Risk Management for Public Universities: Why and How?

(A Conceptual Analysis)

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Abstract

The COVID-19 pandemic has made all institutions, including universities, experience many changes in their governance and operations. This condition makes implementing risk management very important for every higher education institution. The purpose of this article is to conceptually analyze the importance of risk management for higher education. Higher education is facing unprecedented challenges, which are happening on all sides. Higher education can categorize risks based on academic and non-academic. In addition, it can also categorize risks based on strategic goals and key performance indicators of higher education. The risk analysis results will describe the level of risk (high, medium, or low) for each group. These results can be used for

decision-making related to risk mitigation. In addition, institutions can also make it an opportunity. Universities are advised to involve all internal stakeholders in the risk identification and analysis process in stages. The main key that must be considered in maintaining the trust of the most important stakeholders is communication.

Keywords: Risk, stakeholders, governance, academic, non-academic.

1. Introduction

Universities are responsible for providing quality education by applicable regulations. Quality assurance standards are set to ensure that the activity process runs according to the expectations of all stakeholders. The ability to adapt to various changes is one of the important keys. The COVID-19 pandemic has become one of the triggers for changes in many aspects of higher education. These changes also have an impact on the risks that must be managed.

Risk management in higher education has become a crucial aspect of ensuring the sustainability and progress of higher education institutions. These institutions serve as vital mechanisms for developing intellectual and professional potential and face various challenges. These challenges include socio-economic and socio-cultural changes, the globalization of education, and the rapid development of information and communication technologies. Such circumstances necessitate that universities implement effective risk management strategies to enhance the efficiency of their educational and research activities and the quality of the educational and research services they provide (Karapetyan, 2021).

Moreover, behavioral-based risk management approaches in higher education environments are important in controlling risk-taking behavior. This article emphasizes the importance of understanding overlooked psychological barriers and assists policymakers and managers in formulating effective risk management policies and frameworks (Narayan & Kommunuri, 2021). Highlighting the importance of risk-based thinking and contingency models in leadership and administration for quality management in higher education, Jasmine K.S. (2021) argued that identifying context-related risks and planning against risk prioritization is critical.

Kozlova and Snegurenko's (2019) research shows that educational organizations in modern society face various "threats" that affect the quality of their work. Therefore, managing risks is possible only when they are known; otherwise, it cannot be done. From Semko and Mokiienko's (2021) point of view, modern education faces fundamental changes, with educational projects in higher education institutions facing various risk groups. Therefore, a very important research area in educational activities is to reveal the nature and structure of the risks of educational projects, features, and factors on which the success of projects in educational institutions depends.

Lyalyuk and Tuchina (2019) state that the education system is the most important social institution that develops personality and shapes worldviews and conceptions of subjective well-being. Overall, this literature highlights the importance of adopting effective risk management in higher education to address internal and external challenges and ensure high-quality education.

Implementing risk management and internal audit quality in higher education has been shown to positively and significantly affect university performance in Indonesia (Yudianto et al., 2021). These findings show that effective risk management implementation and improving internal audit quality are strategic steps in achieving higher education goals. Rahman, Oktavia, and Irvanda (2021) highlighted the importance of innovation strategies in financial management in public higher education institutions. In particular, they found that the Total Financial Management parameter showed negative results in innovation strategies, implying the need to be more innovative in finding reliable funding sources.

This paper is organized using a conceptual approach. The importance of conceptual articles in academia and research cannot be overlooked. Conceptual articles bridge theory and practice, providing deep insights that can guide practitioners, policymakers, and researchers in dealing with real challenges. Conceptual articles enable theory development and clarification. In many cases, existing theories may not be complete or adequate to explain a particular phenomenon. Conceptual articles allow authors to reflect on, evaluate, and develop such theories, providing a stronger foundation for academic and practical understanding. Through this process, conceptual articles can identify weaknesses in existing theories, propose improvements, or even develop new theoretical frameworks.

Conceptual articles assist in the synthesis of research. In established fields with extensive research, conceptual

articles can provide a critical synthesis of the existing literature, highlighting consensus, contradictions, and gaps in research. Such an overview is invaluable as it helps avoid duplication of research and guides the future research direction more effectively. Conceptual articles often encourage innovation and creative thinking. Authors can explore new ideas and unique approaches to problems or topics without being bound to a particular empirical research methodology. This exploration often results in new and interesting perspectives that can stimulate advanced thinking and future research. Conceptual articles play an important role in education and learning. For students and scholars, conceptual articles can serve as a rich source for an in-depth understanding of a particular topic.

