Risk Identification in Semi-Autonomous Vocational Schools: How Effectively Has It Been Implemented?

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Abstract. Nowadays, many public sector institutions implement risk management, including Semi-Autonomous Agencies or Badan Layanan Umum (BLU). Those institutions have identified their risks, which have been documented in a risk register, as the output of risk management. This study aims to review the effectiveness of risk identification conducted in eight BLUs of higher education. This article uses a qualitative- descriptive method to assess the process and the output of risk identification. Data were collected from risk register reviews, key organization personnel interviews, and identification process observations. This study portrays that risk identification process still needs to be improved, as result of poor risk register. Both the process and the result of risk identification are not yet fully conformed to the best practices. Therefore, those institutions should cultivate the process and improve the result of risk identification by boosting participation and by developing competence of organization members.

Keywords: Risk Management; Risk Identification; Risk Register; Higher Education; Semi-Autonomous Agencies

1 Introduction

Leader's policy of several state universities in Indonesia to raise up the single tuition fee (UKT) has triggered public protests in Indonesia. Many parties object to the increase in single tuition fees in a university, which reaches 500% [1]. In the midst of the difficult economic conditions of the Indonesian people, the increase is considered very burdensome. Demands for canceling increase in the single tuition fees not only appeared in various media, but also occurred in the form of student actions on campus. The students stated that the university was seen as only prioritizing one-sided interests and not conveying adequate information to students. Apart from the demonstrations, criticism of the increase in single tuition fees was also conveyed by students through uploading video content on social media which made the campus report the student to the police even though the report was eventually withdrawn [2]. Furthermore, after considering suggestions from the public, the government finally decided to cancel the single tuition fees increment [3].

According to the Acting Secretary of the Directorate General of Higher Education, the increase in single tuition fees at some state universities was caused by several factors,

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starting from improving the quality of education, increasing economic costs, to the implementation of the Freedom of Learning Independent Campus (Merdeka Belajar Kampus Merdeka [MBKM]) program [4]. Previously, in 2020 learning activities in higher education were only carried out in classrooms and laboratories, but currently, learning activities in higher education are carried out with various activities, including involving practitioner lecturers, doing internships, and completing projects in assignments [4]. These reasons have led to an increase in operational costs, thereby encouraging universities, including universities which adopt Semi-Autonomous Agency (BLU) governance to optimize income, including income from single tuition fees, so that BLU universities can finance its operating activities and not be too dependent on the state budget. However, the single tuition fee set by BLU universities must not be commercial and must be feasible to all students.

The article 1 point 2 of Government Regulation Number 23 of 2005 on Public Service Agency Financial Management states that BLU, including BLU universities, has the goal to enhance services for the community in order for improving public welfare and for educating people. BLU emerged through an agencification process by delegating administrative tasks from ministries or government agencies to semi-autonomous bodies [5]. With agencification, the government transfers some of the duties and functions of the ministry to special vertical bodies outside the ministry [6] to encourage the management modernization process and improving the performance of public sector organizations in serving the community [7]. Although semi- autonomous bodies function to carry out government duties in providing services to the general public, those bodies are given more flexibility and authority than other government institutions so that the quality of services provided is better, transparent, and efficient [8].

The greater authority and flexibility of BLU has requires special arrangements in BLU management. In this case, the Government of the Republic of Indonesia has issued Government Regulation Number 23/2005 as amended by Government Regulation Number 74/2012. Furthermore, to simplify BLU arrangements, Minister of Finance issued Regulation No. 129/PMK.05/2020 on Guidelines for Management of Public Service Agencies. In Article 250 of that regulation, there is stated that BLU leaders are required to implement an integrated risk management program. The implementation of risk management at BLU is an obligation in order to fulfill the Indonesian National Standard (SNI) ISO 31000:2018, which is an adoption of the international standard of ISO 31000:2018. According to ISO 31000:2018, the risk management process consists of several stages: 1. determining scope, context and criteria, 2. risk assessment which includes risk identification, risk analysis and risk evaluation, 3. risk treatment, 4. communication and consultation, 5. monitoring and review, and 6. recording and reporting. Among these stages, risk identification is the most important stage and influences management's strategic decisions [9] because it is the basis for conducting risk analysis and risk evaluation [10].

