DOI: https://doi.org/10.38035/sjam.v2i2 https://creativecommons.org/licenses/by/4.0

The Role of Organizational Culture, Market Competition, Mitigation Strategies and Information Systems on Risk Management

Christophorus Indra Wahyu Putra¹, Nera Marinda Machdar², Adler Haymans Manurung³

¹Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, indrahatibie@gmail.com

Corresponding Author: indrahatibie@gmail.com1

Abstract: The purpose of this literature research is to help hypotheses for future authors in determining research related to risk management. Research articles on the role of organizational culture, market competition, mitigation strategies and information systems on risk management are scientific literature articles within the scope of risk management. The approach used in this literature review research is descriptive qualitative. The data collection technique is to use literature studies or review relevant previous articles. The data used in this descriptive qualitative approach comes from previous research relevant to this research and sourced from academic online media such as Thomson Reuters Journals, Springer, Taylor & Francis, Scopus Emerald, Elsevier, Sage, Springer, Web of Science, Sinta Journals, DOAJ, EBSCO, Google Scholar and digital reference books. In previous studies, 1 relevant previous article was used to review each independent variable. The results of this literature review article are: 1) Organizational Culture plays a role in Risk Management; 2) Market Competition plays a role in Risk Management; 3) Mitigation Strategies play a role in Risk Management; and 4) Information Systems play a role in Risk Management.

Keywords: Risk Management, Organizational Culture, Market Competition, Mitigation Strategies, Information Systems

INTRODUCTION

Risk management has become a critical strategic component in maintaining organizational sustainability amidst uncertain global dynamics (Mawarni, 2022). On a global scale, organizations face evolving challenges ranging from economic instability, geopolitical threats, and climate change to rapid technological change (Zainal et al., 2019). All of these create complex and diverse risks that, if not managed properly, can lead to operational disruptions, financial losses, and even business collapse. For example, the global financial

²Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, nera.marinda@dsn.ubharajaya.ac.id

³Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, <u>adler.manurung@dsn.ubharajaya.ac.id</u>

crisis of 2008 demonstrated how risk management failures can destabilize large organizations and have far-reaching effects on the global economy. These issues underscore the need for a holistic and integrated approach to risk management.

The risk management approach is undertaken to analyze the level or amount of risk posed by each activity or operation in the organization or business. By identifying risks, assessing risks, controlling risks and reviewing risks. In this way it is hoped that the organization can avoid the bad things that might happen to the organization (Soesanto, Saputra, et al., 2023).

In a general context, one of the main problems in risk management is the low awareness of organizations about the importance of proactive risk management. Many organizations still view risk management as a response to problems that have already occurred, rather than a preventive effort. This is often due to a weak organizational culture that supports risk management practices (G. A. M. Putri et al., 2023).

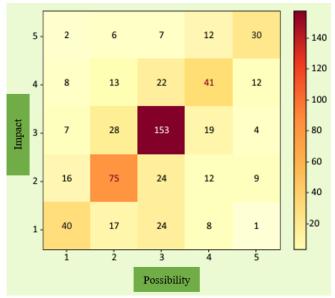


Figure 1. Results of Risk Analysis of Workplace Unconduciveness Source: Indonesia Risk Management Professional Association, (2023)

The organizational culture is closely related to comfort in the workplace, one of which is whether or not the workplace is conducive. Figure 1 is the result of a survey conducted by the Indonesia Risk Management Professional Association, (2023), to respondents who work for companies in the financial services sector and the real sector. From the survey, 30 respondents stated that the risks arising from a non-conducive workplace would have the highest probability of occurring, and have the greatest impact on the company. An organizational culture that is not adaptive or supportive of transparency and innovation will hinder early risk identification. For example, closed communication or lack of collaboration between departments often hinders a comprehensive risk identification process, resulting in organizational cultures that are not adaptive or do not support transparency and innovation hinder early risk identification. For example, closed communication or lack of collaboration between departments often hinders a comprehensive risk identification process, resulting in organizations failing to identify potential threats that could have been anticipated earlier.

In addition to a non-adaptive organizational culture, increased market competition is another factor that makes risk management more difficult. Changing consumer preferences,

competitive pressures and disruptive technological innovations often create new uncertainties that are difficult to predict. Many companies face a dilemma between innovating to stay competitive and maintaining operational stability. The inability to understand market dynamics and analyze competitors well can increase strategic risks such as product failure or loss of market share. On the other hand, inattention to market risk management often leaves organizations vulnerable to economic fluctuations or sudden regulatory changes (Widjanarko et al., 2023).

Another problem is the suboptimal implementation of risk mitigation strategies. Mitigation strategies, such as diversification or contingency planning, are often implemented partially or only to meet regulatory obligations, without considering their effectiveness in reducing the impact of risk. For example, many organizations do not have a strong internal control system in place, leaving them vulnerable to fraud or regulatory non-compliance. On the other hand, a lack of risk management-related training and education for employees also hinders the effectiveness of risk mitigation strategies. In fact, a well-designed mitigation strategy supported by employee understanding can be a very effective tool in reducing the impact of risk (Prasetyo et al., 2022).

In addition, technological developments have dramatically changed the risk management landscape. Information systems are now the backbone of the risk identification, assessment and mitigation process. However, many organizations still face barriers to integrating technology into their risk management. Poor system reliability, low data quality, or lack of interoperability are often barriers to optimizing the use of information systems. In addition, information security threats, such as cyber-attacks, pose additional risks that must be carefully managed. Insecure information systems can provide an opening for outsiders to exploit sensitive data, which in turn can damage an organization's reputation and stability.