In the context of policymakers and practitioners, conceptual articles often provide a framework for understanding and addressing practical issues. By highlighting the theoretical aspects of an issue, conceptual articles can guide how theory can be applied in practice, assisting policymakers and practitioners in making informed decisions based on solid theoretical understanding. Conceptual articles play an important role in both the academic and practical worlds. They support theory development and clarification and promote the synthesis of research, innovation, education, and practical applications. Their ability to evoke critical thinking and offer new perspectives makes them valuable in the research literature.

The purpose of this article is to conceptually analyze the implementation of risk management in higher education. The question is why its implementation is important for universities and how universities should implement risk management.

2. Discussion

2.1. Risk Management Concept

Risk management is a critical process that involves identifying, analyzing, and addressing risks in various organizational contexts. The following narrative summarizes the basic concepts of risk management based on references from current sources: Risk management begins with recognizing and categorizing risks. These risks can relate to various aspects such as financial, operational, technological, legal, and reputational. For example, Ermakov, Kiryakov, Polozov, and Polozova (2023) underline the importance of information support in risk management systems in high-tech organizations involving private capital. They emphasize that understanding the concept of risk and its management is critical to organizational effectiveness. The risk management process involves evaluating risks to determine their impact and probability. The process includes the analysis of factors that can magnify or minimize the risk. Financial risk analysis in enterprise management highlights the importance of understanding risk and ways to manage it (Steshenko & Bondarenko, 2021).

Risk management focuses not only on mitigating risks but also on identifying opportunities. The goal of risk management is not only to reduce losses but also to make smart decisions about security (Peterson, 2020). Technology and data play an important role in modern risk management. Data analytics ("Big Data") deepen risk assessment, especially in the context of fraud prevention. Risk management strategies must be flexible and adaptive to deal with changing conditions and new challenges. Chance (2019) underlines the need for risk management to be integrated within the organizational framework, focusing on market risk. Ultimately, risk management is an ongoing process that requires monitoring and adjusting strategies to maintain organizational sustainability and success in uncertainty.

Risk management in higher education involves identifying, evaluating, and mitigating various risks that may affect the operations and achievement of institutional goals. Some major college risks include campus security, health and safety, financial sustainability, and reputation. Some of the important concepts associated with risk management are elaborated as follows:

a. Risk Identification and Classification: Colleges should identify and classify relevant risks in their context. Colleges should assess the risks in their quality assurance system, considering the internal and external context and the needs and expectations of all stakeholders in higher education (Kondić et al., 2020).

b. Risk Evaluation: Risk evaluation helps higher education institutions determine the impact and likelihood of risks occurring. Risk evaluation can be one of the mechanisms to neutralize internal and external threats to higher education institutions' financial security, including using SWOT analysis and expert methods (Zhyvko et al., 2021).

c. Risk Management: Developing an effective risk management strategy that focuses on mitigating risks and identifying opportunities is important. Peterson (2020) emphasizes that risk management should include smart decision-making for security and sustainability.

d. Technology and Big Data: Technology and big data analysis are increasingly important in college risk management. It is inevitable for information technology to be used in college risk management. Big data analysis is one way to assess risk.

e. Flexibility and Adaptability: Risk management strategies should adapt to changing conditions and new challenges. Integrated risk management within the organizational framework, including market and environmental risks, is important to assess risk design's flexibility and adaptability (Chance, 2019).

Risk management in higher education is a multidimensional process that requires a holistic, adaptive, and data-driven approach to meet the challenges of a dynamic educational environment. Effective strategy implementation and shared responsibility across the organization are key to achieving stability and sustainability in higher education.

2.2. Why PTNs need to implement R.M.

Khaw and Theoh (2023) state that increasing uncertainty in the world due to economic factors, political issues, natural disasters, the global outbreak of COVID-19, and technological advances makes effective risk management (R.M.) an important success strategy for various industries to overcome, especially the higher education (HE) industry. The uncertainty referred to here is the uncertainty of success or achieving performance according to the expectations of all stakeholders. Bamber (2022) The global higher education (HEI) sector is increasingly competitive and has undergone many transformations. In the last 20 years, there have been changes in legal frameworks, governing funding schemes, quality assurance systems, and apprenticeship programs for industry across a range of Higher Education provisions that support workforce upskilling. This chapter shows that higher education institutions (HEIs) constantly seek alternative ways to develop and consolidate new financial streams (partnering with other HEIs, geographical growth, and portfolio development) that enable sustainable development while maintaining high-quality standards. The government and experts believe unit-wide risk management can help campuses reduce risk. The application of risk management in the context of the private HEI case study example to ensure business continuity and sustainable growth while maintaining and improving quality standards.

