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Operational Risk Mitigation Based on Risk Management ISO 31000:2018 – Balanced Scorecard to Increase the Income and Reputation: Case Study at IEC

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Abstract:

The purpose of this study was to evaluate and mitigate operational risks in the International English Center (IEC) to enhance its income and reputation. The research employed an integrated framework that combines ISO 31000:2018 and the Balanced Scorecard. Data collection involved questionnaires and in-depth interviews with the director of the enterprise. Operational risks were assessed across seven dimensions, including internal and external fraud, employment practices and workplace safety, clients, product, and business practices, physical property damage, business disruption and system failures, and task execution and completion, as well as management processes. The research findings led to the development of a risk management plan based on the integration of ISO 31000:2018 ERM Process and the Balanced Scorecard. Based on the evaluation results, priority attention should be given to the dimensions of task execution and completion, as well as management processes, along with physical property damage. By implementing a combination of these frameworks, the enterprise can not only enhance its income and reputation but also achieve its overall objectives.

Keywords: *Balanced Scorecard, ISO 31000:2018, Operational risk; Risk management score*

1. Introduction

Risk management at higher education institutions is critical for safeguarding stakeholders' interests, guaranteeing operational continuity, increasing reputation, preserving financial stability, adhering to rules, promoting innovation, and responding to a quickly changing higher education landscape. It promotes the long-term viability and success of HEIs in carrying out their educational mandate and societal responsibilities. Every organization or enterprise can't avoid things called risk, no matter whether it comes from internal or external. Jr and Lane, (2006) state that risk in general defined as the possibility of loss. Risk is the uncertain events that create disadvantages that

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result in an organization, such as delays in delivery, financial cost, and business loss (Mangla, Kumar & Barua, 2016). In risk, there is a probability of events that happen while the following is related to the effect of the event (Effeney, 2019). Therefore, the organization needs to know and realize that risk management is important to face the uncertain event. By effectively managing these risks, HEIs can safeguard their operations, protect their reputation, and ensure the provision of quality education and research opportunities.

Likewise in the context of the International English Center (IEC) as a business entails dealing with numerous disruptions and risks. To thrive, the IEC strives to provide exceptional service to its students and customers while continuously innovating its course programs to meet their needs. Moreover, the IEC fosters a healthy and positive community environment, supporting students academically and socially. Beyond the academic realm, the center organizes various extracurricular activities to ensure students make the most of their free time. However, amidst the operational activities, the IEC faces challenges in running events optimally. The absence of a planned approach to tackle unforeseen circumstances has led to errors in responding effectively. Consequently, these shortcomings have resulted in both financial and non-financial losses for the IEC. Despite the significance of optimal risk management in any enterprise, the International English Center lacks a standardized framework and established risk management processes.

Risk in an enterprise is essential to be controlled by applying the risk management process. Research proved that the application of enterprise risk management (ERM) can increase the performance and the enterprise's value (Hoyt and Liebenberg, 2015, Nocco and Stulz, 2006). Enterprise risk management (ERM) is a framework for scoring and risk management. ERM manages risk in organizations integrated and holistic manner, by considering interdependence in all risks (Gatzert and Schmit, 2016). ERM is a coordinated activity meant to direct and control the organization related to risk (Ahmed and Manab, 2016).

Besides that, by not applying enterprise risk management (ERM) yet, the International English Center needs to integrate enterprise risk management and a balanced scorecard (BSC). Whereas the application of ERM needs a summarized strategy for the balanced scorecard (BSC) outline. Integrated ERM and BSC frameworks provide more comprehensive information for the senior management about the performance and risk relationship compared to the implementation of both unintegrated management.

The activation integration to BSC and ERM can increase the financial performance and the institution's reputation (Beasley, Nunez, & Wright, 2016). In case study research related to risk mitigation (Gladies & Pangeran, 2020), the implementation of ISO 31000 integrated with BSC in doing the risk mitigation is expected to decrease the risk so that the enterprise can reach the goal of BSC strategy. In the International English Center context, integrated ERM based on ISO 31000:2018 and BSC can increase the financial framework, and the reputation is expected to increase the framework, especially in increasing the income and reputation.

Operational risk becomes one of the important risks that need to be minded especially in higher education. Basel II committee defined operational risk "as loss risk caused by inadequate or the failure of internal process, human, system, or external cause. Operational risk gives severe consequences (Cummis, et all., 2006), and the number of losses in operation events in the past emphasizes the need for measures and adequate operational risk management (Eckert and Gatzert, 2015). So is the reputation, the same as other enterprises', they compete to get customers, and they also compete for reputation. The public builds the reputation based on the provided information about the enterprise's activity from the enterprise itself, from the media, or another observer (Fombrun and Shanley, 1990). Eckert and Gatzert (2015) stated that the finance operational enterprise loss caused severe reputation loss. Besides that, reputation loss can be more disadvantages than the initiated operational, and ignoring the reputation loss can cause a low score to the operational risk in certain types and especially fraud (Eckert and Gatzert, 2015).

Education institutions must manage operational risk by correctly applying control processes. It comprises the formulation of policies and procedures, training employees to deal with operational risks, frequent monitoring and control, and disaster recovery planning. The educational institution can improve its performance and reputation by minimizing operational risk. Effective risk management can assist prevent operational disruptions that can impede the delivery of high-quality educational services. It may improve student happiness, make the school more appealing to prospective students and parents, and boost stakeholders' trust and favorable image.