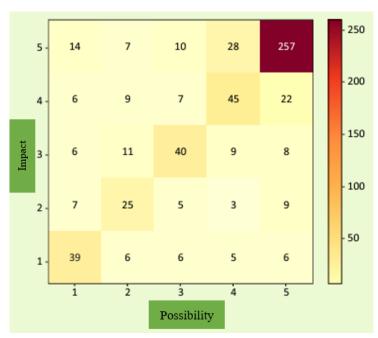


Figure 2. Results of Data and Information Security/Cyber Crime Risk Analysis Source: Indonesia Risk Management Professional Association, (2023)

Gaps in information systems can pose a threat to organizations/companies, in this case financial services sector companies and real companies. Where there are 81 respondents stating that the risk of ineffective implementation of sustainable finance has the highest

probability of occurrence and the greatest impact on the company. This shows that risk management is very important to be carried out on information systems, so that it will reduce gaps that can harm the organization or company.

The core problem with risk management is the lack of synergy between key elements such as organizational culture, market competition, risk mitigation strategies, and information systems. A supportive organizational culture can be the foundation for implementing more effective risk mitigation strategies, but without an awareness of the importance of risk management, these efforts are likely to fail. Similarly, dynamic market competition requires reliable information systems to provide relevant data and support strategic decision-making. However, without a well-planned risk mitigation strategy, market risks can pose a serious threat to business sustainability.

Therefore, this study aims to holistically examine the role of organizational culture, market competition, mitigation strategies, and information systems on risk management. This research is important to provide deeper insights into how these elements can interact and contribute to creating a more effective and change-adaptive risk management framework. With a better understanding of the relationship between these elements, organizations can design a risk management approach that focuses not only on prevention, but also on strengthening their competitiveness and sustainability in the face of global challenges.

Problem Formulation

Based on the background of the problem above, the problem formulation is obtained to be used as a hypothesis for further research, among others: 1) Does Organizational Culture play a role in Risk Management?; 2) Does Market Competition play a role in Risk Management?; 3) Does Mitigation Strategy play a role in Risk Management?; and 4) Does Information Systems play a role in Risk Management?.

METHOD

This research uses a descriptive qualitative approach. This method was chosen because it allows researchers to understand the research concepts related to risk management thoroughly, focusing on the context and meaning contained in the concept of risk management. Descriptive qualitative data collection and analysis allows researchers to customize their approach to the needs of the research and the characteristics of the subject under study, (Dewi, 2024).

The data used in this study comes from previous research related to risk management, organizational culture, market competition, mitigation strategies and information systems. The researcher will analyze the existing literature to identify patterns and trends in risk management concepts. By using previous research and other references, researchers can develop stronger, evidence-based arguments and contribute to a broader understanding of the concept of risk management, (Susanto, Arini, Yuntina, et al., 2024).

Data was collected through a literature review. The literature review is an important step in this research as it allows researchers to identify and analyze various sources relevant to the topic at hand. The researcher will collect data from journal articles, books, and other relevant documents to gain insight into risk management. The literature review also informs researchers about the latest developments in this field and identifies research gaps that need to be filled (Susanto, Arini, Marlita, et al., 2024)

This research uses data from a range of leading academic journals, including Thomson Reuters Journal, Springer, Taylor & Francis, Scopus, Emerald, Sage, WoS, Sinta Journal,

DOAJ, and EBSCO, as well as platforms such as Publish or Perish and Google Scholar. By using these sources, researchers can ensure that the data they collect is valid and accountable. The use of multiple sources also allows researchers to gain a more comprehensive understanding of risk management from various perspectives, (Susanto, Arini, Marlita, et al., 2024).

RESULTS AND DISCUSSION

Results

The following are the research findings considering the context and problem formulation:

Risk Management

Risk management is a systematic process for identifying, analysing, evaluating, controlling and minimising potential risks that may affect the achievement of the organisation's objectives. Risks in this context include threats or uncertainties from various sources, such as financial, operational, technological, environmental and legal. The risk management process begins with the identification of potential risks that could affect the organisation's performance. An analysis is then carried out to determine the likelihood of occurrence and the impact of the risk, followed by an assessment to determine the priority of treatment (Zunaedi et al., 2022).

Indicators or dimensions contained in the Risk Management variable include: 1) Risk identification: The ability to recognise potential risks that may affect the organisation's operations, including strategic, operational and external risks; 2) Risk assessment: Measuring the likelihood and impact of risks to determine the priority of addressing them; 3) Mitigation strategy: Implementing measures to reduce the impact or likelihood of a risk occurring; 4) Risk monitoring: An ongoing process to monitor and update the status of risks as the internal and external environment changes; 5) Risk communication: Transparency in communicating risks to stakeholders for informed decision making; and 6) Regulatory compliance: Ensuring that risk management processes comply with legal requirements and industry standards (Chopra et al., 2021).

Risk Management variables are relevant to previous research conducted by: (Algheriani et al., 2019), (Munawar & Mahaputra, 2022), (Wang, 2023).

Organizational Culture

Organisational culture is a set of values, norms, beliefs and practices that shape the way people in an organisation interact and work together to achieve common goals. Organisational culture influences every aspect of operations, from how decisions are made to how change is managed. A strong culture creates a shared identity that guides employee behaviour in line with the organisation's vision and mission (Susanto, Sawitri, & Susita, 2023).