Public Universities Risk Management, through the risk management function, focuses on risks related to life safety, reputation, financial, compliance, and operational exposures. Achieving these objectives involves risk financing, which includes risk transfer and retention, and risk controls, including risk assessment, training and awareness, and compliance monitoring. The Risk Council, consisting of Risk Management leaders from each member institution, conducts the program's day-to-day transactions and risk mitigation. Activities include integrating risk awareness with campus strategic partners, including General Counsel, Internal Audit, Academic Strategy, Student Affairs, Student Health, Research, International Programs, Human Resources, Environmental Health and Safety, Procurement, Security, Facilities Planning, and Capital.

Dobrowolski Z (2019) explains that in the context of new public management reforms aimed at increasing control capacity and efficiency while emphasizing performance and improving international scientific positions, universities face the problem of proper risk management. It is necessary to establish and assess each risk and select the main risks that can limit or even prevent universities from achieving their goals and carrying out public tasks. Risk management becomes even more important under the conditions of university organizing business.

Gazoulit and Oubal (2023) proved that risk management has become an emerging trend in higher education due to its dynamic and evolving environment and the opportunities it offers to control risks, improve governance systems, and achieve expected performance. This study aims to analyze the relationship between risk management and performance in public universities through a literature review based on current bibliographic references. The analysis revealed that, in the majority of cases, there is a significant relationship between the risk management system, whose implementation is based on sequential steps (risk identification, risk assessment, risk handling, and risk monitoring), and the performance of public universities as measured by several indicators (academic excellence, scientific production, information technology, satisfaction of stakeholder expectations and improved responsiveness).

2.3. How to design Risk Management for PTN

Drafting a good risk management document for higher education involves several critical steps. Universities need to translate the definition of a security management system that integrates physical, I.T., and communication security in their institutions. The risk analysis of this security management should be translated

into the security plan and alarm system design (Cojocariu et al., 2020). Organizing the accounting and risk management section will involve managing information from the accounting system for the risk management process. Such an organization includes corrective management actions on various defined risk management system processes (Vyhivska et al., 2019).

Applying an enterprise risk management framework to higher education institutions can help address the challenges faced by these institutions (Wessels & Sadler, 2019). The normative model of academic risk assessment is based on three levels: isolated, recurrent, and systemic academic risks. An action model follows this according to the risk level (O'Leary et al., 2020). Alternatively, the risk assessment outcome model can also be categorized into high, medium, and low risk.

Some universities in Indonesia already have a technical risk management unit. This unit can be assigned to develop risk guidelines and conduct periodic risk assessments. In collaboration with the University's internal supervisory unit and quality assurance agency, this unit can conduct monitoring and evaluation related to implementing risk management by work units. Recommendations are needed for continuous improvement processes by all work units. Universities with a specialized risk management unit can form a team to develop risk management guidelines for universities. Internal supervisory units and quality assurance institutions can carry out the assessment process.

The team can design and assess risks through the following process:

a. All work units as risk owners are asked to fill in the risk assessment self-assessment form by their duties and functions and the service activities provided. This filling can be done periodically during the assessment process carried out by the responsible risk unit.

b. The risk management unit or work team can conduct interviews to explore the risks of certain activities if it is not clear from the assessment form by the risk owner.

c.   Focus group discussions need to be held for joint discussions between leaders and other risk owners regarding the results of risk assessments. Some risks have interrelationships between risk owners. Therefore, it is necessary to have the same perception of the results of the assessed risks.

d. Issuance of risk management documents that guide all work units in carrying out activities. For internal auditors, the risk assessment results become the basis for preparing a risk-based audit work program. Risk management guidelines should be stipulated and ratified as one of the Rector's regulations.

All internal stakeholders need to be involved in all stages of risk management. The participation of all stakeholders is expected to increase the effectiveness of its implementation.

2.4. Various Patterns of Higher Education Risk Management

The approach to risk management in higher education should be oriented towards an in-depth understanding of the diverse risks unique to higher education institutions. Adopting an effective risk management framework relates to academic needs and financial, operational, and regulatory compliance requirements. According to O'Leary et al. (2020), higher education institutions should clearly define academic risks and integrate them within a quality assurance framework. This process involves identifying isolated, recurrent, and systemic academic risks. This approach enables institutions to implement appropriate and proactive mitigation strategies.

