



# Identifying Risks Based on ISO 31000:2018 Using Risk Factors at Public Universities of Legal Entities

Hasan Argadinata<sup>1</sup>, Bambang Budi Wiyono<sup>2</sup>, Ali Imron<sup>1</sup>, Mustiningsih<sup>1</sup>, Moch. Faza Pramudya<sup>1</sup>

<sup>1</sup>Doctoral Program in Education Management, Universitas Negeri Malang, Malang, Indonesia

<sup>2</sup> Department of Information Systems, Universitas Brawijaya, Malang, Indonesia  
hasanargadinata@gmail.com

**Abstract.** Risk identification in incorporated universities is an important activity to identify potential risks that may affect the viability of the institution. The implementation of the international standard ISO 31000:2018 can help incorporated universities carry out risk identification in an effective and structured manner. This article discusses the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities. The methodology used is qualitative descriptive research with a case study approach. Data was collected through interviews with relevant parties in incorporated universities that have implemented ISO 31000:2018-based risk identification using risk factors. The results showed that ISO 31000:2018-based risk identification using risk factors can help incorporated universities in identifying risks effectively and structure. However, there are several factors that influence the lack of optimal implementation of risk identification in incorporated universities, such as lack of understanding of risk management, limited resources and competencies, lack of leadership support and commitment, lack of cooperation between units in universities, and the absence of a clear framework.

**Keywords:** Identify risks, ISO 31000:2018, Risk factors, PTN-BH.

## 1 Introduction

Incorporated colleges are educational institutions that have diverse risks. Such risks can come from internal and external factors, such as human resources, information systems, operational processes, regulatory environment, industrial competition, and social and economic changes. However, risk management in incorporated universities is still not optimal and requires more serious attention. Many incorporated universities still do not have an effective and integrated risk management system. As a result of this, incorporated colleges can face financial losses, loss of reputation, decreased organizational performance, and even non-compliance with the law Incorporated colleges are educational institutions that have diverse risks. Such risks can come from internal and external factors, such as human resources, information systems, operational processes, regulatory environment, industrial competition, and social and economic changes. However, risk management in incorporated universities is still not optimal and requires

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more serious attention. Many incorporated universities still do not have an effective and integrated risk management system. As a result of this, incorporated colleges can face financial losses, loss of reputation, decreased organizational performance, and even non-compliance with the law [1]–[3].

Research on ISO 31000:2018-based risk identification using risk factors in incorporated universities has high urgency and novelty [4], [5]. First, incorporated universities play an important role in supporting human resource development and economic development in Indonesia. Therefore, successful risk management in incorporated universities is essential to ensure good quality of education, institutional sustainability, and greater contribution to national development. Second, ISO 31000:2018 is the latest international standard in risk management that provides practical and integrated guidance in the identification, evaluation and management of risks. The ISO 31000:2018-based approach has been internationally recognised as an effective and tested method of managing risk, ensuring the sustainability and success of organisations in the era of globalization. Third, this study has a novelty because it focuses on risk factors in incorporated universities that can affect the effectiveness of risk management. This research combines the principles of ISO 31000:2018 with risk factors that are relevant and specific to incorporated universities, thus providing practical guidance for decision makers in managing risks in incorporated universities. Fourth, this research will make a significant contribution to the development of science and risk management practices in Indonesia. This research is expected to be a reference for incorporated universities and other organizations in managing their risks effectively and efficiently [6]–[8].

Risk identification in incorporated universities is essential to ensure the effectiveness of risk management and minimize the possible negative impact on the institution. 1) Maintaining the sustainability of the institution, Risk identification helps incorporated universities in identifying risks that can affect the sustainability of the institution, such as poor finances or loss of reputation. 2) Provide a basis for decision-making, Risk identification provides a clear basis for decision makers in prioritizing risk and deciding on actions that need to be taken to reduce or eliminate risk. 3) Improve the effectiveness of risk management, Risk identification helps incorporated universities to develop effective and integrated risk management plans, so as to reduce identified risks and optimize the use of available resources. 4) Meet legal and regulatory requirements, Risk identification allows incorporated colleges to meet legal and regulatory requirements related to risk management, as set by regulators and accreditation agencies. 5) Improving the quality of education, Risk identification can help incorporated colleges in identifying risks that can affect the quality of education they provide, so as to improve the quality of education and provide a better educational experience to students. 6) Increase public trust, Risk identification can help incorporated colleges to identify risks that may affect public trust in institutions, so as to take necessary actions to maintain or improve their reputation in the eyes of the public [9].