Based on the data from the website of Directorate of BLU Financial Management Development, the number of BLUs in Indonesia in August 2024 is 320 institutions, 114 of which or 45% are BLUs in the education sector. BLU education is dominated by state universities and universities under ministries or state institutions. Among these BLU universities, there are vocational schools in the form of academies or polytechnics. All this time, vocational education has received little attention and has become the

second choice when continuing education, but slowly vocational education is starting to receive full support and attention from the government and is gaining a place in the hearts of the people [11]. Furthermore, vocational education has an important role in efforts to develop human resources in the country so that the effectiveness of implementing risk management, especially risk identification at BLU vocational schools is something that is very important to realize. If risk identification, analysis and management mechanisms are not implemented effectively, it will have a negative impact on the organization [12].

Based on the discussion above, it is necessary to conduct research to assess the effectiveness of risk identification at BLU vocational schools. Previously, there were several studies related to the effectiveness of risk management, such as that conducted by Jafari *et al.* (2011), Newman *et al.* (2018), Ghazieh & Chebana (2021), and Anh (2023). Likewise, there have been several studies related to risk identification such as research by Chapman (1998), Tchankova (2002), Häntsch & Huchzermeier (2013), Hanna *et al.* (2013) Dinu (2015), Baumann *et al.* (2016), Lagat & Tenai (2017), Vijayakumar & Arun (2017), Siraj & Fayek (2019), and George (2020). Research related to risk management at BLU has also been conducted by Triadi & Winaya (2017), Ningsih *et al.* (2016), Kurniawan *et al.* (2020), and Kurniawan and Mahrus (2024). However, these studies only focus on certain topic such as effectiveness of risk management, risk identification, or risk management at BLU vocational colleges. There is still very little research that discusses the effectiveness of risk identification in BLU vocational colleges. There is a study by Sumiyati & Tritjahjono (2020) which discusses risk mapping at one of the BLU vocational schools, but it only discusses risk mapping related to the internal control system and does not measure the effectiveness of risk identification.

Different from previous studies, this study aims to review and measure the effectiveness of risk identification at 8 BLU vocational schools in Indonesia, seen from two aspects which are the process aspect and the output aspect. This study will answer three research questions: (1) How effective is the risk identification process at BLU vocational colleges? (2) What is the quality of the risk identification output at BLU vocational colleges? and (3) What is the overall effectiveness of risk identification activities at BLU vocational colleges? This research provides an assessment of the risk identification practices that have been carried out by 8 BLU vocational colleges in accordance with predetermined criteria and then provides suggestions for future improvements.

2 Theorical Background

2.1. Risk Management Theory

Risk management began to be implemented around 2.400 years ago by the people of Athens, Greece, but was only formally implemented in the 1950s by the United States of America [30]. The concept of risk management cannot be separated from the definition of the term risk which was first published by Frank Knight in 1921 [31]. Defining the term risk is very important for discussing and developing the concept of risk management [32]. Considering that the concept of risk is complex and develops

dynamically, there are several different definitions of risk [31] which then influence the concept and definition of risk management.

There are several definitions of risk. Initially, The Australian and New Zealand Standard for Risk Management AS/NZS 4360:2004 defined risk management as a culture, process and structure directed at realizing potential opportunities and managing adverse impacts that may occur. However, this definition was revised in accordance with the definition of risk management according to ISO 31000 as coordinated activities to direct and control an organization in relation to risk. Meanwhile, The Institute of Internal Auditors (IIA) defines risk management as a process carried out by the management and employees of an entity, which is designed to manage risks in accordance with their risk appetite and provide adequate confidence regarding the achievement of the entity's objectives. Meanwhile, according to Minister of Finance Regulation no. 222/PMK.01/2021 on Risk Management for State Financial Management, risk management is a systematic and structured process supported by a risk-aware culture to manage risk at an acceptable level to provide adequate confidence in achieving targets. From these several definitions, it can be concluded that risk management is a management tool for controlling or managing risks, which is aimed at maintaining the achievement of organizational success [33].

