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ISO 31000-Based Risk Management and Balanced Scorecard to Improve Company Performance: A Case Study at Indonsian YNK Tour and Travel Company

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Abstract

This research aims to conduct risk management assessments based on ISO 31000: 2018 and Balanced Scorecard (BSC) to improve performance at YNK Tour and Travel Company in Indonesia. Data obtained through filling out questionnaires and interviews with the company's director. The identified tourism risks consist of 5 types of risk, including: financial risk, operational risk, environmental risk, competitive risk and economic risk. The result of this research is to produce a risk management design based on ISO 31000. This standard is effective for identifying, analyzing, evaluating, and handling risks assisted by the Balanced Scorecard as a guideline to reach company’s goals. If the companies combine both of the standard, it can improve not only company’s performance but also company’s objective can be achieved. Based on the risk management plan, it is expected to assist the company in coping and dealing with it by determining the best risk management options according to the company's capabilities so that it can improve company performance.

Keywords: *Tourism Risk; Risk Management Assessment; ISO 31000; Balanced Scorecard*

Introduction

Every business and company must deal with all kinds of risks; some of which can cause the profits loss which can lead to the company’s value damage (*value decreation*). Risk is the uncertainty of conditions that can cause the failure in achieving the company’s goals. Companies or organizations will certainly face various types of risk; including those which came from inside and outside. Therefore, the company management needs to know and to realize that the risk management is very important for the organization. The management needs to understand the causes of the failure from the risks that may occur in achieving the goals and also see the opportunities that can support in achieving the goals of the company. By determining these risks, it is hoped that the management of the company can manage the risks correctly and precisely.

Brown et all (2009) in Malik (2019) stated that an effective ERM process makes fewer *earnings surprises* by helping the company management to utilize the opportunities, improve information and communication processes, improve company reputation, accountability, assurance and governance, and give contribution in developing the company plans and performance.

In its application; ISO (*International Organization for Standardization*) issued a standard for conducting risk management assessments, namely ISO 31000. ISO (*International Organization for Standardization*) is a non-governmental organization with the members of the National Standardization Bodies of each country. Due to the presence of ISO 31000-based risk management assessment; company are able to minimize the risks possibilities that can damage the company value and see opportunities in achieving the organizational goals. ISO 31000 is issued in order to make the companies use it as a national standard for conducting risk management assessments.

The importance of ERM in the company can be used as a suitable reference for implementing an ISO 31000: 2018-based risk management framework. In this study, the writer used the YNK Tour and Travel Company case; which is engaged in providing tour package services and whose office is located in Indonesia. YNK Tour and Travel Company has quite a lot of problems and causes various risks; due to the ERM that has not been implemented in that company. The company which has not implemented ERM creates many problems and it makes the company's goals unachievable. The risks that often occur include the company operational risk (human resources and business processes) and the economic and environmental (natural) risks. These risks need to be treated by implementing ERM with an ISO 31000: 2018 based risk management assessment process in order to make the company's goals achieved.

Therefore, the companies need to integrate BSC and ERM in order to align the company's business in hadling the risks. The companies that apply BSC and ERM can provide a clear statement related to the company's strategic objectives and the need for risk management that can thwart these goals. This ISO 31000: 2018 and *Balanced Scorecard*-based risk management assessment is expected to improve performance in the YNK Tour and Travel company in Indonesia.

Literature Review

Stakeholder Theory

Stakeholders Theory as a unit of analysis of the relationship between businesses with groups and individuals who can influence or be influenced, and companies have the opportunity to work together effectively (Parmar et al., 2010). Stakeholders Theory explains that there is a mutual relationship that needs and helps each other; between the company and various parties.

Resource Dependent Theory (RDT)

Resource Dependent Theory (RDT) has become one of the most influential theories in organizational theory and strategic management (Hilman, Withers, and Collins, 2009). RDT characterizes the corporation as an open system; depending on the possibilities in the external environment (Pfeffer and Salancik, 1978). RDT recognizes the external factors influence on the organizational behavior and although limited by the context; the managers can act to reduce environmental uncertainty and dependence.

Enterprise Risk Management (ERM)

Beasley (2006) stated that ERM has a core element; namely aligning risks and strategies. When the company has selected the strategic choices made; the management must identify risk responses, provide accountability, and monitor the implementation in an integrated and coordinated approach so that the company goals can be achieved. According to COSO (The Committee of Sponsoring Organization of the Treadway Commission) in Fraser (2010), ERM is a process, the effectiveness of entity directors, management, and other personnel, who apply strategies, design identification of potential events that have the impacts on the company, and manage risks based on the risk appetite, and to provide reasonable assurance due to the company objectives achievement. ERM can be used to protect and increase value; so that it fulfills the main objective of maximizing the shareholder wealth (Chapman, 2011).