Although the identification of risks in incorporated universities is very important, there are several obstacles or factors that cause their application to be less than optimal. 1) Lack of understanding of risk management, Many incorporated colleges do not have sufficient understanding of the concept of risk management, making it difficult

to understand the importance of risk identification and how to do it effectively. 2) Limited resources and competencies, Risk identification requires adequate resources and competencies, both in terms of people, technology, and finance [9]–[12] However, not all incorporated universities have sufficient resources and competencies to properly identify risks. 3) Lack of leadership support and commitment, Effective risk identification requires support and commitment from the leadership of incorporated universities. However, not all leaders have sufficient understanding of the importance of risk identification and not all leaders are committed to carrying out risk identification on a regular and effective basis. 4) Lack of cooperation between units in universities, Risk identification requires cooperation between units in universities, such as academic units, financial units, and administrative units. However, not all units in universities have a good cooperative relationship and are less integrated in carrying out risk identification. However, not all incorporated universities have sufficient resources and competencies to properly identify risks. 3) Lack of leadership support and commitment, Effective risk identification requires support and commitment from the leadership of incorporated universities. However, not all leaders have a sufficient understanding of the importance of risk identification and not all leaders are committed to carrying out risk identification on a regular and effective basis. 4) Lack of cooperation between units in universities, Risk identification requires cooperation between units in universities, such as academic units, financial units, and administrative units. However, not all units in universities have a good cooperative relationship and are less integrated in carrying out risk identification. 5) In the absence of a clear framework, Risk identification requires a clear and structured framework, so as to facilitate the risk identification process and minimize errors. However, not all incorporated universities have a clear and structured framework for identifying risks [6], [8], [13].

Therefore, an in-depth research is needed to assist incorporated colleges in identifying possible risks and evaluating their impact on organizations. This research will use an ISO 31000:2018-based approach to provide practical guidance in managing risks effectively. Thus, this research is expected to help incorporated universities to improve the effectiveness of their risk management, reduce financial losses, maintain the reputation of the institution, and improve the overall performance of the organization.

## 2 Method

Qualitative descriptive method is a method used in research to describe the phenomenon under study by collecting, analyzing, and interpreting data using a qualitative approach. In the study "ISO 31000:2018 Based Risk Identification Using Risk Factors in Incorporated Universities", qualitative descriptive methods were used to get a clear picture of the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities [14]–[16].

The steps taken in the qualitative descriptive method in this study are as follows: 1) Data collection, data collected through interviews with related parties in legal entities that have implemented ISO 31000: 2018-based risk identification using risk factors. In

addition, data is also collected through the study of documents related to the identification of risks in incorporated colleges. Qualitative data analysis in the ISO 31000:2018 Based Risk Identification study at Legal Entity Universities using snow ball sampling and NVivo analysis was carried out to gain a deeper understanding of the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities. The research location is at Surabaya State University as a Legal Entity State University (PTN-BH) and already has a team in risk management. First of all, snow ball sampling is used to select respondents relevant to the study. Snow ball sampling is a non-probability sampling technique used to search for informants through social networks or references from previously discovered informants. This technique was chosen because risk identification in incorporated colleges is a very specific topic and informants are hard to find randomly. After the informants were collected, the data that had been collected through interviews and document studies were analyzed using NVivo. NVivo is software used to analyze qualitative data by organizing, storing, and obtaining information from it [17]–[19].

The analysis was carried out using qualitative data analysis techniques, such as content analysis and thematic analysis. In content analysis, the collected data is analyzed based on certain keywords or concepts that appear in the data. In this study, the keywords used were ISO 31000:2018 and risk factors. The data were analyzed to gain an understanding of how ISO 31000:2018-based risk identification using risk factors is applied in incorporated universities. In addition, thematic analysis is also used to identify themes or patterns in the data that appear periodically. In this study, the themes identified include the use of risk factors, the risk identification process, the obstacles faced in implementing ISO 31000: 2018, and the benefits obtained from the application of ISO 31000: 2018-based risk identification using risk factors. Data were analyzed to get a clear picture of the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities [17], [20], [21].