2. Review of Literature

Institutional Theory

Organizational dynamic is getting complex (DiMaggio & Powell, 1983). The approach of the Chowdhury system, 2021 explained that institutional theory sees the organization as an interdependent factor including individual, group,

attitude, motive, formal structure, interaction, purpose, status, and authority. Each unit works together so the organization's objectives can be reached. The activity of the organization can cause risk inside. Darmawi, 2017 elaborates that risk management is a system to know, analyze, and also to control the risk in every organization's activity to gain effectiveness and efficiency in the institution. The institutional theory highlights the influence of external institutional pressures on higher educational institutions. By managing risks associated with compliance, legitimacy, and reputation, and aligning with prevailing norms and expectations, institutions can improve their performance and enhance their reputation within their institutional environment. Implementing effective risk management practices enables institutions to navigate the complexities of their institutional context and achieve sustainable success.

Signaling Theory

Signaling theory is one of the theories which relates the information to the background of the problem. The enterprise is using this theory to give a positive or negative signal. The enterprise is using the signaling theory to reveal whether implementing good corporate governance can create a good quality to increase the enterprise's value (Andarini and Indira, 2010). One of the signals of implementing corporate governance issued by the government is the revealing of risk management (Almilia and Prayoga, 2013). Signaling theory suggests that educational institutions can manage risks and enhance performance and reputation by strategically deploying signals to communicate their quality, credibility, and commitment to stakeholders. By leveraging various signaling mechanisms, institutions can mitigate risks associated with uncertainty, information asymmetry, and reputational damage while building trust and confidence among stakeholders. According to signaling theory, educational institutions may manage risks and improve performance and reputation by proactively communicating their quality, trustworthiness, and commitment to stakeholders. Institutions may manage risks related to uncertainty, information asymmetry, and reputational harm by using diverse signaling systems while also creating trust and confidence among stakeholders.

Resource Based Theory

Resource-Based Theory (RBT) proposed that the resources owned by the educational institution become the source of competitive advantage if it is well managed. Resource-based theory or RBV applied after the action. In particular, this theory interpreted that reputation is a precious intangible resource and rare because it is difficult to be imitated and rare, which directs to sustainable advantage. Risk management in the context of operational risk at an educational institution may improve work performance and the school's reputation. By identifying critical operational resources, assessing operational risk, and implementing control measures, the educational institution may optimize

resource utilization, reduce risk, and achieve better outcomes in a risky environment.

Enterprise Risk Management (ERM) and ISO 31000:2018

Enterprise Risk Management is one of the techniques developed to address the complex business challenges in the global market. Risk management is identifying, assessing, and risk priority accompanied by the resource implementation economically and coordinated to minimize, observe, and control the possible effect of unprofitable events (Njogo, 2012). ERM benefits the organization by increasing the interest-bearing value, competitive advantages, performance, and the organization's capability to reach its purpose.

ISO (International Organization for Standardization) is a world federation of national standardization agencies, that are members of ISO. In February 2018, International Organization for Standardization (ISO) released a new standard for risk management which is ISO 31000:2018 Risk Management – Guidelines. Susilo, 2018 stated that the ISO 31000:2018 components are made of the risk management principle, risk management framework, and risk management process (see Figure 1).

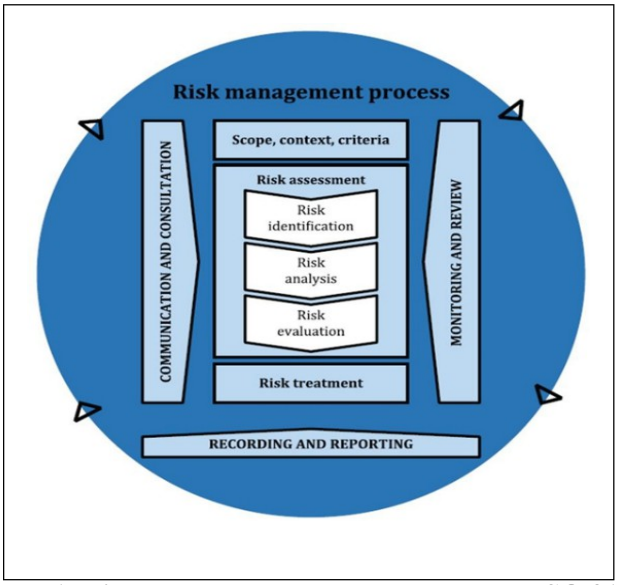

Figure 1. Risk Management Process based on ISO 31000
Source: ISO 31000: 2018

Risk management principles refer to fundamental concepts and guidelines that underpin effective risk management practices. The framework in the implementation of risk management is made as the rule and the foundation of the organization. While the risk management process refers to the series of steps

or activities involved in managing risks within an organization. It typically follows a systematic and iterative approach to identify, assess, treat, and monitor risks. The risk management process aims to reduce uncertainty, optimize resource allocation, and enhance decision-making by systematically addressing and managing risks throughout the organization.

According to ISO 31000:2018, the risk treatment has five options, that are: (1) Avoiding the risk, activities that are at risk are not carried out. (2) Accepting risk, no management risk. (3) Transferring risk, transferring part of the treatment risk to a third party. (4) Risk mitigation, the purpose is to reduce the risk, the risk possibility, or both.