Currently, risk management is one of the things that gets the main attention of executives so that many companies implement risk management [13]. Risk management is an important tool for managers to set the most appropriate decisions for the company so that they can increase the possibility of success in carrying out their duties [34]. The company or organization needs to implement risk management effectively to protect itself from various potential risks and minimize the impact of unexpected events [35]. Effective risk management is an effort to control future outcomes through active actions, not reactive ones [16]. The effectiveness of risk management implementation is influenced by several factors, including basic skills and knowledge regarding risk management, management commitment, an integrated risk management system, communication skills, and the availability of a budget related to risk management [14] [36].

Risk management is a process of evaluating an organization's risk level which is carried out systematically and realistically [20]. The risk management process consists of a series of scheduled administrative stages during which the organization must implement a risk management program and monitor the activities being carried out [12]. The risk management process consists of five stages that run simultaneously: risk identification, risk analysis, risk control, risk transfer, risk review [20]. According to ISO 31000:2018, there are several stages that must be carried out in the risk management process, namely establishing context, assessing risk, mitigating or handling risk, communicating and consulting on risk, monitoring and reviewing risk, and recording and reporting risk. In the assessment stage, there are three activities, namely risk identification, risk analysis, and risk evaluation.

2.2. Risk Identification

Risk identification is the first stage of the risk management process which is the basis for implementing the next stages [10] [18] and is the basis for developing a risk

management plan that is in accordance with the needs of the organization [24]. It is the most important stage in the risk management process because it seeks to identifying sources and types of risks, including recognizing potential risk events and clarifying risk responsibilities [37]. The importance of the risk identification stage is that if the organization fails to find or mistakenly detects potential dangers/threats to the organization or does not record a potential problem, then this organization will not benefit from the risk management process it carries out [33]. In general, the risk identification stage is considered to have the greatest impact on the accuracy of risk assessment [17] because it can influence all of the organization's tactics and strategic decisions [9]. Once risks are identified, appropriate planning processes can be undertaken to address those risks [24]. In this case, risk identification carried out correctly will guarantee the realization of effective risk management [18] [37].

Risk identification is the process of identifying possible risks and their potential impacts systematically and continuously using risk identification tools and techniques and then classifying each risk into the appropriate category, identifying its causes, and documenting its characteristics [38]. In another definition, risk identification is the process of identifying the potential positive or negative impacts of an activity using certain methods [22]. Considering that risk identification is a discovery process, it requires creative thinking, imagination, experience and knowledge of each party involved [39]. Furthermore, risk identification is a repetitive and continuous cycle [23]. In the risk identification process, an organization carries out comprehensive recording and documentation of risk sources, potential problems and causes of organizational losses [9]. Furthermore, in identifying risks, company management and employees must focus on identifying the most critical and frequently occurring risks [23]. In addition, although in general practice an organization focuses more on identifying negative risks (downside risks), organizations also need to pay attention to positive risks (upside risks) which can bring benefits to the company [40].

Risk identification is a difficult and challenging process, however most organizational managers tend to spend less time identifying risks and more time mitigating risks, even though risks that are not identified cannot be mitigated [24]. In risk identification activities, there are two main activities: recognizing sources of risk and opportunities and identifying risks and opportunities [20]. The purpose of risk identification is to detect and categorize risks and document these risks [20]. According to Al-Bahar and Crandall (1990) and Lam et al. (2007), risk is characterized by three components: the risk event, the uncertainty of the event, and the potential loss or gain. Next, the result of risk identification activities is a risk register [20]. The formulation of a complete risk in an organization is called a risk statement which consists of at least three elements: a statement about what events/events might occur, the cause or main cause of the event which is a risk, and the consequences or negative impacts arising from the risk event [33].