Data interpretation: After the data is analyzed, it is interpreted to gain a deeper understanding of the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities. Data validation: Data validation is performed to ensure the validity and trustworthiness of the data that has been collected. Data validation is carried out by triangulating data, that is, comparing data from different sources to strengthen the validity of the data. Data interpretation is also carried out with the help of result quadrant documents through Importance Performance Analysis (IPA) is a descriptive analysis technique used to identify what important performance factors an organization must show in meeting the satisfaction of their service users (consumers). An example of a quadrant presentation as follows [22].



**Fig. 1.** Cartesian quadrant

By using qualitative descriptive methods, this research is expected to provide a clear picture of the application of ISO 31000:2018-based risk identification using risk factors in incorporated universities. In addition, this research can also assist incorporated universities in improving the application of risk identification and minimizing the negative impacts that may occur on institutions.

### 3 Results and Discussion

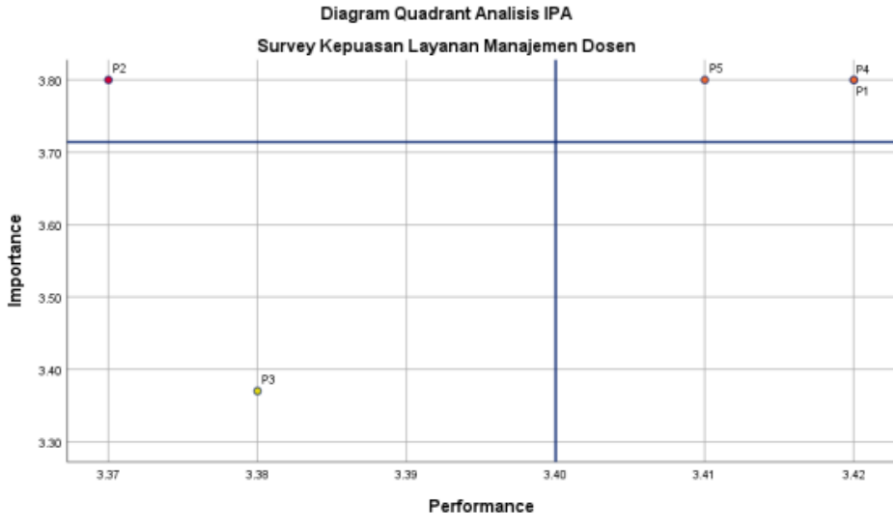
Risk management is very important to do in a legal entity college because the risks faced by a legal entity college can affect the performance and reputation of the college. ISO 31000:2018-based risk identification is the recommended method for risk management as it is proven to be effective and can help organizations identify risks in a systematic way. ISO 31000:2018 is an international standard that provides general guidance for risk management. The ISO 31000:2018:2018-based risk identification method involves the process of identifying, analyzing and evaluating risks that may be faced by legal entity universities. This process involves the collection of data and information, data analysis, and the determination of the level of risk acceptable to the organization [23], [24].

In carrying out risk management, universities of legal entities must also consider factors that affect risks, such as the internal and external environment, organizational goals, and available resources. In addition, the college of legal entities must also have an action plan to reduce or eliminate the identified risks. By conducting risk management effectively, legal entity colleges can reduce the negative impact of the risks faced and improve the performance and reputation of the organization. Therefore, risk management based on ISO 31000:2018 is highly recommended to be carried out in legal entity universities [25], [26].

This research was assisted by data analysis using NVivo software. The Nvivo analysis findings regarding "Identifying Risks Based on ISO 31000:2018 Using Risk Factors at Public Universities of Legal Entities" reveals several important insights.



defines risk management as "coordination of the process of activities including planning, controlling, measuring and assessing risks, as well as risk-related decision-making carried out in order to achieve organizational goals. In practice, the ISO 31000:2018-based risk identification process in legal entity universities must involve the participation of various parties related to the risk, including senior management, academic and administrative staff, students, and external parties such as government and society [27]. One of the campus' efforts in identifying risks through service satisfaction surveys as presented in the picture 1.