Indicators or dimensions contained in the Organizational Culture variable include: 1) Core values: Key principles that guide the organisation in making decisions; 2) Leadership: The style and behaviour of leaders who create a supportive working environment; 3) Communication: The effectiveness of the flow of communication between members of the organisation; 4) Teamwork: The ability of employees to work together to achieve a common goal; 5) Adaptability: The organisation's response to environmental changes; and 6) Innovation: The drive to generate new ideas and implement creative solutions within the organisation (Ali et al., 2022).

Organizational Culture variables are relevant to previous research conducted by: (F. Saputra et al., 2024), (Susanto, Maharani, Suroso, et al., 2023), (Aziz et al., 2021).

Market Competition

Market competition is a situation in which different business actors compete with each other to attract customers and gain market share in a particular industry. This competition takes place at local, national and global levels and includes factors such as price, product quality, innovation and customer service. In healthy competition, companies strive to provide the best value to customers while complying with applicable business rules and ethics (Suryatman et al., 2021).

Indicators or dimensions contained in the Market Competition variable include: 1) Competitor analysis: Understanding the strengths, weaknesses and strategies of competitors in the market; 2) Product/service quality: The superiority of the product or service over the competition; 3) Pricing strategy: The ability to set competitive prices without sacrificing profits; 4) Product innovation: The ability to create new products that meet market needs; 5) Market share: The proportion of customers owned compared to competitors in the same industry; and 6) Customer Retention: The ability of a company to build strong relationships with customers through positive experiences (Wijaya, 2020).

Market Competition variables are relevant to previous research conducted by: (Chairina & Hutagaol, 2022), (Iksan et al., 2022), (Ali et al., 2024).

Mitigation Strategy

Risk mitigation strategies are plans or actions designed to reduce the negative impact of risks that may affect the organisation. These strategies aim to minimise the likelihood of a risk occurring or to reduce the impact of the risk if it does occur. In a business context, mitigation includes measures such as portfolio diversification, implementation of security standards, compliance management and insurance coverage (Mawarni, 2022).

Indicators or dimensions contained in the Mitigation Strategy variable include: 1) Diversification: The spreading of resources or investments to minimise a single risk; 2) Internal control: Systems and procedures to identify and prevent operational risks; 3) Risk transfer: Risk transfer through insurance or third party contracts; 4) Contingency planning: Developing contingency plans to deal with unexpected risks; 5) Education and training: Improving employee awareness and skills in dealing with risk; and 6) Use of technology: Using analytical tools and data-driven systems to identify and mitigate risks (MacIas-Velasquez et al., 2021).

Mitigation Strategy variables are relevant to previous research conducted by: (Fole, 2023), (Prasetyo et al., 2022), (Yahman et al., 2022).

Information Systems

Information systems are a combination of technology, people and processes designed to collect, process, store and disseminate information to support an organisation's decision-making and operations. These systems play a critical role in ensuring that relevant and accurate data is available at the right time to support business needs (F. Saputra & Sumantyo, 2023).

Indicators or dimensions contained in the Information System variable include: 1) System reliability: The ability of the system to operate without interruption or error; 2) Data quality: The accuracy, completeness and relevance of the data generated by the system; 3) Flexibility: The ability of the system to adapt to changing business needs; 4) Information security: The protection of data from external or internal threats; 5) Interoperability: The ability of the system to integrate with other platforms; and 6) Decision Support: Providing relevant information to support business strategy (F. Saputra & Sumantyo, 2022).

Information System variables are relevant to previous research conducted by: (Satriawan et al., 2024), (R. Saputra et al., 2023), (F. Saputra, 2022).

Previous Research

Based on the findings above and previous studies, the following research discussion is formulated:

Table 1. Relevant Previous Research Results

Table 1. Relevant Previous Research Results				
No	Author (Year)	Research Results	Similarities With This Article	Differences With This Article
1	(Supriyadi & Setyorini,	-Governance variables affect Risk Management in the	This article has in common that it	The difference with previous research is
	2020)	Indonesian Banking Industry	examines the Organizational Culture variable in the	that there are Governance variables as other independent
		-Organizational Culture variables affect Risk Management in the Indonesian Banking Industry	independent variable, and examines the Risk Management variable in the dependent variable.	variables.
2	(Soesanto, Nur Kaifa, et al., 2023)	-The variable of Market Competition affects Risk Management at PT Indofood Tbk -The Natural Disaster Risk	This article has in common that it examines the Market Competition variable in the independent variable, and examines	-The difference with previous research is in the Natural Disaster Risk variable as another Independent variable.
		variable affects Risk Management at PT Indofood Tbk	the Risk Management variable in the dependent variable.	-There is an object of research conducted at PT Indofood Tbk.
3	(Sutrisno et al., 2023)	-Risk Mitigation Variables affect Risk Management in the People's Credit System -Rescue Procedure variables	This article has in common that it examines the Risk Mitigation variable in the independent	The difference with previous research is in the Rescue Procedure variable as another Independent
		affect Risk Management in the People's Credit System	variable, and examines the Risk Management variable in the dependent variable.	variable.
4	(Sine & Maria, 2022)	Information System variables affect Risk Management in Development Planning at the Communication, Informatics, Statistics and Coding Service (DKISP).	This article has in common that it examines the Information System variable in the independent variable, and examines the Risk Management variable in the dependent variable.	There is an object of research conducted at the Communication, Informatics, Statistics and Coding Service (DKISP).

Discussion

This literature review will be discussed based on the history of the topic, research objectives, problem formulation, indicators or dimensions, and related previous research:

The Role of Organizational Culture on Risk Management

Organizational culture plays an important role in building an effective risk management framework because it determines how individuals and teams within the organization understand, respond to, and manage risk. Core values as the foundation of organizational

culture provide strategic direction regarding the importance of risk management. If the organization has values such as integrity, transparency and accountability, individuals will be more aware of the importance of identifying and understanding risks that may arise. In this way, strong core values encourage the strengthening of the risk identification process, as each member feels responsible for identifying potential threats early on.