There are several techniques that can be used to carry out the risk identification process: brainstorming, scenario planning, expert interviews, nominal group methods, Delphi methods, Crawford slip methods, and influence or risk diagramming [20]. Among those techniques, there are three techniques that are often used by organizations: brainstorming, interviews, and SWOT analysis [10]. Meanwhile, the three alternative techniques that are rarely used in the risk identification process are the Delphi

Technique, Synectics, and Bisociation [10]. Furthermore, the quality level of an organization's risk identification process is determined, among other things, by the clarity and completeness of the documents used for risk identification, participation from organizational members and stakeholders, use of historical data, and integration of the risk identification process [42].

2.3. Semi Autonomous Agency

Semi Autonomous Agency or called Public Service Agency (BLU) is an administrative agency that is separate from ministries or government agencies, operated by civil servants, financed by the state budget, and subject to public law provisions [6], and has a special mandate in various economic sectors that cannot be provided by ministries or other government institutions [43]. BLU was formed to provide services to the community in the form of providing goods and/or services based on the principles of efficiency and productivity and without prioritizing profit making (Minister of Finance Regulation No. 129/PMK.05/2020). BLU has the main function of carrying out public tasks, such as regulation and coordination, conservation and management, research, social services, health, agriculture, education, technology and innovation, economic empowerment, and socio-cultural issues [43] [44]. The significance of the tasks given depends on the measurability of the output, political contribution, and the size of the budget [45]. Furthermore, in carrying out its duties, BLU is financed partially or completely by the state budget [46] and is given great autonomy by the central government to manage their human resources more effectively [47]. The status of BLU employees is government employees, but not necessarily civil servants, who must follow public administrative procedures [46].

The number of BLU in Indonesia has increased quite rapidly from year to year [46]. One of the reasons for the increase in the number of BLUs is the increase in public satisfaction with BLU services [48]. Based on a study of 250 articles related to granting autonomy in the field of public services, 27% of them explained that delegating authority to semi-autonomous bodies could increase public satisfaction, trust or political participation [49]. Therefore, currently most government hospitals and state universities in Indonesia have adopted BLU governance [50]. Almost all state universities and institutional ministry universities have adopted BLU to be more independent and more flexible in managing academic activities and higher education budgets [50]. This is in accordance with the mandate of Law 12/2012 concerning Higher Education which recommends that universities become BLU first before being able to upgrade their status as a more independent legal entity [50]. Among the advantages of being a BLU is that BLU is given flexibility in managing its finances so that it is able to improve services to the community by implementing sound business practices [51].

3 Research Method

This research employs two methods in data processing, quantitative and qualitative. Quantitative method is used to analyze and to assess the degree of effectiveness of risk identification, indicated by scores. On the other hand, qualitative method is assigned to

grab and to describe the experience and the real practice found from observing risk identification.

The numeric scores are resulted from assessing the practice of risk identification in the organizations researched. The analysis and evaluation is conducted through two facets of risk identification: process side and output side. These two sides are divided into several indicators for determining the degree of risk identification effectiveness. The scores consist of five scales, one to five. The scales consecutively from the least to the highest indicate how good is risk identification implemented.

Those five grades of the scale are constructed based on the analogy of risk management maturity rating. According to Risk Management Maturity Model for ISO 31000, known as ERMA ISO 31000 RM3, there are fives level of risk management maturity level [52]. These levels, from one to five, have the meaning of initial, repeatable, defined, managed, and optimized. Moreover, Ministry of Finance Regulation No. 191/PMK.09/2008 states the five levels of risk management maturity model: risk naïve, risk aware, risk defined, risk managed, and risk enabled. Those two five level ratings model define the maturity level of risk management that an organization has implemented.

The scale used in this research consists of five levels also. Those levels, from level 1 to level 5, indicate the quality of risk identification conducted by an organization. The higher the level, the better the quality of the risk identification. Level 1 indicates that the risk identification is worst. Level 2 demonstrates the poor of risk identification. Level 3 shows that risk identification has been conducted moderately and has sufficient results. Level 4 shows the good quality of risk identification. Lastly, level 5 signs the excellent risk identification process and the best quality of risk identification results.