**Fig. 3.** Service Satisfaction Survey through Cartesian Diagram

In quadrant I, a service indicator with the code P2 is found, meaning that the availability of services in supporting the activities of the tridarma of higher education, administration and services for information needs on-line and offline accurately and satisfactorily must be the top priority. The management of the college has not carried it out in accordance with the wishes of consumers, causing a sense of dissatisfaction. Thus the variables in this quadrant need to be taken seriously and must be improved even better. Meanwhile, in quadrant II, it was found that there were variables P1, P4 and P5. These variables are factors that are considered important by users and have been implemented properly so that they can satisfy consumers, so the obligation of university management is to maintain the performance that has been running so far. The aspects of P1, P4 and P5 respectively are the ease of obtaining information in supporting the activities of the Tridarma of Higher Education, the services of leaders and / or persons in charge who are authorized to support the implementation of the Tridarma of Higher Education and excellent management services at PT are carried out in accordance with procedures. Meanwhile, for the P3 variable, namely the ease of management services in the implementation of the Tridarma of Higher Education, it is in quadrant III, meaning that it is undisputed and is in accordance with consumer expectations so that it is

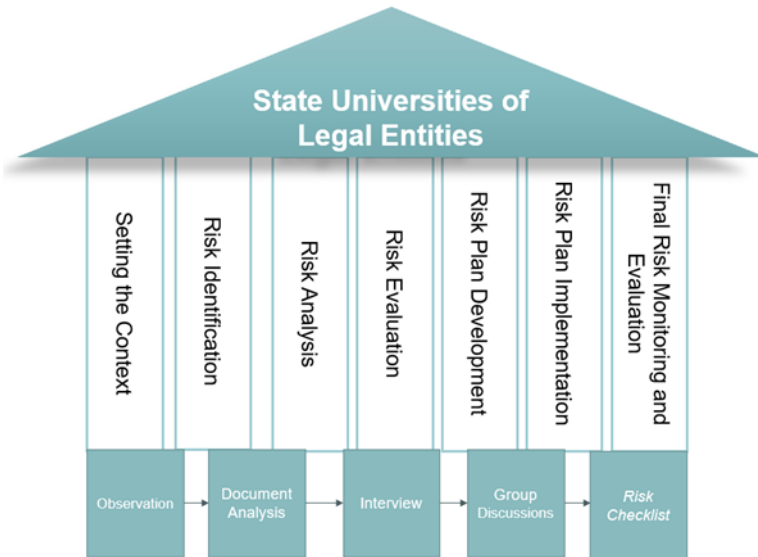
not too much of a focus of attention in improving subsequent management services. This data is one of the basis of the risk identification process in universities legal entities.

The risk identification process is an important stage in risk management in universities of legal entities. Here are some of the methods that can be used in the ISO 31000:2018-based risk identification process in legal entity universities: 1) Direct Observation, This method involves making direct observations of various activities in legal entity universities, such as academic, administrative, and facility activities, to identify possible risks. 2) Document Analysis, This method involves conducting an analysis of documents related to the college of legal entities, such as existing policies and procedures, financial statements, audit records, and other documents related to risk. 3) Interviews with Staff, This method involves conducting interviews with college staff of legal entities to gain an understanding of the risks that occur in their work. 4) Group Discussions, This method involves conducting group discussions with various parties related to the college, such as senior management, academic and administrative staff, students, and external parties such as government and society, to identify possible risks. 5) Risk Checklist, This method involves using a risk checklist to identify risks that are common within college legal entities. The risk checklist can be either a list of already known risks or a list of questions that allow to identify possible risks [28], [29].

The ISO 31000:2018-based risk identification process at legal entity colleges is carried out by following these steps: 1) Establishing context, universities of legal entities should establish the context in which risks occur. This includes an understanding of the organization's objectives, existing policies and procedures, the internal and external environment, and related stakeholders. 2) Identify risks, The next step is to identify the existing risks. Risk identification can be done through a variety of methods, such as direct observation, document analysis, staff interviews, and group discussions. The identified risks should be clearly spelled out and sorted by risk level. 3) Risk analysis, Once the risk is identified, the legal entity college should conduct a risk analysis to evaluate the possible occurrence of the risk and its impact on the goals of the organization. Risk analysis is carried out by measuring the likelihood of risk occurrence and its impact, as well as determining the level of risk that must be addressed. 4) Risk evaluation, After a risk analysis is carried out, the legal entity college must evaluate the identified risks to determine which risks need to be addressed first. Risk evaluation is carried out taking into account risk criteria, such as the source of risk, potential consequences, likelihood of occurrence, and impact. 5) Development of a risk management plan, After the risk is evaluated, the college of the legal entity should develop a risk management plan to reduce the risk or its impact. A risk management plan may include a variety of actions, such as policy and procedure changes, the use of technology, employee training, and risk mitigation. 6) Implementation of the risk management plan, After the risk management plan is developed, the legal entity college must implement the plan and ensure that risk mitigation measures are carried out in accordance with the plan. 7) Monitoring and evaluation, The risk identification process must be monitored and evaluated on an ongoing basis to ensure that risks are identified and addressed appropriately. Universities of legal entities must ensure that the risk management plan



remains effective and in accordance with the goals of the organization. Visually made a chart of findings from the results of data collection in the field as follows [30].