Operational Risk

Basel II defined operational risk as the caused risk by the failure of the internal process, human, system, or from external activity. Ikatan Bangkir Indonesia (2015), categorized operational risk.

Table 1. Operational Risk Indicator

Risk Dimension	Definition
Internal Fraud	Losses caused by the crime intentionally involve at least one internal employee. An example of the activity is transaction manipulation, a Violation of the code of ethics, etc.
External Fraud	Losses due to actions intended to deceive, property abuse, or avoiding law by a third party. An example of the activity is burglary, and cheque forgery, damage caused by hacking.
Employment Practices and workplace safety	Losses due to actions not in accordance with the law or the employment agreement, health or safety, from payment of personal injury claims.
Clients, Products, and Business Practices	Losses caused by the failure unintentionally or neglect to fulfill the professional obligation to a certain customer. An example is product conformity, disclosure, and fiduciary.
Physical Property Damage	Losses caused or physical property damage caused by the natural disaster. The activity example is natural disaster losses, terrorism, etc.
Business Disruption and System Failures	Losses caused by business disruption or system failure. The activity example is the hardware failure, software failure, telecommunications, and damage or disruption of utilities.

Task Execution and Completion; and Management Process	Losses due to transaction process failure or management process related to customer's services. The activity example is communication errors, data input errors, etc.

Balanced Scorecard (BSC)

The balanced scorecard is a framework by combining measures of enterprises' strategy. Akbarzadeh, 2012 stated that a balanced scorecard is a management system used by organizations to translate vision and strategy into action. Balanced Scorecard (BSC) is used to translate mission and strategy into many purposes and real dimensions composed of four perspectives. Kaplan and Norton, 1996 in their book mentioned four perspectives: (1) Financial perspective; is related to profitability, sales growth, or the creation of cash flow. From a financial perspective, the enterprise strategy target includes optimization of the utilization of property and income growth. (2) Customer perspective; is related to customer and market segment whereas business units are competing in the target segment. (3) Internal business process perspective; is related to organization process or the enterprise is needed to be controlled well to assess so that attract and maintain the customers. (4) Learning and growth perspective; is related to three main humans.

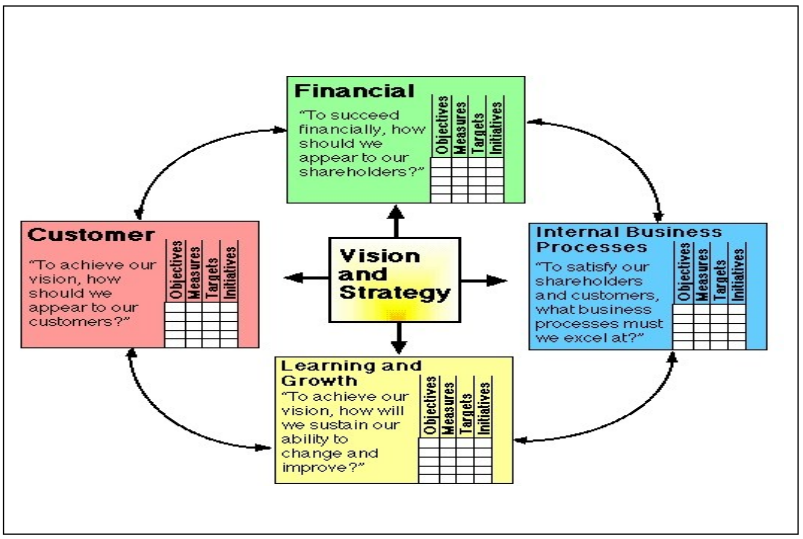

Figure 2. Balanced Scorecard Perspective

Integration of Enterprise Risk Management and Balanced Scorecard Frameworks

Overall, ERM sees the enterprise's condition through event risk done with strategy and consistency. The main purpose is to make sure that the enterprise value is maintained and even increased (Beasley et all., 2006). Balanced

Scorecard (BSC) is a management system in which general performance strategy measurement is used, whereas connecting mission and organization strategy aligned with the strategy. Balanced Scorecard explicitly connects risk management with the performance strategy (Olson and Wu, 2017). BSC framework can help compose and communicate risk management tasks (Calandro and Lane, 2006). ERM sees through risk events that possibly happen and affect the achievement of the purpose process strategy in BSC.

Customer Perspective in the Balanced Scorecard emphasized the education season morally and new students who joined the course at the IEC. In this perspective, there is operational risk attached, that is how well the operational system can affect the increasing number of students registered at the IEC. Internal Business Process Perspective focused on innovative curriculum and superior services. The operational risk includes the external fraud dimension; clients, products, and practice business; physical property damage; business disruption and system failures; and task execution and completion and management process. If the enterprise can do the right service and fast match the student's needs, and provide an innovative curriculum appropriate to the demand of the market, the students will be satisfied to take courses at the IEC.