Effective leadership within the organizational culture also determines how risk is managed. Leaders who are able to provide a clear vision and prioritize risk management will create a work environment that supports the implementation of a thorough risk assessment. Risk-aware leadership ensures that everyone understands the impact of risk on organizational goals and supports the implementation of appropriate mitigation strategies. In addition, visionary leadership can ensure that sufficient resources are allocated to support structured risk management.

Open and effective communication is an element of organizational culture that is integral to successful risk management. In the risk communication process, a clear, structured and transparent flow of information enables all stakeholders to understand the status of risks and their impact on the organization. Good communication also supports informed decision-making, especially when risks need to be identified, assessed and mitigated in a timely manner. Without good communication, risks often go undetected or are not properly addressed, which can have a significant impact on the organization.

Strong teamwork within an organization's culture strengthens the organization's ability to manage risk more effectively. Collaboration across departments allows for more comprehensive risk identification and the development of more effective mitigation strategies. For example, cross-functional teams can bring different perspectives to the understanding of risk, making the mitigation strategies developed more relevant and applicable. Teamwork also plays an important role in risk monitoring, where each individual is responsible for ensuring that mitigation actions are properly implemented.

Adaptability as an element of organizational culture is critical to ensuring that the organization can respond to dynamic risks. An ever-changing business environment requires a flexible approach to risk management, and adaptability helps organizations adapt decisions to new or changing regulations. Organizations with an adaptive culture are quicker to recognize changes in the external environment, such as regulatory changes or new threats, so they can immediately adjust their risk management policies and procedures.

Innovation in organizational culture provides great benefits in strengthening risk management. Through innovation, organizations can develop new tools, technologies, or processes to more effectively identify and manage risk. For example, using data-driven technology to support risk monitoring can improve the accuracy and speed of identifying potential threats. In addition, innovation encourages the development of more creative and forward-looking mitigation strategies so that risks can be minimized proactively.

All of these elements of organizational culture interact to create a resilient risk management system. Core values provide an ethical framework, leadership provides strategic direction, communication creates transparency, teamwork supports effective execution, adaptability ensures agility, and innovation drives efficiency. When all these elements are integrated, organizations have a greater chance of effectively managing risk, maintaining operational sustainability and complying with applicable regulations. A strong organizational culture is therefore an essential foundation for creating a responsive and sustainable risk management system.

The Role of Market Competition on Risk Management

Market competition plays a significant role in shaping an organization's risk management strategy. In the face of competition, competitor analysis is an important first step in risk identification. Organizations need to understand competitors' strengths and weaknesses, their strategies, and the opportunities or threats that may arise from competitors' activities. For example, if a competitor introduces a new product with cutting-edge technology, the organization should identify the risk of losing market share or the need to update existing products. By understanding the competitive landscape, you can identify external risks early and make better decisions.

Product or service quality factors also influence the risk assessment process in risk management. In a competitive market, customers tend to compare the quality offered by different suppliers. If an organization fails to meet quality expectations, the risk of losing customers becomes significant. Therefore, organizations should assess the risks associated with product quality, including the potential for product failure, customer complaints, or negative reputational impact. This assessment helps organizations identify areas that need improvement to remain competitive.

Pricing strategies in competitive markets also have a direct impact on risk mitigation strategies. Intense price competition can lead to risks such as low margins or costly price wars. To address these risks, companies can develop mitigation strategies, such as improving operational efficiencies or providing value to customers. In addition, flexible pricing strategies allow companies to adapt to market dynamics without compromising financial stability.

Product innovation is another key element of market competition that impacts risk monitoring. Organizations that continuously innovate tend to be better prepared for risks arising from market changes or new technologies. Good risk monitoring enables organizations to evaluate the success of product innovation and to anticipate challenges that may arise, such as patent risks, technology failures, or negative customer reactions. Well-managed innovation helps companies stay relevant and competitive in the marketplace.

Market share is also closely related to risk communication in risk management. Organizations with a large market share face higher reputational risks because of higher customer and stakeholder expectations. Therefore, effective risk communication is essential to maintain market confidence. When certain risks arise, such as product quality issues or operational disruptions, organizations must be able to clearly communicate mitigation measures to customers, business partners, and shareholders.

Finally, customer retention as part of market competition has a major impact on regulatory risk management decisions. To retain customers, organizations must ensure compliance with relevant regulatory standards, such as customer privacy or product quality certification. Legal or reputational risks resulting from regulatory violations can have a serious impact on business sustainability. By prioritizing customer retention through regulatory compliance, organizations not only maintain good customer relations, but also mitigate risks associated with laws and regulations.

Overall, market competition serves as a key driver in strengthening an organization's risk management. Competitive analysis helps identify risks, while focusing on product quality, pricing strategies, and product innovation helps assess risk and develop effective mitigation strategies. Monitoring risk through innovation and strategic risk communication ensures that organizations can better manage the impact of competition. Finally, attention to market share and customer loyalty guides the organization to remain competitive without

neglecting regulatory compliance. With this integrated approach, risk management not only protects the organization from external threats, but also strengthens its strategic position in a competitive marketplace.