**Fig. 4.** PTN-BH Risk Identification Process

Figure 1. Strengthen that the implementation of the risk identification process at UNESA is carried out with the following steps: 1) Establish context, 2) Risk identification through direct observation methods, document analysis, interviews with staff, group discussions, and risk checklists, 3) Risk analysis to evaluate the likelihood and impact of risks, 4) Risk evaluation to determine which risks need to be addressed first, 5) Development of a risk management plan, 6) Implementation of risk management plans, and 7) Monitoring and evaluation. The findings from the results of data collection in the field can be described in a chart. The choice of methods used in the risk identification process can be adjusted to the needs and resources available. It is important to involve various parties related to the risk to ensure that all possible risks have been identified and managed appropriately.

### **3.2. ISO 31000:2018 Risk Identification in Legal Entity State Universities (PTN-BH)**

Surabaya State University (UNESA) is one of the Legal Entity State Universities (PTN-BH) in Indonesia that has conducted risk identification based on ISO 31000:2018. This risk identification process is carried out as part of risk management efforts at UNESA to ensure that possible risks in higher education can be identified and managed appropriately. The risk identification process at UNESA is carried out by involving various related parties, such as senior management, academic and administrative staff, and students. The method used in the risk identification process at UNESA is to conduct document analysis, direct observation, and group discussions. The results of risk identification at UNESA cover a wide range of risks associated with academic and

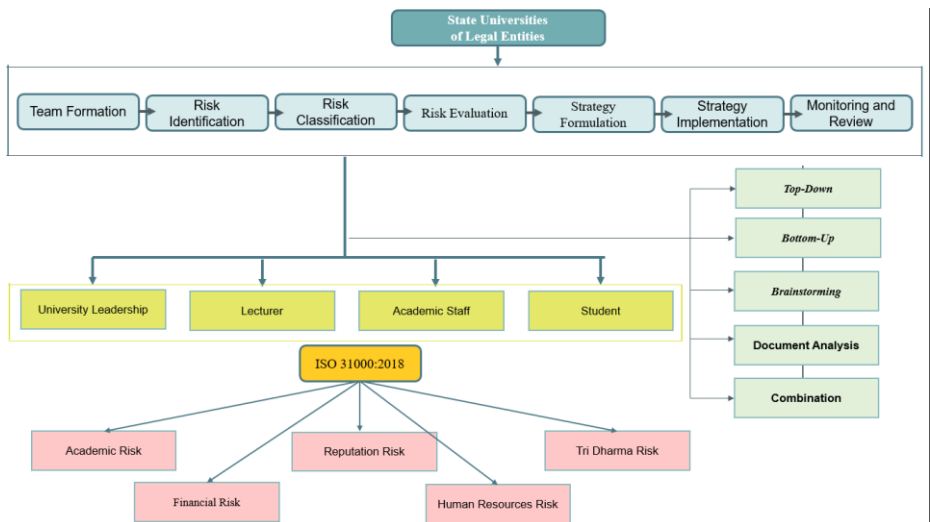
administrative activities, such as information security risks, occupational safety and health risks, financial risks, legal risks, and reputational risks. UNESA Then conduct a risk analysis using a risk matrix to determine the severity and likelihood of risk occurrence, so as to determine appropriate risk control measures. Through an ISO 31000:2018-based risk identification process, UNESA can better understand the risks that may occur in universities and carry out appropriate risk management to reduce the negative impact of these risks. This is important to ensure that UNESA can continue to operate effectively and provide maximum benefits to all parties involved [31].