The non-numeric aspects are used to explain qualitative aspects found in the organizations observed. These phenomena are found and collected through observation in risk identification process and by interviewing persons involved in the risk identification activities. This qualitative method of data analysis could deepen and better explained the immaterialized aspects of risk identification, especially in the process side.

The data analyzed in this research are primary data collected directly from the research objects. Those primary data consist of documentary data, namely risk register. The risk register is the documentation of the result of risk identification [33]. The risks identified and documented in the risk register are analyzed to determine the effectiveness of risk identification that has been conducted. Furthermore, the primary data are also derived from the observation and discussion with the personnel of the organization. According to Miles and Huberman (2014), the primary data used in qualitative research often emanates from interviewing the in-charge personnel.

This research focus only on the risk identification, not the whole process of risk management. Risk identification is a part of risk management process, where the potential problems are listed. This boundary concept is simply depicted by Figure 1 below.

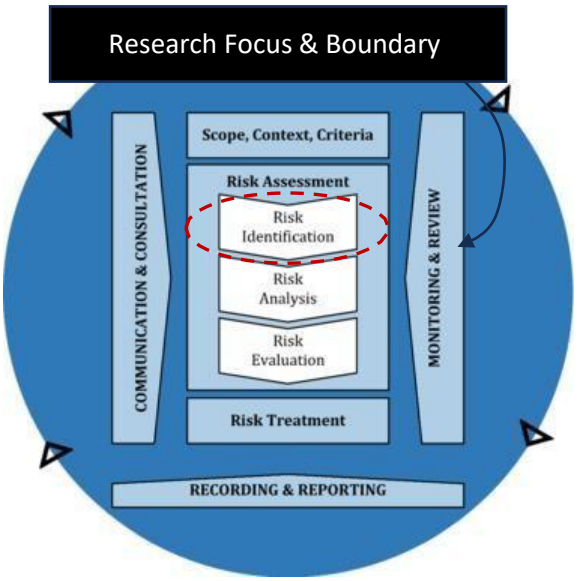

Fig.1 The Research Boundary: Risk Identification

The two aspects reviewed in this research are the process side of risk identification and the output side or the result of risk identification. The indicators used to analyze the process side consist of: (1) the involvement of all units in organization; (2) the participation from key personnels; (3) the guidance to identify risks; (4) the mechanism of risk agregation; and (5) the time to identify risks. On the other hand, the indicators implemented to analyze the output side consist of: (1) the comprehensiveness of risk register; (2) the arrangement of risk code; (3) the management of risk database; (4) the completeness of risk statement elements; (5) the logic interrelation of risk statement elements; (6) the clarity of risk statement; and (7) the relevance of risk toward organization's objectives.

The objects studied in the research are the semi-autonomous vocational higher education in Indonesia. There are eight schools (higher education) that have been observed in performing risk identification from 2022 to 2024. Those semi-autonomous (BLU) vocational schools are public sector organization that lay in the education sector. This fact makes the research focus on the same field objects, that is the risk about delivering vocational education.

4 Results and Discussion

4.1 General Results Analysis of Risk Identification

In the risk management process, risk identification is one activity as part of risk assessment. This activity is conducted in order to enlist and to register potential problem that could endanger organizations' goals. Risk identification should be done by relevant and competent personnel in the organization. As a result of the activity, the organization

will come up with a risk register for documenting the risk identification process.

In fact, the risk identification process generally has been conducted by all of the eight vocational schools being researched. Those vocational schools being researched have their own risk register showing their relevant risks. Based on the risk register, we have analyzed and evaluated the substantive content of the risk identification process and results. We have interviewed key persons in the schools in order to elaborate more on the way the organization does risk identification. The result of these processes are summarized in Figure 2 below.