Table 2. Risk Dimension and Balanced Scorecard

Risk Dimension	Balanced Scorecard Perspective			
	Financial Perspective	Student Perspective	Internal Process Perspective	Learning and Growth Perspective
Internal fraud	X			
External fraud			X	
Employment Practices and workplace safety	X			X
Clients, Products, and practice business			X	
Physical Property Damage			X	
Business Disruption and System Failures			X	
Task Execution and Completion; and Management Process			X	X

Source: Survey Data (2023)

The learning and Growth Perspective focused on the motivation and the development of the staff. The event related to the operational risk in the learning and growth connected to the enterprise's human resources. Then, human resources are expected to be competent in realizing the development of the

curriculum or the services so they can attract new students. Financial Perspective focused on the growth of income and optimizing the use of the property. The event of operational risk related to the fee and the benefit can detain the target achievement from the financial perspective. Therefore, IEC needs to do a risk assessment and appropriate treatment suitable for the enterprise's capability in facing the risk. Operational risk influenced the financial perspective: internal fraud dimension, employment practices, and workplace safety. BSC should be comprehensive but effective in measuring the performance activity to execute strategy, while ERM should measure the risk resulting from the activity (Calandro and Lane, 2006). The integrity of BSC and ERM enables ERM to improve the effectiveness of a balanced scorecard.

3. Research Method

The case study research was conducted at International English Center (IEC). The institution work in the field of English Language Institute Services. The research is a study case research with quantitative and qualitative methods. There are two processes done in this research, which are to determine the company's objectives by making an analysis balanced scorecard and to apply the risk management score based on ISO 31000:2018. In applying the risk management score based on ISO 31000, the company needs to determine the effect criteria, the possibility, and the risk levels (see Table 3, Table 4, and Table 5). For data collection and preparation of strategic objectives, developing questionnaires, and risk registers, this study intensively involved IEC leaders.

Table 3. Risk Impact Level Criteria

Effect	Insignificant (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Income	Deviation: 1%-10% of the income target	Deviation: 10%-20% of the income target	Deviation: 20%-30% of the income target	Deviation: 40%-50% of the income target	Deviation: 50% of the income target
Reputation	Filling out the questionnaire at the end meeting is at 4 ratings	Rumored, uncovered by the media, has little impact on staff morale	Making not a good review, in public, and on social media	Loss of customer interest	Prosecuted

Source: Survey Data, 2022

Table 4. Risk Probability Level Criteria

Probability Level	Frequent each semester	Score
Rare	1 time in a period	**1**
Unlikely	1-2 times in a period	**2**
Possible	3-4 times in a period	**3**
Likely	4-5 times in a period	**4**
Certain	>5 times in a period	**5**

Source: Survey Data, 2022

Table 5. Risk Level Criteria

Score	Risk Level	Performance	Risk Response	Priority
20-25	**Very High**	Need responsive action for the risk management	Mitigate, Share, Avoid	I
16-19	**High Risk**	Need preventive or responsive action		II
12-15	**Medium Risk**	Need preventive action	Mitigate	III
6-11	**Low Risk**	Does not need any action, if possible, action can be done	Accept	IV
1-5	**Very Low Risk**	Does not need any action, only control		V

Source: Data Management Results

4. Result and Discussion

The research started by deciding objectives on each perspective in the balanced scorecard, as shown in the following figure 3.

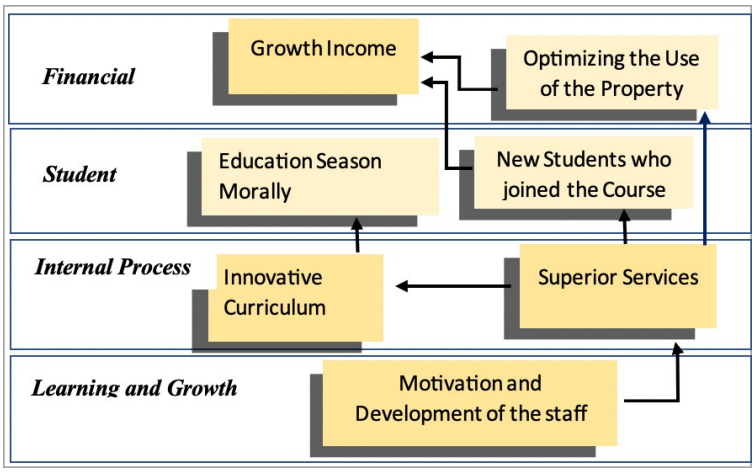

Figure 3. IEC's Strategy Map – Balanced Scorecard
Source: Survey Data (2023)

An interview conducted at the IEC was to decide the enterprise's strategy market, performance measurement, target achievement, and future event planning. Determination BSC process aims to see the enterprise's objectives detailed and help identify the risk that can detain the purpose. The balanced Scorecard can be seen in Figure 3 about the IEC's map strategy. The next step is applying a risk management score based on ISO 31000:2018. By doing risk identification, risk analysis, risk evaluation, and risk management.

Risk Identification

Risk identification is purposing of finding risk events at the IEC related to the business's failure to achieve a target or the enterprise's purpose. Besides that, risk identification is used to find the cause of the risk event, the possibility, and the effect. Table 6 presents the result of risk identification that has been carried out; got 28 risk events. The risk event identified as 3 operational risk events from the internal fraud dimension; 3 events from external fraud; 4 events from employment practices and workplace safety; 2 events from clients, product, and business practice dimension; 4 events from physical property damage; 2 events from business disruption and system failures; 10 events from task execution and completion, and management process.