Universitas Negeri Surabaya (UNESA) identifies risks based on ISO 31000:2018 as a Legal Entity State University (PTN-BH) with the following steps: 1) Establishing a risk management team, UNESA forms a risk management team consisting of representatives from various units at the university, such as academic, administrative, financial, and legal units. This team is responsible for conducting risk identification and formulating risk management strategies at UNESA. 2) Risk identification, The risk management team conducts risk identification by conducting document analysis and interviews with university staff. The team also conducted direct observations of activities at UNESA to identify possible risks. 3) Risk classification, After the risk is identified, the risk management team groups risks by type, such as financial risks, academic risks, legal risks, and so on. 4) Risk evaluation, The risk management team evaluates risks based on the severity and likelihood of risk occurrence using a risk matrix. This helps UNESA to determine which risks should be prioritized to be managed further. 5) Establishment of risk management strategies, After the risks are evaluated, the risk management team determines the appropriate risk management strategies to control and mitigate risks. These strategies can be preventive measures, risk mitigation, or risk transfer. 6) Implementation of risk management strategy, Once a risk management strategy is determined, the risk management team implements it by involving various parties at UNESA to ensure the effectiveness of the strategy. 7) Monitor and review, The risk management team monitors and evaluates risks regularly to ensure that the established risk management strategies are still relevant and effective. By identifying risks based on ISO 31000:2018, UNESA can identify possible risks in universities and take appropriate preventive and mitigation measures to control these risks. This is important to ensure the continuity of UNESA's operations and provide maximum benefits for all parties involved [26], [32].

Surabaya State University (UNESA) conducts risk identification based on ISO 31000:2018 as a Legal Entity State University (PTN-BH) because it aims to manage risks effectively and efficiently in carrying out its operations as a university. As a PTN-BH, UNESA is responsible for providing quality educational services and providing maximum benefits to the community. In carrying out its operations, UNESA faces various risks that can affect the sustainability of the institution and the achievement of its goals. These risks can be in the form of financial risks, academic risks, legal risks, reputational risks, and so on. Therefore, UNESA conducts ISO 31000:2018-based risk identification to be able to identify these risks and take appropriate preventive and mitigation measures to control these risks. By identifying risks based on ISO 31000:2018, UNESA can also improve the effectiveness of risk management and increase transparency in managing risks. This is important to provide confidence and trust to various

stakeholders, such as students, lecturers, employees, government, and the general public. Thus, UNESA can ensure the sustainability of its operations as a PTN-BH and provide maximum benefits to the community [33], [34].

Surabaya State University (UNESA) as a Legal Entity State University (PTN-BH) can use several methods in identifying risks in accordance with the ISO 31000:2018 standard. Here are some methods that can be used: 1) Top-Down Approach This method starts from the introduction of risks of a general nature, identified by UNESA's top-level management, and then communicated to departments and work units throughout the university. Departments and work units can then evaluate risks related to their duties and responsibilities. 2) Bottom-Up Approach This method begins with the identification of specific risks by departments and work units throughout UNESA. Departments and work units can then report their risks to top-level management. These risks can then be consolidated and analyzed by top-level management to ensure that all risks have been identified. 3) Brainstorming This method involves group discussion sessions led by a facilitator who promotes an open and structured discussion about risks. In this session, participants were asked to record each risk they identified and then evaluate each risk collectively. 4) Document Analysis This method involves the collection and analysis of documents related to UNESA's operations and activities to identify associated risks. Documents that can be analyzed include policies, standard operating procedures (SOPs), audit reports, inspection reports, and previous risk reports. 5) The UNESA combination method may also use a combination of some of the above methods to ensure that all risks have been correctly identified and properly documented. Once a risk has been identified, UNESA can process it into a further risk evaluation and risk management stage in accordance with ISO 31000:2018 standard [35]–[37].



**Fig. 5.** Research Findings Risk Identification Process

Figure 4 explains that UNESA is a state university in Indonesia that has identified risks based on ISO 31000: 2018 as part of its risk management efforts. This process

involves a variety of stakeholders such as senior management, academic and administrative staff, and students. The methods used include document analysis, direct observation, and group discussions to identify various risks associated with academic and administrative activities such as information security, occupational health and safety risks, finance, legal, and reputation. UNESA then evaluate the risks using a risk matrix to determine the severity and likelihood of each risk and implement appropriate risk control measures. Through this process, UNESA can manage risks effectively and efficiently to ensure its sustainability and provide maximum benefit to all stakeholders involved.

