Ade et al., 2020) states that there is a significant influence in the implementation of risk management on the sustainability of SMEs in Lagos State. The results of this research also support other research which found that there is a relationship between effective risk financing for MSMEs to survive (Adeyele & Omorokunwa, 2017). Research (Kiew et al., 2016) shows that the practice of effective risk management can increase the sustainability of MSMEs. Research (Nuseir & Aljumah, 2022) shows that entrepreneurial orientation in SMEs must have the necessary steps to support sustainability. In this research, it was found that there is a significant influence of entrepreneurial orientation on sustainable entrepreneurship. The results of the current research are also consistent with research conducted by (Salunke, 2013) which identified the impact of entrepreneurial orientation on entrepreneurial bricolage which also influences business sustainability.

The results of this research are in conflict with research conducted by those (Mamai & Yinghua, 2017) who stated that there is no relationship between risk management and practice and financial performance, so they are contrary to the results of this research. These results also contradict those (Pagach & Warr, 2010) which reveal that in the US the contribution of limited risk management practices does not have a significant effect on the performance of public companies that have a Chief Risk Officer (CRO).

CONCLUSIONS

Based on the results of the research and discussion, it can be concluded that risk management and entrepreneurial orientation have a significant effect on the sustainability of MSME businesses. This means that risk management is carried out through risk identification, risk analysis, risk evaluation and risk treatment and entrepreneurial orientation in the form of innovative, proactive and risk-taking businesses that have an impact on business sustainability both in the social economy and the MSME environment. Furthermore, MSMEs can maintain their business or business continuity both in the social economy and the environment by carrying out risk management and entrepreneurial orientation.

REFERENCES

- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link? *Journal of Innovation and Entrepreneurship*, 10(1). <https://doi.org/10.1186/s13731-021-00170-8>
- Ade, I., Joseph, M., & Francis, D. (2020). Enterprise Risk Management Practices and Survival of Small and Medium Scale Enterprises in Nigeria. *Studies in Business and Economics*, 15(1), 68–82. <https://doi.org/10.2478/sbe-2020-0007>
- Adeyele, J. S., & Omorokunwa, O. G. (2017). The Journal of Entrepreneurial Finance RISK APPETITES AND EMPIRICAL SURVIVAL PATTERN OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA. In *RISK APPETITES AND EMPIRICAL SURVIVAL PATTERN OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA* (Vol. 18, Issue 2). <http://hdl.handle.net/10419/197554> Available at: <https://digitalcommons.pepperdine.edu/jef/vol18/iss2/2>
- Ajzen, I. (1991a). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- AL-Dosari, K., & Fetais, N. (2023). Risk-Management Framework and Information-Security Systems for Small and Medium Enterprises (SMEs): A Meta-Analysis Approach. *Electronics (Switzerland)*, 12(17). <https://doi.org/10.3390/electronics12173629>
- Arabeche, Z., Soudani, A., Brahmi, M., Aldieri, L., Vinci, C. P., & Abdelli, M. E. A. (2022a). Entrepreneurial Orientation, Organizational Culture and Business Performance in SMEs: Evidence from Emerging Economy. *Sustainability (Switzerland)*, 14(9). <https://doi.org/10.3390/su14095160>
- Bangun, C. S., Suhara, T., & Husin, H. (2023). THE APPLICATION OF THEORY OF PLANNED BEHAVIOR AND PERCEIVED VALUE ON ONLINE PURCHASE BEHAVIOR. *Technomedia Journal*, 8(1SP), 123–134. <https://doi.org/10.33050/tmj.v8i1sp.2074>
- Fisher, J., Arora, P., Chen, S., Rhee, S., Blaine, T., & Simangan, D. (2021). Four propositions on integrated sustainability: toward a theoretical framework to understand the environment, peace, and sustainability nexus. *Sustainability Science*, 16(4), 1125–1145. <https://doi.org/10.1007/s11625-021-00925-y>