Table 6. Risk Identification

Dimension	Events Description at the IEC	Risk Code
Internal Fraud	Unrecorded financial transactions in the system	IF.02
	Abuse of the foundation's physical properties by an unauthorized party	IF.01
	Unprofessional on the teaching schedule responsibility	IF.03
External Fraud	Data burglary by the IEC partner	EF.01
	Impersonation IEC service system	EF.02
	Damage by IEC academic information system hacking	EF.05
Employment Practices and Workplace Safety	Low compensation or the employee income	EP.01
	No salary allowance on overtime work hours	EP.04
	Low on time off given to the employees	EP.05
	Periodic wage increases	EP.03
Clients, Product, and Business Practices	Services that are not following the procedures	CPB.02
	Learning methods are not following the learning target	CPB.08

Table 6. (Continued)

Dimension	Events Description at the IEC	Risk Code
Clients, Product, and Business Practices	Services that are not following the procedures	CPB.02
	Learning methods are not following the learning target	CPB.08
Physical Property Damage	Damage to buildings caused by natural disasters	KAF.01
	Damage to transportation or building by an external party	KAF.04
	Utility disruption to the IEC physical properties	GBKS.04
	Provided facilities are not taken care of by the student	KAF.02
Business Disruption and System Failures	Not updated user information in applying the hardware	GBKS.03
	Lack of a digital archive database to store student data	GBKS.02
Task Execution and Completion; and Management Process	Miscommunication	EM.01
	Failure on class settlement	EM.05
	Delay in the class settlement	EM.06
	The employees are not yet able fulfilling the market target on time	EP.07
	There is no good governance system yet	GBKS.01
	Management systems and management processes are still conventional	GBKS.05
	The monitoring system in the learning process is not optimal	EM.09
	The evaluation system for graduate learning achievement is not optimal	EM.08
	Deviant behavior related to refund requests from students	EF.03
	Registered students are not age-related eligibility	EM.03

Source: Survey Data

Risk Analysis

After identifying the risk, the next step is risk analysis. Risk analysis includes detailed risk events, the potential cause, the effect of failure, the possibility, and controlling the risk that might disrupt the enterprise's purpose. From the interview, the risk analysis obtained the effect criteria score, possibility criteria, and risk level. Determination of the effect criteria, possibility, and risk level determined in the initial conceptualize stage with the enterprise's director.

Table 7. Inherent Risk

Inherent Risk Of Financial Impact					
Risk Dimension	**Risk Event Code**	**Freq per Semester**	**Impact**	**Risk Level**	**Score**
KAF.01	GBKS.04	4 - 5	30%-40%	HR	16
EPT.02	EM.06	4 - 5	20%-30%	MR	12
EPT.02	EM.09	4 - 5	20%-30%	MR	12
EPT.02	EP.07	4 - 5	20%-30%	MR	12

Notes: KAF = Physical Property Damage EPT = Task Execution and Completion; and Management Process

Table 8. (Continued)

Code	Risk Event
GBKS.04	Utility disruption to the IEC physical properties
EM.06	Delay in the class settlement
EM.09	The monitoring system in the learning process is not optimal
EP.07	The employees are not yet able fulfilling the market target on time

Table 7 presents operational risk on the financial effect resulting on four events on high-level risk and medium-level risk, that are GBKS.04; EM.06; EM.09; and EP.07; the frequent on each event are equal. Whereas the event was on physical property damage; and task execution and completion and management process. High risk is on a score of 16 and medium risk is on a score of 12.

Inherent Risks mapping is a Figure of the risk analysis result and is a result of impact and probability multiplication. All events related to operational risk, are analyzed based on the risk level mapping. From the risk mapping, evaluated and handled on risk level above risk line tolerance. Inherent risk mapping to financial effect, as followed in Figure 4, can be seen through operational risk events that affected finance there are 12 events on the very low-risk level and 12 events on the low-risk level. The event below the risk line tolerance, which is on the green is determined by the enterprise and doesn't need any handle or risk treatment.

The effect of the non-financial aspect is reputation, which influences the operation of the IEC. Operational event result has a role in the reputation, as follow in Table 8.