The Role of Mitigation Strategies on Risk Management

Risk mitigation strategies are a critical component of risk management, helping organizations manage and minimize the impact of potential threats. One of the most common approaches is diversification, which helps identify risks in greater depth. By diversifying a portfolio of products, services, or markets, organizations can reduce their dependence on a single source of revenue and thereby identify the risks inherent in that dependence. Diversification helps organizations identify potential threats in different business areas, such as market fluctuations, regulatory changes, or supply chain disruptions.

Internal controls also play an important role in risk assessment. Internal control mechanisms, such as audits and standard operating procedures, help organizations assess risk more accurately. These systems enable early detection of errors or discrepancies that could lead to operational risk. By ensuring that internal processes are up to standard, organizations can identify weaknesses and assess the severity of existing risks, both financial and operational.

Risk transfer, such as through insurance or third-party contracts, helps organizations develop more effective mitigation strategies. By transferring certain risks to other parties, organizations can minimize losses that may result from unforeseen events. For example, the risk of asset damage from a natural disaster can be transferred to an insurance company, allowing the organization to focus on its core business without having to devote significant resources to managing the risk. This strategy not only reduces the financial burden, but also improves operational stability.

Contingency planning plays an important role in risk monitoring. Contingency plans allow organizations to remain resilient in the midst of emergencies or sudden changes. With pre-designed alternative scenarios, such as responses to system disruptions or significant market changes, organizations can continue to proactively monitor risks. This helps organizations stay alert to potential new threats as they emerge and immediately adjust their risk management strategies accordingly.

Education and training are important elements in supporting risk communication. By improving employees' understanding of risks and how to manage them, organizations can ensure that risk communication is effective at all levels. Trained employees are able to identify risks early and report them to the appropriate parties. In addition, ongoing training ensures that the entire team understands the importance of transparent and accurate risk communication.

Finally, the use of technology has a significant impact on regulatory risk management decisions. Technology, such as analytics software and automation systems, enables organizations to comply with regulations more efficiently. These technologies help monitor regulatory changes, analyze their impact on operations, and implement the necessary actions to remain compliant. In addition, the use of technology makes it easier to make strategic decisions based on accurate data to minimize regulatory risk.

Overall, risk mitigation strategies provide a solid framework for strengthening an organization's risk management. Diversification helps identify risks early, while internal controls ensure that thorough risk assessments are performed. Risk transfer supports the development of more robust mitigation strategies, while contingency planning ensures

ongoing risk monitoring. Education and training promote better risk communication, and advanced technology helps organizations make regulatory-compliant decisions. By applying all of these elements of a risk mitigation strategy synergistically, organizations can create an adaptive and highly competitive risk management system.

The Role of Information Systems on Risk Management

Information systems are a key pillar in improving the effectiveness of risk management by supporting each stage with various functions and capabilities. System reliability is an important element of risk identification, ensuring that the information generated is free from technical glitches or errors. A reliable system enables organizations to identify potential risks with accurate, real-time data. For example, technology-based monitoring systems can detect anomalies or failures that may pose operational risks.

In addition, data quality is a key contributor to risk assessment. Accurate, relevant and organized data enables organizations to better assess the severity and impact of risks. A well-designed information system provides access to valid and integrated data so that risk assessments can be based on concrete evidence. In addition, analytical reports generated from quality data help managers understand complex risks and plan effective mitigation measures.

The flexibility of information systems supports the development of dynamic risk mitigation strategies. A flexible system allows organizations to adjust risk management approaches as business needs or the external environment change. For example, an adaptive system can quickly make adjustments to risk mitigation strategies due to changes in regulations or market trends. This flexibility ensures that the organization remains resilient in the face of new challenges.

Information security plays an important role in risk monitoring. Systems with strong security protocols, such as data encryption and dual authentication, protect critical information from unauthorized access or cyber threats. This information security not only maintains the integrity of risk data, but also gives stakeholders confidence that the monitoring process is secure. This is especially important in sensitive sectors such as finance and healthcare, where security breaches can have a major impact.

Information system interoperability supports better risk communication between departments or units within an organization. Interconnected systems allow risk data to be shared efficiently so that each stakeholder has access to relevant information. This interoperability also helps create a more collaborative environment where teams can work together to identify and mitigate risk without information barriers. As a result, organizations can respond to risks more quickly and in a more coordinated manner.

Finally, the decision support provided by advanced information systems is influencing regulatory risk management decisions. Systems based on analytics and artificial intelligence can make strategic recommendations based on analysis of historical data and future trends. This capability helps managers make decisions that comply with applicable regulations while optimizing risk mitigation strategies. For example, information systems can suggest the best way to meet audit requirements or estimate the impact of new policies on enterprise risk.

Overall, information systems provide a strong foundation for all aspects of risk management. System reliability ensures timely risk identification, while data quality supports better risk assessment. Flexibility enables adaptation of mitigation strategies, and information security maintains the integrity of the risk monitoring process. Interoperability promotes efficient risk communication, while decision support capabilities help organizations better

comply with regulations. By leveraging the power of information systems, organizations can take a more proactive, measured and strategic approach to risk.