- Gaschi-Uciecha, A. (2019). Risk Management in SMES. *Transport Economics and Logistics*, 82, 91–99. <https://doi.org/10.26881/etil.2019.82.08>
- Imran, M., Salisu, I., Aslam, H. D., Iqbal, J., & Hameed, I. (2019). Resource and information access for SME sustainability in the era of IR 4.0: The mediating and moderating roles of innovation capability and management commitment. *Processes*, 7(4). <https://doi.org/10.3390/pr7040211>
- Islam, A., & Tedford, D. (2012). Risk determinants of small and medium-sized manufacturing enterprises (SMEs) - an exploratory study in New Zealand. *Journal of Industrial Engineering International*, 8(1). <https://doi.org/10.1186/2251-712X-8-12>
- Jikrillah, S., Ziyad, M., & Stiadi, D. (2021a). ANALISIS MANAJEMEN RISIKO TERHADAP KEBERLANGSUNGAN USAHA UMKM DI KOTA BANJARMASIN. *JWM (JURNAL WAWASAN MANAJEMEN)*, 9(2), 134–141. <https://doi.org/10.20527/jwm.v9i2.24>
- Kielbus, A., & Karpisz, D. (2019a). RISK MANAGEMENT AS A PROCESS SECURITY TOOL. *System Safety: Human - Technical Facility - Environment*, 1(1), 234–239. <https://doi.org/10.2478/czoto-2019-0030>
- Kiew, Y., Angeline, H., & Teng, Y. S. (2016). *enterprise risk management: eviDence from small-meDium enterprises*.
- Lima, O., Fernandes, G., & Tereso, A. (2023). Benefits of Adopting Innovation and Sustainability Practices in Project Management within the SME Context. *Sustainability*, 15(18), 13411. <https://doi.org/10.3390/su151813411>
- Mamai, M., & Yinghua, S. (2017). Enterprise Risk Management Best Practices for Improvement Financial Performance in Manufacturing SMEs in Cameroon. In *International Journal of Management Excellence* (Vol. 8, Issue 3).
- Moore, J. E., Mascarenhas, A., Bain, J., & Straus, S. E. (2017). Developing a comprehensive definition of sustainability. *Implementation Science*, 12(1). <https://doi.org/10.1186/s13012-017-0637-1>
- Mthiyane, Z. Z. F., van der Poll, H. M., & Tshehla, M. F. (2022). A Framework for Risk Management in Small Medium Enterprises in Developing Countries. *Risks*, 10(9). <https://doi.org/10.3390/risks10090173>
- Nuseir, M. T., & Aljumah, A. (2022). The impact of entrepreneur orientation on sustainable entrepreneurship among SMEs in the UAE: mediating effects of the sustainability orientation and bricolage behaviours of entrepreneurs. In *Int. J. Trade and Global Markets* (Vol. 16, Issue 3).
- Pagach, D., & Warr, R. (2010). *The Effects of Enterprise Risk Management on Firm Performance*. <http://ssrn.com/abstract=1155218www.garp.com>
- Parviainen, T., Goerlandt, F., Helle, I., Haapasaari, P., & Kuikka, S. (2021). Implementing Bayesian networks for ISO 31000:2018-based maritime oil spill risk management: State-of-art, implementation benefits and challenges, and future research directions. *Journal of Environmental Management*, 278. <https://doi.org/10.1016/j.jenvman.2020.111520>
- Prasanna, R. P. I. R., Jayasundara, J. M. S. B., Gamage, S. K. N., Ekanayake, E. M. S., Rajapakshe, P. S. K., & Abeyrathne, G. A. K. N. J. (2019). Sustainability of SMEs in the competition: A systemic review on technological challenges and SME performance. In *Journal of Open Innovation: Technology, Market, and Complexity* (Vol. 5, Issue 4). MDPI. <https://doi.org/10.3390/joitmc5040100>

- Rosani, N. R., Lukiastuti, F., Manajemen, M., Bank, S., & Jateng, B. (n.d.). *PENGARUH PENGELOLAAN RISIKO DAN PERILAKU INOVATIF TERHADAP KEBERLANGSUNGAN USAHA UMKM YANG DIMODERASI OLEH KAPABILITAS JEJARING*. 4(2), 2022.
- Susiloningtyas, R., Pujiati, A., Harahap, S., Dano, D., Ak, M., Yamin, Y., Rosaria, D., Wahyuni, L., Hamzah, A., Pranyoto, S. E., Rely, G., Muhammad, H., & Hidayatullah, R. (n.d.). *MANAJEMEN RISIKO PENERBIT CV.EUREKA MEDIA AKSARA*.
- Wijethilake, C., & Lama, T. (2019). Sustainability core values and sustainability risk management: Moderating effects of top management commitment and stakeholder pressure. *Business Strategy and the Environment*, 28(1), 143–154. <https://doi.org/10.1002/bse.2245>