### **3.3. Identification of Risk Factors in Legal Entity Universities (PTN-BH)**

Identification of risk factors in Legal Entity Universities (PTN-BH) is a process to identify factors that can cause risks or dangers in the PTN-BH environment. Risks in the context of PTN-BH may vary, such as financial risks, legal risks, reputational risks, environmental risks, and so on. In this case, PTN-BH can use a systematic approach to identify risk factors, such as conducting internal and external environmental analysis, considering market trends and changes, observing the state of competition, evaluating financial conditions, evaluating policies and procedures, and identifying weak points that may be exploited by irresponsible parties. The process of identifying risk factors in PTN-BH can be done through a participatory approach, involving all stakeholders or related parties. In addition, PTN-BH can also use international standards and guidelines, such as ISO 31000:2018 to assist in a more systematic and structured identification of risk factors. With proper identification of risk factors, PTN-BH can take action to prevent risks or reduce their impact if such risks occur.

Identification of risk factors in Legal Entity Universities (PTN-BH) involves various parties related to the operations and activities of PTN-BH. Some of the parties involved in the risk factor identification process at PTN-BH include: 1) PTN-BH Management, PTN-BH Management, especially leaders and decision makers, responsible for leading the risk factor identification process and establishing appropriate risk management strategies. Departments and work units Departments and work units at PTN-BH, including finance, academic, research, community service, human resources, facilities, and so on, have the responsibility to identify risk factors related to their duties and responsibilities. 2) Staff and employees Staff and employees at PTN-BH also have an important role in the risk factor identification process. They can provide input on the risk factors they find in their daily activities, as well as provide advice to reduce the associated risks. 3) Students and service users Students and service users at PTN-BH can also provide input on risk factors related to their experience on campus or in using the services provided by PTN-BH. 4) External parties of PTN-BH can also involve external parties, such as risk experts, management consultants, independent auditors, and other related parties in the process of identifying risk factors and managing risks effectively. Involving all relevant parties in the risk factor identification process can assist PTN-BH in obtaining a comprehensive picture of the risks that may occur within their environment, so as to take action to reduce risks and protect PTN-BH from the impact of these risks.

The application of risk factor identification at Surabaya State University (UNESA) as a Legal Entity University (PTN-BH) can be done with the following steps: 1) Risk identification, The first step in implementing risk factor identification is to identify risks related to activities carried out by UNESA. Risks can be operational risks, financial risks, reputational risks, legal risks, and environmental risks, among others. 2) Risk evaluation, Once the risk is identified, the next step is to evaluate the risk. Risk evaluation can be done using a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) to understand the strengths, weaknesses, opportunities, and threats associated with those risks. 3) Determination of risk control, After the risk is evaluated, the next step is to determine the risk control. Risk control can be in the form of prevention, mitigation, transfer, or acceptance of risks. 4) Implementation of risk control, After risk control is determined, the next step is to implement risk control. The implementation of risk control involves the implementation of predetermined risk control measures. 5) Monitoring and evaluation, The last step in the application of risk factor identification is the monitoring and evaluation of risk control that has been implemented. Monitoring and evaluation is carried out periodically to ensure that risk control is still effective and can significantly reduce risks.

Surabaya State University (UNESA) identifies risk factors as a Legal Entity University (PTN-BH) because as a legal entity, UNESA has legal responsibilities and obligations to all its stakeholders, including students, lecturers, employees, the government, and the wider community. These responsibilities include operational, financial, reputational, legal, and environmental aspects, which must be managed effectively to avoid or minimize adverse impacts. In an increasingly complex and dynamic business environment, the identification of risk factors is becoming increasingly important for organizations to anticipate and manage risks that may affect the overall performance of the organization. Risks can arise from various sources, such as changes in regulations, government policies, changes in market conditions, as well as from the organization's own internals such as financial mismanagement or human resource management. By systematically identifying risk factors, UNESA can find out what risks may arise and how to manage those risks effectively. This will help UNESA to reduce the impact of adverse risks and maintain good organizational performance and public trust. In addition, the implementation of risk factor identification is also an important requirement for legal entities, both nationally and internationally, to ensure compliance and compliance with applicable regulations and standards. Table 1 will present the matrix used by UNESA in identifying risks using risk factors.