Conceptual Framework

The conceptual framework is determined based on the formulation of the problem, research objectives and previous studies that are relevant to the discussion of this literature research:

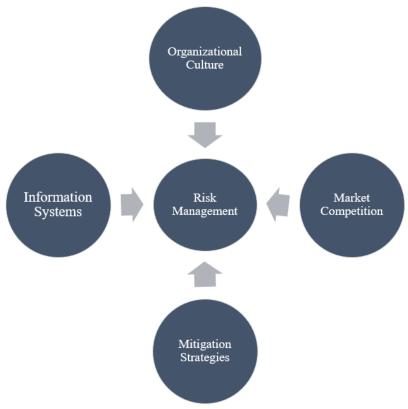


Figure 3. Conceptual Framework

Based on figure 3 above, organizational culture, market competition, mitigation strategies and information systems play a role in risk management. However, in addition to the variables of organizational culture, market competition, mitigation strategies and information systems that affect risk management, there are other variables that influence, including:

- 1) Employee Education: (Astuti, 2020), (Febriana Eka Wulandari, 2019), (N. S. Putri et al., 2019), (Bratha et al., 2023).
- 2) Work Motivation: (Widodo, 2021), (Ali et al., 2022), (Widodo et al., 2019), (F. Saputra et al., 2023), (Hasibuan & Bahri, 2018),
- 3) Employee Competence: (Sudiarso, 2022), (Susanto, Setiawan, Yandi, et al., 2024), (Jailani & Nawangsari, 2020), (Muhajirin et al., 2024), (Utami & Sukmawati, 2019).

CONCLUSION

Based on the problem formulation, results and discussion above, the conclusions of this study are:

- 1) Organizational Culture plays a role in Risk Management;
- 2) Market Competition plays a role in Risk Management;
- 3) Mitigation Strategy plays a role in Risk Management; and

4) Information System plays a role in Risk Management.

REFERENSI

- Algheriani, N. M. S., Kirin, S., & Spasojevic Brkic, V. (2019). Risk model for integrated management system. *Tehnički Vjesnik*, 26(6), 1833–1840.
- Ali, H., Sastrodiharjo, I., & Saputra, F. (2022). Measurement of Organizational Citizenship Behavior: Workload, Work Culture and Motivation (Literature Review Study). *Journal of Multidisciplinary Science*, *I*(1), 83–93.
- Ali, H., Susanto, P. C., & Saputra, F. (2024). Faktor-Faktor Yang Mempengaruhi Manajemen Transportasi Udara: Teknologi Informasi, Infrastruktur dan Kompetensi Sumber Daya Manusia. *Jurnal Siber Transportasi Dan Logistik (JSTL)*, *1*(4), 121–134. https://ejournal.stp-aviasi.ac.id/index.php/JIK/article/view/113
- Association, I. R. M. P. (2023). Annual Risk Survey Indonesia, Konteks Korporasi. In *Center for Risk Management & Sustainability* (Vol. 1).
- Astuti, R. W. (2020). Pengaruh pendidikan, keterampilan kerja dan lingkungan kerja terhadap produktivitas kerja karyawan. *JSMBI (Jurnal Sains Manajemen Dan Bisnis Indonesia)*, 10(1), 24–29.
- Aziz, I. N., Widodo, D. S., & Subagja, I. K. (2021). Effect of Training and HR Development on Employee Performance with Motivation as an Intervening Variable in PT. Rekasis Gigatama. *Global Journal of Engineering and Technology Advances*, 6(2), 169–181.
- Bratha, W. G. E., Sawitri, N. N., & Faeni, D. P. (2023). Motivation Mediate the Effect of Education, Work Experience, Intellectual Intelligence, and Discipline on Employee Performance. *Journal of Accounting and Finance Management*, 4(1), 53–62.
- Chairina, C., & Hutagaol, J. (2022). Pengaruh Iklan dalam Persaingan Pasar Monopolistik dan Pasar Oligopoli. *All Fields of Science Journal Liaison Academia and Sosiety*, 2(2), 347–356.
- Chopra, S., Sodhi, M., & Lücker, F. (2021). Achieving supply chain efficiency and resilience by using multi-level commons. *Decision Sciences*, *52*(4), 817–832. https://doi.org/https://doi.org/10.1111/deci.12526
- Dewi, M. (2024). *Metode Penelitian Research is Fun* (A. Ambiyar (ed.); 1st ed.). CV. Muharika Rumah Ilmiah.
- Febriana Eka Wulandari. (2019). Pengaruh Pendidikan, Pengalaman Kerja Dan Lingkungan Kerja Terhadap Kinerja Karyawan Di Bank Syariahmandiri Cabang Tulungagung. 15–38.
- Fole, A. (2023). Perancangan Strategi Mitigasi Risiko Pada Proses Bisnis CV. JAT Mengunakan Metode House of Risk. *JIEI: Journal of Industrial Engineering Innovation*, 01(02), 54–64.
- Hasibuan, S. M., & Bahri, S. (2018). Pengaruh Kepemimpinan, Lingkungan Kerja dan Motivasi Kerja Terhadap Kinerja. *Maneggio: Jurnal Ilmiah Magister Manajemen*, *1*(1), 71–80. https://doi.org/10.30596/maneggio.v1i1.2243
- Iksan, N., Imaddudin, & Athalarik, F. M. (2022). Komunikasi Nusantara Komunikasi Pemasaran sebagai Upaya Rebuilding Image Pizza Hut Restoran di Masa Pandemi Covid-19. *Jurnal Komunikasi Nusantara*, *4*(1), 1–9.
- Jailani, & Nawangsari, L. C. (2020). The Effect Of Compensation, Competence, And Leadership On Ministry Of Industrion's Public Employees Performance. *Dinasti International Journal of Management Science*, 1(4), 598–606.