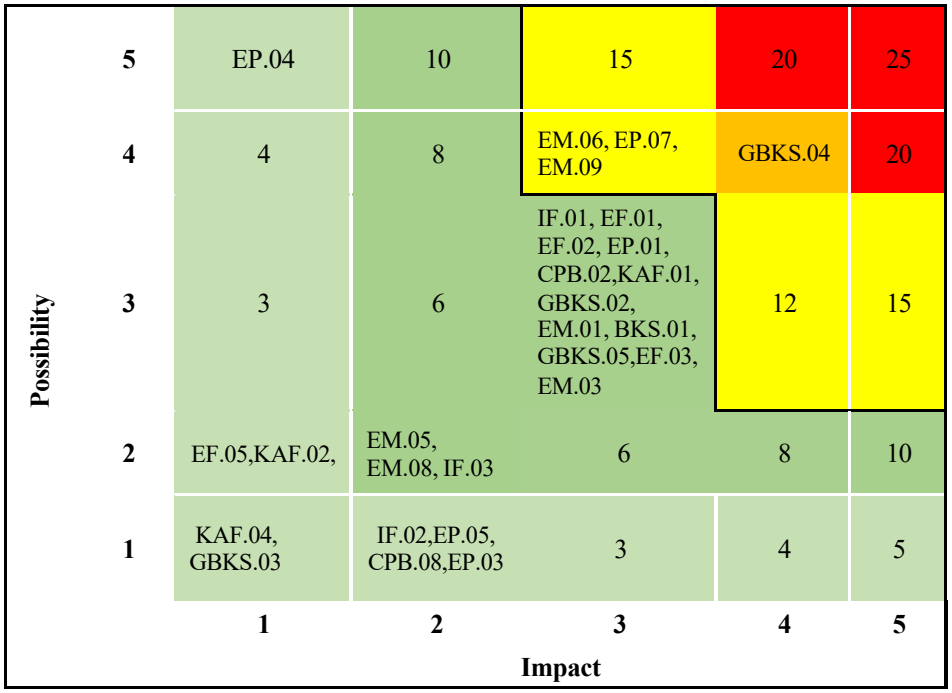

Figure 4. Inherent Risks Mapping to Financial Effect
Source: Survey Data (2023)

Table 8. Inherent Risk

Inherent Risk of Reputation Impact					
Risk Dimension	**Risk Event Code**	**Freq per Semester**	**Impact**	**Risk Level**	**Score**
EPT.02	EF.03	3 – 4	Loss of customer interest	MR	12
EPT.02	EM.06	4 – 5	Making not a good review, in public, and on social media	MR	12
EPT.02	EM.09	4 – 5	Making not a good review, in public, and on social media	MR	12
EPT.02	EP.07	4 – 5	Making not a good review, in public, and on social media	MR	12

Notes: EPT = Task Execution and Completion; and Management Proces

Table 8. (continued)

Code	Risk Event
EF.03	Deviant behavior related to refund requests from students
EM.06	Delay in the class settlement
EM.09	The monitoring system in the learning process is not optimal
EP.07	The employees are not yet able fulfilling the market target on time

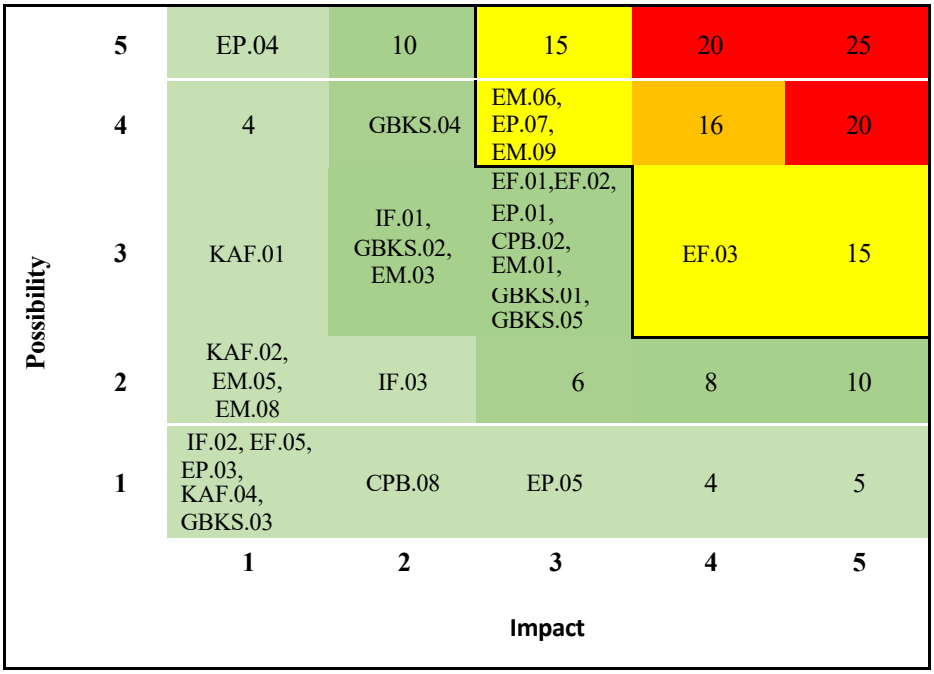

Figure 5. Inherent Risks Mapping to Reputation Effect
Source: Survey Data, (2023)

Table 8 shows 4 events on the medium risk level on a score of 12, which are events EF.03; EM.06; EM.09; and EP.07. The events are part of the task execution and completion; and the management process dimension. Figure 5 presents inherent risks mapping showing the risk analysis result affecting the reputation. The score is obtained by impact and probability multiplication. The result shows the event at the IEC affected the reputation. Risk mapping shows results on each event below the risk line tolerance or above the risk line tolerance. The risk line tolerance is determined by the enterprise. There are 13 events on the very low-risk level and 11 events on the low-risk level. There are 24 events below the risk line tolerance or in the green area. There are 4 events above the risk line tolerance, which are in the yellow area.

Risk Evaluation

From the inherent risk mapping, it can be found the levels of each risk event. After the risk mapping process, then there will be a risk evaluation. Risk evaluation is purposing of deciding whether there will be a treatment or not and making risk a priority. Risk management can be seen based on the risk line tolerance determined.