No.	INDICATORS	VS 1	VS 2	VS 3	VS 4	VS 5	VS 6	VS 7	VS 8	AVG
PROCESS SIDE										
1.	The involvement of all units in organization	3	4	2	5	4	3	1	2	**3,00**
2.	The participation from key personnels	4	4	2	5	5	3	1	3	**3,38**
3.	The guidance to identify risks	4	5	2	3	3	1	1	1	**2,50**
4.	The mechanism of risk agregation	2	3	1	2	2	1	1	1	**1,63**
5.	The time to identify risks	3	5	3	4	4	3	2	3	**3,38**
		3,20	**4,20**	**2,00**	**3,80**	**3,60**	**2,20**	**1,20**	**2,00**	**2,78**
OUTPUT SIDE										
1.	The comprehensiveness of risk register	5	4	3	4	4	2	1	3	**3,25**
2.	The arrangement of risk code	4	4	2	3	3	2	1	2	**2,63**
3.	The management of risk database	3	4	1	3	4	1	1	2	**2,38**
4.	The completeness of risk statement elements	4	5	3	4	4	3	3	3	**3,63**
5.	The logic interrelation of risk statement elements	4	4	1	3	3	2	1	3	**2,63**
6.	The clarity of risk statement	3	4	1	3	3	2	1	3	**2,50**
7.	The relevance of risk toward objectives	3	3	2	3	3	2	2	3	**2,63**
		3,71	**4,00**	**1,86**	**3,29**	**3,43**	**2,00**	**1,43**	**2,71**	**2,80**

Fig.2 The Evaluation Result of Risk Identification

Firstly, all of the eight vocational schools being researched have implemented risk identification process. It is proven by the existence of risk register evaluated. Based on the interview to key persons in the vocational schools and the observation of risk identification process, we conclude that the scale of risk identification process lays beetween 2 and 3 (2,78 out of 5). The minimum score of the process side is materialized in VS 7, with score of 1,20 out of 5. On the other hand, VS 2 has the best score in conducting risk identification process, with the score of 4,20 out of 5.

Secondly, all of the eight vocational schools has presented their own risk register. Those risk registers have been evaluated by considering seven indicators. Based on the evaluation result depicted in Figure 2 above, the average score of output side is 2,80 (out of 5). The worst risk register score is 1,43; hold by VS 7. On the other hand, the best score of risk register is having by VS 2 with the score of 4,00 out of 5.

By considering the result depicted in Figure 2 above, it can be concluded that the risk identification process conducted by those all BLUs of higher vocational education is not sufficient enough. Eventhough, there are three schools that have good scores, but majority of the schools being observed have implemented risk identification poorly. The score of 2,78 shows that in average, the vocational schools is still far away from implementing the best practices of risk identification.

Furthermore, the score of 2,80 in the output side also shows that the quality of the risk

register is not good enough. There are many flaws and deficiencies in their risk registers. In terms of the quality of risk register, there is only one vocational school that has score of 4,00 (VS 2) showing the good quality of risk register produced by the risk identification conducted. Based on the two results analysis, it can be simply concluded that the risk identification has been implemented. However, the process does not fully comply with the best practices and the result is having poor quality.

4.2 Process Side Analysis of Risk Identification

Based on Figure 2 above, the process side shows the score of 2,78 (out of 5) in average. This score means that generally the vocational schools have not yet implemented risk identification process by considering best practices guided by the standards. Risk identification process should be conducted through systematic process guided by the organization regulation, such as minister decree or other internal regulation toward risk management implementation. The organization could also use ISO 31000 as the guidance in identifying its risks.

Through observation and interview, it is found that there are several lacks in risk identification. Generally, the risk identification process is conducted by only one dedicated person that appointed by the manager in the organization. Unfortunately, the dedicated person has no sufficient knowledge and competency in implementing risk management. This person arranges risk register solely. As a result, the risk register yielded does not having good enough quality and does not reflecting potential threats of all divisions within the organization.

The minimum score of process side is 1,63 in average. The score indicates that all of the vocational schools do not have a mechanism to state their organizational risks. There is a confusion among the organization member toward how to acknowledge individual risks, subdivisional risks, divisional risks, or organization risk as a whole. This condition is resulted from the lack of mechanism to aggregate risks from the smallest unit to the unit as a whole. For example, all subdivisions within the organization have identified total of 150 risks. The problem is whether the all of the 150 risks is the risks belong to the organization. Should the organization report the all of 150 risks? This is a problem that confusing how to answer which one is the risk of the organization. This problem could be overcome by setting risk agregation mechanism. This mechanism gives a guidance to set the arrangement of risk in the individual level, subdivisional level, until the organizational level.