Deineha et al. (2020) emphasize the importance of risk management mechanisms and process models in educational activities. They suggest that traditional approaches to risk management be integrated into the decision-making and operational processes of higher education institutions. Implementing these suggestions ensures that risks are identified and efficiently managed before negatively impacting educational objectives. Kondić et al. (2020) highlighted the need to clarify the concept of risk and its elements in the context of higher education. They outline a risk management approach, including risk assessment, control, and monitoring. This approach is essential to ensure that risks are managed effectively and do not hinder the achievement of educational and research objectives.

Vyhivska et al. (2019) add that risk management in higher education should also include financial and operational aspects. They suggest an organizational approach to information support of risk management, which is crucial to ensure the stability and sustainable development of the institution. Overall, the approach to risk management in higher education should be holistic and multifaceted, integrating academic, financial, and operational aspects. This approach requires a comprehensive understanding of the college's risks and how they can be effectively managed to ensure the institution's long-term success.

Generally, universities categorize risks based on academic and non-academic factors. Academic risks, for example, are associated with acquiring accreditation ratings, student study periods, students who continue their studies or work, academic reputation, and scientific publications, among other factors. Non-academic risks include the number of lecturers with functional levels of professor and associate professor, facilities and infrastructure, budget allocation and absorption, and achievement of performance outputs. In addition, universities can also classify risks based on strategic target groups and the achievement of key performance indicators set by the organization. The determination is to reduce the college's strategic plan to an annual action plan.

This form of grouping can be used according to the needs of the college. Universities must have tiered risk mapping results starting from the University level and the work units below to know the level of risk (high, medium, or low) for each program and activity and the person responsible for following up on the potential risk.

2.5. Complexities, Challenges, and Strategies for R.M. Implementation in Higher Education

Christopher, J. & Sarens, G. (2015) found that broader influences (mostly caused by conflicting management cultures) had different impacts on the values of key players and the consequences of implementing the process. The values of the key players ranged from those aligned with the corporate culture (at the strategic level) to those not aligned with the corporate culture (at the operational level) and produced different results. These different outcomes suggest that implementing risk management by Australian public universities under the influence of new public management is problematic.

The Compliance Office for Risk Management is the Inspectorate General tasked with conducting audits of the implementation of Risk Management in work units within the Ministry of Education and Culture. This unit also monitors risk management in universities. Therefore, universities need to note that preparing effective risk management documents requires an integrated approach that covers various aspects of the organization.

The complexity of risk management implementation in higher education can be seen from the following aspects:

a. Risk Understanding and Information Needs. Vyhivska et al. (2019) state that organizing information from the accounting system for the risk management process is important to ensure higher education institutions' stability and sustainable development. This process involves identifying risks affecting various study groups, such as students, staff, and government, and taking appropriate corrective actions.

b. Decision Making. Drugova and Kalachikova (2019) highlighted that decision-making in higher education institutions occurs under conditions of instability, uncertainty, complexity, and ambiguity. They recommend strategies to reduce uncertainty and improve decision quality, including decomposing problems and managing information flow distribution.

c. Technology Utilization and Innovation. Woolcott et al. (2020) emphasized the importance of managing knowledge networks and collecting data related to complex systems as key factors in the success of higher education institutions. Adaptability and agility in the face of complexity are considered crucial.

d. Stakeholder Involvement. The active role of stakeholders in the risk management process is critical. Their inclusion in decision-making and strategic planning ensures that risks are identified and managed effectively.

e. Reporting and Monitoring. Developing an effective reporting and monitoring system is key to evaluating the effectiveness of risk management actions. Such a system includes periodic assessments of the risks and mitigation measures implemented.

An integrated and comprehensive approach to risk management in higher education helps face the challenges of a complex and ever-changing environment. Colleges can manage risks more effectively by understanding risk factors and adopting appropriate strategies.