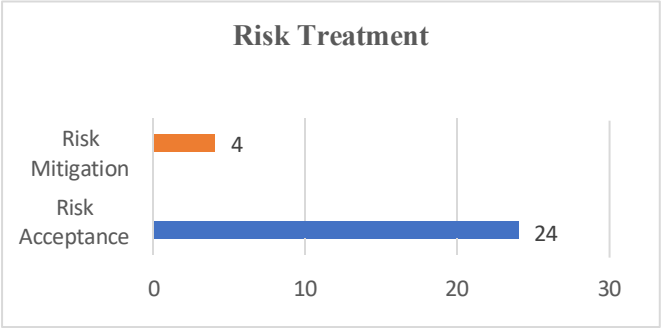

Figure 6. Risk Evaluation
Source: Survey Data, 2022

A risk mitigation plan is assigned based on the risk level above the risk appetite. The risk above the risk line tolerance is the one on medium risk, high risk, and very high-risk levels. This level needs treatment such as; risk mitigation, risk transfer, and risk avoidance. In this research, there are 28 events related to operational risk, with priority determination and treatment. From the risk evaluation, 4 risks need to be well treated from the financial aspect and reputation aspect. Risk mitigation was done according to the plan or the program was made based on 4 risk events from a financial aspect or non-financial aspect. While 24 risk events will be accepted by the IEC which means does not need any handling or risk treatment, monitoring of those events is still needed.

Risk Treatment

The next step is treatment planning and continuous control. Risk management is a treatment that can be applied for enterprises to overcome and minimalize the risk events that can be disruptive to the purpose achievement or the enterprise's target. In the risk management process, the enterprise needs to decide on a treatment plan for the risk event, the expected output result, and responsibility for the risk management plan. Risk management produces residual risk with the risk management expectation that can be successful by the enterprise and decrease the effect or the possibility of the risk event that can disrupt the purpose of the enterprise.

Table 9. Residual Risk

Residual Risk of Financial Impact					
Risk Event Code	**Risk Treatment Option**	**Freq per Semester**	**Impact**	**Risk Level**	**Score**
GBKS.04	Mitigate	3 - 4	20%-30%	Low Risk	9
EM.06	Mitigate	3 - 4	10% -20%	Low Risk	6
EM.09	Mitigate	3 - 4	10% -20%	Low Risk	6
EP.07	Mitigate	3 - 4	10% -20%	Low Risk	6

Conducted risk mitigation and retrieved residual risk for 3 events that are EM.06, EP.07, EM.09 with medium risk level on multiplication score of 12, become low risk with multiplication score of 6. And high-risk level with a multiplication score of 16, that is GBKS.04 decreases with appetite risk to the low-risk level with a score of 9. The residual risk result displayed on risk mapping is as in figure 7:

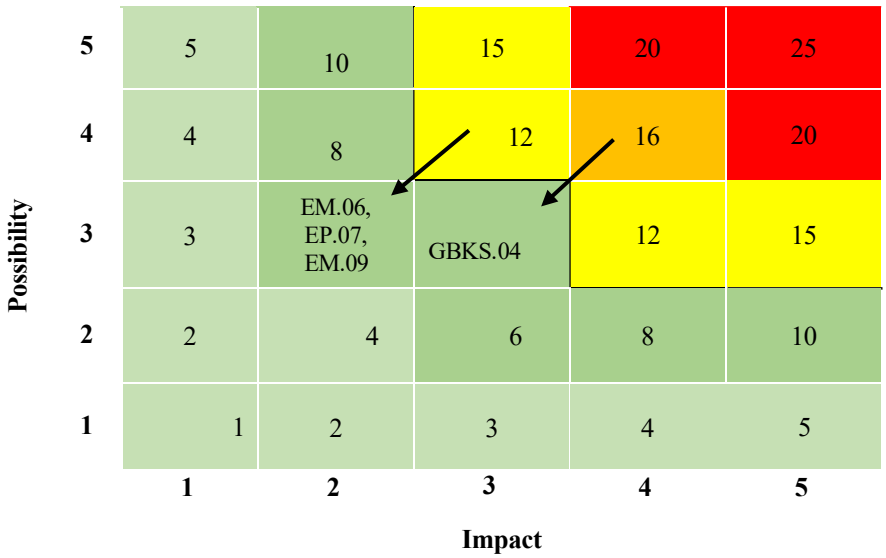

Figure 7. *Residual Risk* Research Based on the financial effect
Source: the result of data processing

Table 10. Residual Risk

Residual Risk of Reputation Impact					
Risk Event Code	**Risk Treatment Option**	**Freq per Semester**	**Impact**	**Risk Level**	**Score**
EF.03	Mitigate	1 - 2	Making not a good review, in public, and on social media	Low Risk	6
EM.06	Mitigate	3 - 4	Rumored, uncovered by the media, has little impact on staff morale	Low Risk	6
EM.09	Mitigate	3 - 4	Rumored, uncovered by the media, has little impact on staff morale	Low Risk	6
EP.07	Mitigate	3 - 4	Rumored, uncovered by the media, has little impact on staff morale	Low Risk	6

Risk events after the mitigation, are below the risk line tolerance (see Figure 7). Whereas the handling or the risk treatment is expected not to be above the enterprise risk line tolerance. Besides that, the mitigation can be done with the risk treatment to decrease the operational risk effect from a non-financial aspect. Residual risk affected reputation effect, as in Table 10 follow.