Like the lack of risk agregation mechanism, the observed schools have not enough guidance for organization member to identify their organization risks. Internally, the all vocational schools do not have spesific internal guidance to identify unique risks in the organization. It is important to set specific guidance for directing organization members' in identifying their unique risks based on their organization context. This condition could lead to the poor quality of the risk statement expressed in the risk profile. The respondents stated that they cannot identify risk comprehensively because their organization has no specific guidance about how to identify their organization risks.

In regard to the time the organizations conducting risk identification, the related score

is the highest among the other indicators. Based on the observation and discussion with the respondents, most all the schools have identified their risk at the beginning of the risk management period. Kurniawan (2023) says that risk assessment, including risk identification, should be conducted in the beginning of time horizon, the time of risk management period [33]. Generally, the observed schools have conducted risk identification in the period of January to April. The earlier organization identify risks, the more beneficial the impact of risk management.

Besides the time to identify, the personnel to identify the risk also has the highest score, 3,38 out of 5. Based on the observation, most persons that involved in the risk identification have knowledge to the business process of the organization. Moreover, before they identify the risk, they conduct a sharing session about risk management theories and concepts internally. The only problem about the participation of organization members in idetifying risks is the less number of the participants.

Furthermore, the participants to identify risks do not derived from all divisions in the organization. In the beginning, the participants from all divisions have been assigned to join the risk identification process. However, in fact, some of the appointed personnels cannot join the process because of the other assignments. As a result, in several vocational schools, still there is at least one division or subdivision that does not have a risk register. Based on the discussion, the respondents express their agreement that all divisions must be involved in the risk identification process. Nevertheless, the awareness among all division and all subdivision members to identify their own risks is still weak. Moreover, there is still exist a wrong paradigm among the members of the organization stated that risk identification should be done by internal audit division only, not the whole division within the organization.

4.3 Output Side Analysis of Risk Identification

Figure 2 above shows the worst score of 2,38. The score is given to the indicator of risk management database. Generally, the vocational schools evaluated do not have good risk management database system. They have documented risk register in each divisions or subdivisions separately and unsytematically. This condition results in the difficulty to search, to find, and to retrieve the intended risk. Because of the lack of risk database, there is not an interrelated risk database within the organization. Moreover, almost all of the organization being evaluated do not have specific application to implement risk management, including risk identification activity. After they identified their risks, they only store their risk register using forms in the Microsoft Excel.

The second worst score (2,50) is about the clarity of risk statement. Kurniawan (2023) states that risk statement should be stated clearly, so that the others can be able to understand and to interpret organization risk as the same as the organization's interpretation [33]. Clear risk statement could help to the other persons in understanding the organization risk register. It can also eliminate potential bias and misunderstood toward organization risk interpretation. The respondents say that they still struggle with the risk statement arrangement because of the less guidance in proposing risk statement.

The less clear risk statement will affect to the substance of risk statement itself. In this research, it is proven that the third worst score after the unclear risk statement is the

less correlation of risks identified to the organization objectives and the less logic interrelation among the elements of the risk statement. Kurniawan (2023) express that there are three elements of risk statement: event, causes, and impacts [33]. These three elements should correlate highly and construct logical relationship among the elements. Based on the risk register evaluation, it is found that there are many risks that have less correlation to the organization objectives. For example, it is less correlation toward the organization objective to produce good quality alumny to the risk of unachieved campus revenues target. Furthermore, there are some risks that have illogical correlation among risk event and its consequences. For instance, the risk event stated is about the students fail to pass the exam and the consequence is the financial aspects toward the organization. The respondents express that they still have less knowledge about proposing organization risk. Furthermore, they say that they are newbie with less experience in doing risk identification.