- https://doi.org/10.31933/DIJMS
- MacIas-Velasquez, S., Baez-Lopez, Y., Tlapa, Di., Limon-Romero, J., Maldonado-Macias, A. A., Flores, D. L., & Realyvasquez-Vargas, A. (2021). Impact of Co-Worker Support and Supervisor Support among the Middle and Senior Management in the Manufacturing Industry. *IEEE Access*, 9, 78203–78214. https://doi.org/10.1109/ACCESS.2021.3082177
- Mawarni, K. (2022). Usulan Mitigasi Risiko Pada Halal Supply Chain Management dengan Pendekatan House Of Risk (Studi Kasus UKM Kampoeng Timoer).
- Muhajirin, A., Purnamasasi, I. O., Rony, Z. T., & Ali, H. (2024). Pengaruh Kompetensi, Budaya Kerja, dan Teknologi Informasi di Era Endemi pada Kinerja Guru pada SMK XYZ. *Jurnal Ekonomi Manajemen Sistem Informasi*, 5(3), 250–256.
- Munawar, N. A., & Mahaputra, M. R. (2022). the Youth Interest To Invest in Stocks: Education, Advertising and Motivation. *Dinasti International Journal of Education Management And Social Science*, 3(4), 587–596.
- Prasetyo, B., Retnani, W. E. Y., & Ifadah, N. L. M. (2022). Analisis Strategi Mitigasi Risiko Supply Chain Management Menggunakan House of Risk (HOR). *Jurnal Tekno Kompak*, 16(2), 72. https://doi.org/10.33365/jtk.v16i2.1878
- Putri, G. A. M., Fauzi, A., Saputra, F., Danaya, B. P., & Puspitasari, D. (2023). Pengaruh Pengembangan Karier, Budaya Organisasi dan Beban Kerja terhadap Kepuasan Kerja Karyawan (Literature Review MSDM). *Jurnal Ekonomi Manajemen Sistem Informasi (Jemsi)*, 5(2), 99–110. https://doi.org/https://doi.org/10.31933/jemsi.v5i2
- Putri, N. S., Mendo, A. Y., & Bokingo, A. H. (2019). Pengaruh Pendidikan Dan Pelatihan Terhadap Prestasi Kerja Karyawan Di Pt.Telekomunikasi Indonesia (Telkom) Regional Vii Gorontalo. *JAMIN: Jurnal Aplikasi Manajemen Dan Inovasi Bisnis*, 2(1), 16. https://doi.org/10.47201/jamin.v2i1.36
- Saputra, F. (2022). The Role of Human Resources , Hardware , and Databases in Mass Media Companies. *International Journal of Advanced Multidisciplinary*, *1*(1), 45–52.
- Saputra, F., Mahaputra, M. R., & Maharani, A. (2023). Pengaruh Jiwa Kewirausahaan terhadap Motivasi dan Minat Berwirausaha (Literature Review). *Jurnal Kewirausahaan Dan Multi Talenta (JKMT)*, *1*(1), 42–53.
- Saputra, F., Putri, G. A. M., Puspitasari, D., & Danaya, B. P. (2024). Pengaruh Pengembangan Karier dan Budaya Kerja terhadap Loyalitas Karyawan dengan Kepuasan Kerja Sebagai Variabel Intervening pada PT Graha Sarana Duta Cabang STO Gambir. *Trending: Jurnal Ekonomi, Akuntansi Dan Manajemen*, 2(1), 168–186.
- Saputra, F., & Sumantyo, F. D. S. (2022). The Role of Marketing Management in Information Industry: Corporate Image, Brand Awareness and Promotion (Case Study at PT Lensa Potret Mandiri). *Jornal of Applied Management and Business*, *3*(2), 46–54. https://doi.org/10.37802/jamb.v3i2.267
- Saputra, F., & Sumantyo, F. D. S. (2023). Pengaruh Sistem Informasi Manajemen: Kepuasan Konsumen dan Keputusan Pembelian Tiket MPL Mobile Legend di Aplikasi Blibli.com. *Cuan: Jurnal Kewirausahaan Dan Manajemen Bisnis*, 1(2), 98–105.
- Saputra, R., Rizky Mahaputra, M., Saputra, F., & Ridho Mahaputra, M. (2023). Analisis Penerapan Artificial Intelligence terhadap Produktivitas Perusahaan Media Informasi. *Journal Pendidikan Siber Nusantara (JPSN)*, *1*(2), 91–96.
- Satriawan, N., Saputra, F., Saputra, E., & Saputra, R. (2024). Peranan Infrastruktur Teknologi Informasi dan Internet of Things terhadap Manajemen Information System Industri Pertahanan dan Keamanan. *Letigasi: Jurnal Ilmu Hukum, Politik Dan Pertahanan*,