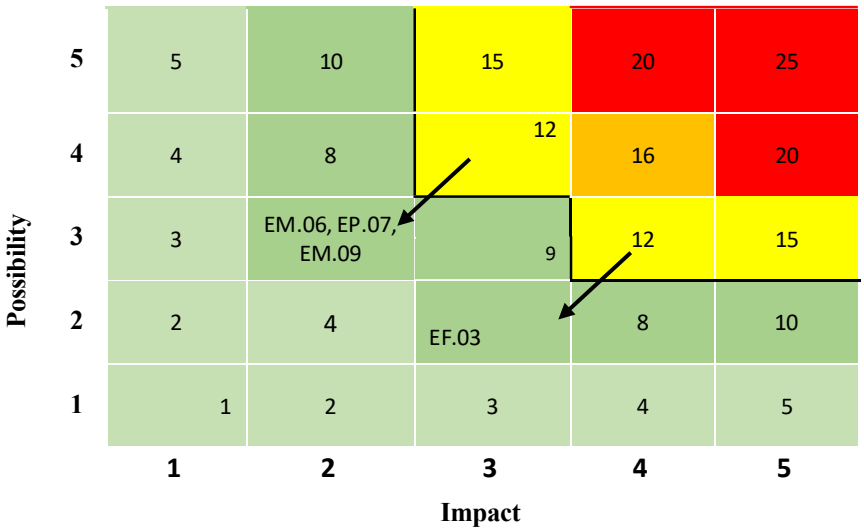

Figure 8. *Residual Risk.* Research Based on Non-financial Effect (reputation)
Source: the result of data processing

Risk Mitigation on the delay in the class settlement event (EM.06), the employees are not yet able fulfilling the market target on time (EP.07), the

monitoring system in the learning process is not optimal (EM.09), are the low-risk level with a score of 6 from medium risk level with multiplication score of 12. Besides that, deviant behavior related to refund requests from students (EF.03) is a medium-level risk with a score of 12, decreasing to a multiplication score of 6 in the low-risk area. The effect of risk event decrease and has little impact on the staff's morale. Displayed on the risk mapping, as in Figure 8.

Table 11. Risk Management Event on Financial and Non-financial Effects

The employees are not yet able fulfilling the market target on time (EP.07)
- Training the employees' skills in marketing
- Arranging marketing plan promotion
Delay in class settlement (EM.06)
o Arranging a flexible course schedule
o Making maximum conditions for students to reschedule classes
o Making class policy over the student's constraints
o Determining the maximum period for class completion
The monitoring system in the learning process is not optimal (EM.09)
- Arranging observation agenda on the student's progress
- Provide assessment questionnaires to students related to the learning process
- Opening suggestion box for the student related to the learning process in class
Utility disruption to the IEC physical properties (GBKS.04)
o Making records of inbound and outbound cash flows for maintenance needs of physical properties

Risk mapping shows that events risk decreasing to below the enterprise's risk line tolerance. EF.03 decreases to the low-risk area. Also, EM.06; EP.07; EM.09 moving to low-risk areas. The risk management expected that it will be as expected as the enterprise's expectation. Whereas the reputation effect given is not above the risk line tolerance.

Risk Mitigation means risk treatment was done to make and arrange programs based on the problem core of each risk event. Deciding the root cause with the fishbone diagram. Table 11 is an arrangement from several programs that can be run as half of the risk mitigation. Those programs are risk mitigation from decreased income aspect and even reputation.

There are ten programs run by the enterprise related to operational risk mitigation effected to the finances that are the decreased income and non-financial is the enterprise's reputation. The run program is expected to monitor the decreasing risk effect on the IEC so that the income will increase and the reputation will be maintained.

5. Conclusion

The purpose of this case study research is to mitigate the operational risk to increase the performance on the financial aspect or even the non-financial, that is the reputation of the International English Center (IEC) by applying Enterprise Risk Management (ERM) based on ISO 31000:2018 and Balanced Scorecard. ERM and BSC are expected to increase the enterprise's performance by mitigating the risk events that are influential in achieving the enterprise's strategic objectives.

The result of the operational risk analysis affecting to the medium risk level or even the high risk to the decreased income and the reputation of the IEC. Eckert and Gatzert, 2015 stated that the loss of reputation was caused by the loss of operational events. The operational risk dimension gives a big impact on the decreased income and reputation, which is sourced from the task execution and completion, and management process dimension; physical property damage dimension. Besides that, the result shows that the financial and non-financial impact refers to the task execution and completion, and management process dimension. The dimension shows that operational risk affecting to the decrease of the income and the reputation of the IEC, more dominance is caused by the human resource factor and management process in organization management. This mentioned institutional theory, signaling theory, and resource-based theory related to reputation. Whereas reputation needs to be built from an institutional context so the sign will be accepted by the stakeholders and can be created as an intangible resource (Deephouse, 2000).

Risk management by the enterprise can be run according to the action plan or arranged program. Risk events exceeding the determinate risk line tolerance need action. This was done so the given effect of the achievement will not be adverse. While the enterprise, especially the ones given the responsibility to control, will be controlled by the enterprise. So, the purpose can be achieved. The program planned or the action can help the enterprise face the events that might disrupt the purpose. Risk mitigation is expected to decrease the impact level and the risk possibility so that the performance can be increased.

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