As the result of having no risk database, the risk register being evaluated shows the fact that there is no risk code to register organization risks. It has been indicated by the score of 2,63 showing unsufficient risk code. In order to construct good risk database, each risk statement should be coded systematically. The code is unique to every single organization. Almost all of the vocational schools have not yet developed a risk code to roster their risks. The respondents say that they have not developed the risk code because of the lack knowledge about it.

The two highest scores in the output side are the comprehensiveness of risk register (3,25) and the completeness of risk statement elements (3,63). The comprehensiveness of risk register is reflected by the reference used to identify organization risks. All of the vocational schools have used objectives and key performance indicator stated in the organization strategic plan document. In the other side, the completeness of risk statement elements literally has been imposed by the regulation. The regulation used by the vocational schools being evaluated explicitly states the elements of risk statement: event, causes, and impacts. Also, the regulation of risk management implementation provides a set of form to document the elements of risk statement, including risk code and risk category. To sum up, the regulation becomes the primary factor that causes the highest score of the indicator. Nevertheless, based on the evaluation to the risk register, it is found that several, not many, risk statement has incomplete risk statement elements.

5 Concluding Remarks

5.1 Conclusion

The study aims to review the effectiveness of risk identification that has been conducted by eight BLUs of higher vocational education. This research uses primary data collected through interview, observation, and document (risk register) evaluation. The four researchers are involved in the data collection process and in the assessment of the data research. In doing so, there are two aspects scrutinized – process and output – with total 12 indicators.

This study indicates that risk identification has been conducted by all of the BLUs of

higher vocational education. All of the higher vocational education have had their own risk register as the result of risk identification process conducted. However, the scores resulted from the assessment shows that both process side and output side, indicate insufficiency in the risk identification conducted by the higher education.

In the process side, with the score of 2,78 out of 5 scale, those organization still confuse to mention the proper exact organization's risk due to the lack of guidance to the risk aggregation. Furthermore, the organizations still have no specific guidance to identify their relevant risks. As a result, the organizations cannot result risk identification process that fully comply to the best practices.

On the other hand, output side has the score of 2,80 out of 5 scale. The most important thing to be considered from the output side is the existence of risk database. The lack of systematic risk database could lead to the insustainability of risk management implementation. Several points to be considered because of the low score of the output side are simply about the low quality of risk statement. The absence of risk code, the unclear risk statement, the illogical relation between risk statement elements, and the irrelevant of risk toward organization objectives are the points to be improved in order to yield in good risk register.

Based on the low scores and the explanation above, we conclude that the risk identification process conducted by the eight BLUs of higher vocational education have not fully comply with the best practices. This condition lead to the low quality of the risk register resulted by the process of risk identification. Considering the two factors, it is concluded that the risk identification in the BLUs higher education has not been conducted effectively.

5.2 Implication and Limitation

Indicating by the results and discussion of the research, there are some lessons that could be learned. Organization should put attention more on risk identification. It is because risk identification is the primary activity in doing risk management process. Risk that unproperly identified or barely not identified will cause an organization in a risky condition, despite the organization has impelented risk management. In the case of the object of the research, it is shown that risk identification might not yet properly conducted. In the future the vocational higher education should put attention on risk identification. The real action might be taken by the vocational schools is by upgrading competence and skill of the organization member in risk identification. Moreover, the schools should raise up the awareness of organization member to identify risk by adhering to best practices.

Based on the result of the research, risk identification should be directed to succeed relevant organizational objectives, so that the benefit of risk management could be reaped. The risk statement must be clearly stated and should be presented clearly. Furhtermore, the most siginificant effort should be directed to build complete and integrative risk database. As a result, risk register can be able to produce risk statement that is complete and has logic relationship among its components: events, causes, and impacts.

This study has several limitations. The research covers small number of research

objects, eights object study conducting through qualitative research. Furthermore, the research is originating from the same type of tertiary institution, namely the vocational higher education in the form of BLU. Moreover, the research only focuses on one part of risk management process, that is risk identification. Future research is expected to increase the number of objects study and may cover other segment or field of the samples. The next research might be directed also to study the other activity in risk management process.

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