- *I*(1), 8–17.
- Sine, M. M., & Maria, E. (2022). Analisis Manajemen Risiko pada Penerapan Sistem Informasi Pembangunan Daerah (SIPD) Menggunakan IEC/ISO 31010:2019. *Building of Informatics, Technology and Science (BITS)*, 4(1). https://doi.org/10.47065/bits.v4i1.1531
- Soesanto, E., Nur Kaifa, F., Kafah Aulia, S., Maharani, K., Muqtafi, A. Z., Bhayangkara, U., & Raya, J. (2023). Analisis Pengaruh K3 Terhadap Sistem Manajemen Sekuriti pada PT. Indofood Tbk. *IJM: Indonesian Journal of Multidisciplinary*, *1*(2), 406–413.
- Soesanto, E., Saputra, F., Puspitasari, D., & Danaya, B. P. (2023). Determinasi Sistem Manajemen Sekuriti: Analisis Objek Vital, Pengamanan File dan Pengamanan Cyber pada Yayasan Siber Publisher. *Jurnal Ilmu Multidisiplin*, 2(1), 23–29.
- Sudiarso, S. (2022). the Effect of Transformational Leadership, Competence and Work Environment on Employee Performance of Pt Waskita Karya (Persero) Tbk in Becakayu 2a Ujung Project. *Dinasti International Journal of Management Science*, 3(3), 535–546. https://doi.org/10.31933/dijms.v3i3.1103
- Supriyadi, A., & Setyorini, C. T. (2020). Pengaruh Pengungkapan Manajemen Risiko Terhadap Nilai Perusahaan Melalui Kinerja Keuangan Di Industri Perbankan Indonesia. *Owner (Riset Dan Jurnal Akuntansi)*, 4(2), 467. https://doi.org/10.33395/owner.v4i2.257
- Suryatman, T. H., Kosim, M. E., & Samudra, G. E. (2021). Perencanaan Strategi Pemasaran Dengan Analisis Swot Dalam Upaya Meningkatkan Penjualan Sepatu Adidas Di Pt. Panarub Industry. *Journal Industrial Manufacturing*, 6(1), 43. https://doi.org/10.31000/jim.v6i1.4117
- Susanto, P. C., Arini, D. U., Marlita, D., & Yuntina, L. (2024). Mixed Methods Research Design Concepts: Quantitative, Qualitative, Exploratory Sequential, Exploratory Sequential, Embedded and Parallel Convergent. *International Journal of Advance Multidisciplinary*, *3*(3), 471–485. https://doi.org/https://doi.org/10.38035/ijam.v3i3
- Susanto, P. C., Arini, D. U., Yuntina, L., & Panatap, J. (2024). Konsep Penelitian Kuantitatif: Populasi, Sampel, dan Analisis Data (Sebuah Tinjauan Pustaka). *Jurnal Ilmu Manajemen*, *3*(1), 1–12. https://doi.org/https://doi.org/10.38035/jim.v3i1
- Susanto, P. C., Maharani, A., Suroso, S., Kamsariaty, K., & Suryawan, R. F. (2023). Determinasi Budaya Organisasi, Pengembangan Karir dan Kepuasan Kerja Terhadap Keterikatan Karyawan: Studi Empiris. *Jurnal Siber Multi Disiplin*, *1*(2), 93–101.
- Susanto, P. C., Sawitri, N. N., & Susita, D. (2023). Job Satisfaction and Employee Turnover: Analysis Recruitment, Career Development, Organizational Culture. *Dinasti International Journal Of Digital Business Management*, 4(3), 619–629. https://doi.org/10.31933/dijdbm.v4i2
- Susanto, P. C., Setiawan, H. A., Yandi, A., & Putri, A. (2024). Analysis Servant Leadership, Competence, and Motivation on Performance Employee: Study Literature Review. *Greenation International Journal of Law Social Sciences*, 1(3), 114–123.
- Sutrisno, S., Panggalo, L., Asir, M., Yusuf, M., & Cakranegara, P. A. (2023). Literature Review: Mitigasi Resiko dan Prosedur Penyelamatan pada Sistem Perkreditan Rakyat. *Journal of Economic, Bussines and Accounting (COSTING)*, 6(2), 1154–1167. https://doi.org/10.31539/costing.v6i2.4879
- Utami, A., & Sukmawati, A. (2019). Pengaruh Kompetensi terhadap Kepuasan Kerja dan Work Engagement Karyawan UKM Kluster Hasil Pengolahan Perikanan di Bogor. *Jurnal Manajemen Dan Organisasi*, 9(1), 10–21.

- https://doi.org/10.29244/jmo.v1i1.25336
- Wang, Q. (2023). Whole Process Management-Discussion on Economic Risk Management of General Contract Project. *Journal of Theory and Practice of Management Science*, 3(4), 7–9.
- Widjanarko, W., Hadita, H., Saputra, F., & Cahyanto, Y. A. D. (2023). Determinasi Kemudahan Akses Informasi Bagi Keputusan Investasi Gen Z. *Digital Bisnis: Jurnal Publikasi Ilmu Manajemen Dan E-Commerce*, 2(4), 248–264.
- Widodo, D. S. (2021). Influence of managerial performance: work motivation, leadership style and work experience (literature review study). *Dinasti International Journal of Digital Business Management*, 2(6), 1079–1089.
- Widodo, D. S., Silitonga, P. E. S., & Azahra, D. (2019). The influence of transactional leadership to employee job motivation and satisfaction in Jakarta stock exchange. *International Journal of Governmental Studies and Humanities*, 2(1), 38–46.
- Wijaya, T. (2020). Pasar persaingan sempurna dan pasar persaingan tidak sempurna dalam perspektif islam. *PROFIT: Jurnal Kajian Ekonomi Dan Perbankan Syariah*, 4(2), 1–16.
- Yahman, M. B., Profita, A., & Widada, H. D. (2022). Analisis Risiko Dan Penentuan Strategi Mitigasi Pada Proses Produksi Beras. *MATRIK*: *Jurnal Manajemen & Teknik Industri Produksi*, 20(2), 67–78. https://doi.org/10.47467/visa.v2i2.964
- Zainal, V. R., Widodo, D. S., & Subagja, I. K. (2019). Indonesia Islamic Banking Readiness in Facing the ASEAN Economic Community, in Terms of Islamic Banking Disclosure and Performance Indices. *Journal of Economics and Management Sciences*, 2(2), p25–p25.
- Zunaedi, B. N. F., Annisa, H. R., & Dewi, M. (2022). Fungsi Internal Audit Dan Manajemen Risiko Perusahaan: Sebuah Tinjauan Literatur. *Jurnal Bisnis Dan Akuntansi*, 24(1), 59–70. https://doi.org/10.34208/jba.v24i1.1159