Table 1. Risk Factor Identification Matrix

Risk Factors Placed in Risk Categories			
Strategic Risk Factors	Operational Risk Factors	Financial Risk Factors	Compliance Risk Factors
Impact on stakeholder value	Workforce skill and competence	Susceptibility to fraud	Extent of regulatory influence on operations

Criticality to achievement of strategic objectives	Stability of operations (existence of recent change)	Recent cash flow trends	Magnitude of fines or other penalties (including recent internal audit findings)
Alignment with identified ERM risks	Dependence on strategic partners	Impact of foreign exchange	Impact of recent legislative activity
Competitive environment	Labor market (recruiting and retention stability)	Total annual spending	Existence of debt covenant obligations
Access to strategic resources (talent, raw materials, capital, and so on)	Management competence	Complexity of transactions	Tone at the top set by leadership

One way to identify risk factors is to use the four risk categories described earlier: strategic, operational, financial, and compliance. Thinking about the risk factors for each category can help you remember items that may have been overlooked. Using risk categories can also help you choose risk factors that are weighted according to the category in which your organization has the most risk. For example, a public utility company may have most of its risks in the operational and compliance categories, so most of its risk factors must also be in those categories.

The superiority of Surabaya State University (UNESA) applies the identification of risk factors as a Legal Entity University (PTN-BH) is as follows: 1) Reducing risk, By identifying risk factors, UNESA can reduce possible risks and minimize adverse impacts on the organization. 2) Optimizing resources, By knowing the risks that may arise, UNESA can optimize the use of organizational resources to manage those risks effectively and efficiently. 3) Increase public trust, Effective identification of risk factors can help increase public confidence in UNESA, especially in terms of transparency and accountability in managing risk. 4) Compliance with regulations and standards, The application of risk factor identification can also help UNESA to ensure compliance and compliance with applicable regulations and standards, both nationally and internationally. However, there are some disadvantages that may occur in the application of risk factor identification by UNESA as a PTN-BH, such as: 1) Cost, Risk factor identification can cost a considerable amount, especially if it is carried out continuously and involves various parties in the organization. 2) Limited resources, UNESA may experience human, technological, and financial limitations in identifying existing risk factors. This may affect the effectiveness of the identification of risk factors carried out. 3) Limited insight, Identification of risk factors carried out by UNESA may not be able to identify unexpected or new risks. This can affect UNESA's ability to manage emerging risks. 4) Inconsistent implementation, Although UNESA has identified risk factors, the implementation of risk control may be inconsistent because there are various factors such as limited resources and limited insights that may affect the effectiveness of such implementation. In this case, UNESA needs to pay attention to the existing weaknesses and take action to overcome these problems so that the implementation of risk factor identification can run well and effectively.

## 4 Conclusion

The ISO 31000:2018-based risk identification process in legal entity universities is based on the concept of integrated and systematic risk management. The risk identification process is an important stage in risk management in universities of legal entities. The choice of methods used in the risk identification process can be adjusted to the needs and resources available. The ISO 31000:2018-based risk identification process in legal entity universities is carried out by following the following steps: 1) Establishing context 2) Risk identification 3) Risk analysis 4) Risk evaluation 5) Development of a risk management plan 6) Implementation of a risk management plan 7) Monitoring and evaluation Methods that can be used in the ISO 31000:2018-based risk identification process in legal entity universities include: direct observation, document analysis, staff interviews, group discussions, and risk checklists.

Universitas Negeri Surabaya (UNESA) conducts risk identification based on ISO 31000: 2018 as a Legal Entity State University (PTN-BH) using several methods, including: document analysis, direct observation, and group discussions. The results of risk identification at UNESA cover a wide range of risks associated with academic and administrative activities, such as information security risks, occupational safety and health risks, financial risks, legal risks, and reputational risks. UNESA then performs a risk analysis using a risk matrix to determine the severity and likelihood of risk. Through an ISO 31000:2018:2018-based risk identification process, UNESA can better understand the risks that may occur in higher education and carry out appropriate risk management to reduce the negative impact of these risks.

Identification of risk factors in Higher Education Legal Entities (PTN-BH) is a process to identify factors that can affect risk, such as the internal and external environment, organizational goals, and available resources. In carrying out risk management, universities of legal entities must also consider the factors that affect risk. In addition, the college of legal entities must also have an action plan in place to reduce or eliminate the identified risks. By conducting risk management effectively, universities can reduce the negative impact of the risks faced and improve the performance and reputation of the organization.

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