Implementing risk management in higher education is a complex and challenging task. Some previous research and literature show some of the main challenges faced, among others:

a. COVID-19 pandemic, Wooldridge et al. (2021) revealed that the COVID-19 pandemic poses a major disruption to higher education. This challenge requires a risk management strategy that includes internal efforts, benchmarking, communication, and technology/learning support to respond to educational risks. Increased satisfaction with the risk management process can be achieved with effective communication and appropriate benchmarking.

b. Resistance to change, especially in e-learning implementation, is a major challenge. The quality of the Learning Management System (LMS) and faculty experience in e-learning play an important role in overcoming operational risks. Effective strategies include faculty training and LMS quality improvement (Syed et al., 2020).

c. Technology and Innovation, Woolcott et al. (2020) emphasized the importance of managing knowledge networks and collecting data to deal with complexity in higher education. Adaptation and agility in technology and innovation are needed to overcome challenges.

d. Uncertainty in Decision Making, Drugova and Kalachikova (2019) suggest strategies to reduce uncertainty and improve decision quality, including problem situation decomposition and information flow distribution management. Higher education institutions often face problems related to uncertainty in the decision-making process, resulting in late decisions.

To address these challenges, universities can take strategies such as effective communication. Communication can be used to ensure that the entire college community, including students, staff, and lecturers, are well informed about the risks and strategies being taken. Good communication can also reduce differences in perception from all parties.

Universities must also make quality improvements to learning tools and technologies and provide adequate training for work unit leaders and staff. Information technology challenges require adapting and improving human resource competencies in providing services. Socialization, training, technical guidance, and competency certification for leaders, lecturers, and staff must be carried out regularly and continuously. This strategy will accelerate the adaptation process to the risks arising from the application of information technology.

An effective risk management implementation strategy can be achieved if continuous risk analysis is conducted. Identifying, assessing, and analyzing risks cannot be done only once because of certain needs. This process must be carried out regularly to identify and manage emerging risks. In addition, it is also necessary to pay attention to the importance of stakeholder participation. Stakeholder involvement in decision-making ensures that any strategies implemented align with their needs. The right strategy is expected to be the solution for effectively implementing risk management in higher education.

The established risk management strategy should also ensure compliance and mitigate legal risks. In addition, communication and transparency in risk management to all relevant parties feel involved, and information about risks and mitigation measures is widespread within the organization.

3. **Conclusion and Recommendation**

Risk management in higher education is a complex process that requires an in-depth understanding of the various internal and external factors that affect the institution. The need for risk management arises from the changing dynamics in the higher education environment, including policy changes, financial pressures, and technological developments. Such a situation requires higher education institutions to adopt comprehensive and sustainable risk management strategies.

The college must involve various stakeholders in designing the risk management document, including administration, staff, and students. This participation ensures that all aspects of risk are identified and managed effectively. The risk management design should also adhere to normative conventions, including compliance with applicable regulations and laws, to ensure that the college operates within legal and ethical boundaries.

One of the main challenges in implementing risk management is resource constraints and resistance to change. Overcoming this requires effective communication, continuous training, and appropriate technology. This approach will assist universities in integrating risk management into their operations more effectively. Preparing a risk management document should include risk assessment, strategy development, implementation, and ongoing monitoring. These steps should be carried out systematically and involve stakeholders at every stage to ensure the success and sustainability of the risk management endeavor.

Overall, risk management in higher education requires a proactive and participatory approach. Colleges must commit to effective and sustainable risk management supported by evidence and best practices. Success in this endeavor depends on the active involvement of all levels in the organization and a clear understanding of the challenges and opportunities the college faces. A comprehensive and evidence-based approach to risk management will help the college meet current and future challenges.

Some suggestions that can be given from this article include improving the quality of decision-making. Effective

implementation of risk management enables universities to make more informed and reasoned decisions. Risks have been identified, evaluated, and incorporated into the planning process. With stronger organizational resilience, colleges become more resilient to disruptions and unexpected changes. Institutions can adapt quickly and recover from potentially harmful events with a good risk management system. Improved trust and reputation, proactive and transparent risk management can increase trust from external and internal stakeholders, including students, staff, government, and the general public. Such an approach, in turn, enhances the institution's reputation and credibility. Long-term cost savings, by effectively identifying and mitigating risks, colleges can avoid unnecessary costs arising from unexpected incidents, such as litigation or operational losses.

In addition, to learning environment improvement, by managing risks related to infrastructure, technology, and human resources, colleges can provide a safer and more conducive learning environment for students and staff. Effective implementation of risk management ensures that colleges comply with relevant regulatory standards, which can avoid sanctions or penalties. Encouraging collaboration between departments and other institutions in risk management can open up opportunities for teaching, research, and administration innovation. With effective risk management, universities will be better prepared for future challenges, such as demographic changes, technological advancements, and changes in education policy. Overall, this article emphasizes that implementing effective risk management is about avoiding and leveraging risks as opportunities for continuous growth and improvement in higher education.

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