ISO 31000-based Risk Management Implementation

ISO 31000: 2018 is prepared by the *International Standard Organization*; in which, it is expected to become a risk management standard that can be used by all countries. By implementing ISO 31000, the international companies are expected to create better harmony, communication and coordination related to the risk management. The process of implementing risk management includes: (1) Risk identification, which aims to find, describe, and record uncertainties that can obstruct the company's ability in achieving goals. (2) Risk analysis, aims to analyze the risks' impact and possibilities, then determine the level of risks that occur. (3) Risk treatment, aims to make decisions related to the needs to make efforts or not.

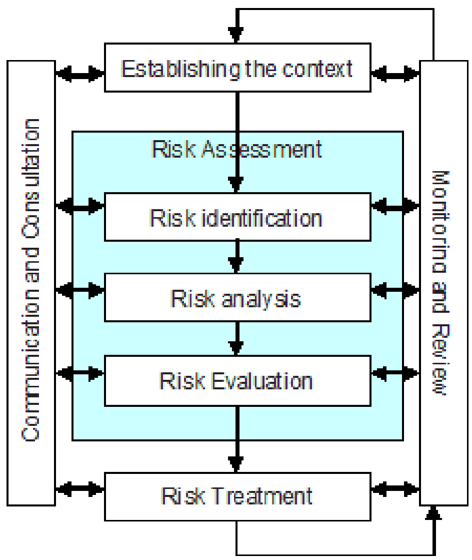

Figure 1. Risk Management Process based on ISO 31000
Source: ISO 31000:2018

The purpose of risk treatment is to select and implement options in dealing with risks. According to ISO 31000: 2018, risk management includes: (1) Risk mitigation, to reduce the risk possibilities, or reduce, the risk impacts if they occured, or reduce both; the possibilities and the impacts. (2) Risk accepting; not doing any treatment for that risk. (3) Risk avoidance; not carrying out or continuing activities that create these risks. (4) Risk sharing; an action to reduce the risk possibilities or risk impacts through insurance, outsourcing, subcontracting, foreign currency hedging transactions, etc.

Tourism Risk

When a tourist buys a flight, or books accommodation; there is an inherent risk because the tourist purchases an intangible service and the tourism experience will only occur after they have paid (Boksberger and Craig-Smith, 2016). Tour companies are particularly vulnerable to tourist perceptions, because tourism spending is discretionary and tourists can delay vacation plans, or change tourist destinations that may be risky. In fact, the companies face a series of systematic risks from operational risks related to competition, production/business processes, and distribution. Apart from that, the companies also face non-systematic risks arising from exogenous events, for example the global economic crisis, military coups, earthquakes, etc. In short, there are many risks because we will never have perfect knowledge of the future (Williams and Balaz, 2014). Table 1 describes the types of risk and risk indicators that will be used in this study.

Table 1. Risk Indicator of Tourism Risk

CODE	RISK TYPE	INDIKATOR RISIKO
F	**Financial Risk** Financial risk is the risk of financial conditions that can reduce the company's profitability.	1. Liquidity Risk 2. Credit Risk 3. Interest Risk
O	**Operational Risk** Operational risk is the risk of loss resulting from insufficient or failure of humans, internal / external business processes, and technology.	1. Human Resources 2. Internal Business Process 3. Information Technology
E	***Environmental Risk in Nature & Man-made Risk*** Environmental risk is an event that occurs outside the company's business that can damage corporate value	1. Disaster Risk 2. Weather 3. Pandemic, Virus *4.* Terrorism Attack
ER	**Economic Risk** Economic risk is the impact of macro and micro economics, both nationally and internationally, on company performance.	1. Inflation 2. Exchange Rate 3. Fuel Cost 4. Financial Crisis
C	**Competitor Risk** Competition Risk is a risk that can be created due to the presence of the same business competitors.	1. Competitive Risk

Source: Summarized from Chapman (2011), Oroian and Gheres (2012), Ural (2016), Susilo and Riwu Kaho (2018)

Balanced Scorecard

The *Balanced Scorecard* is a framework in helping the companies to adopt the organizational strategies by translating strategies into company operational objectives that support the company performance and behavior. *Balanced Scorecard* (BSC) is used for identifying objectives and measuring four different perspectives. The four perspectives include: (1) Financial Perspective; it is related to the company income or expenses. The company's strategic goals for a financial perspective include: Profit growth, revenue growth, and cost efficiency. (2) Customer perspective; is related to the customer satisfaction, loyalty, and the presence of new customers. The company's strategic objectives: Customer Satisfaction, Customer Loyalty, and New Customers. (3) Internal Business Process Perspective; is related to the organization / company activities to produce qualified products / services due to the customer expectations. The targets of the company's strategy are: the accuracy and speed service; and product development. (4) Learning and Growth perspective; is related to the employees / staff work that must be done and determined internally due to the company objectives. The strategic objectives include: improving the quality of human resources and employee loyalty.

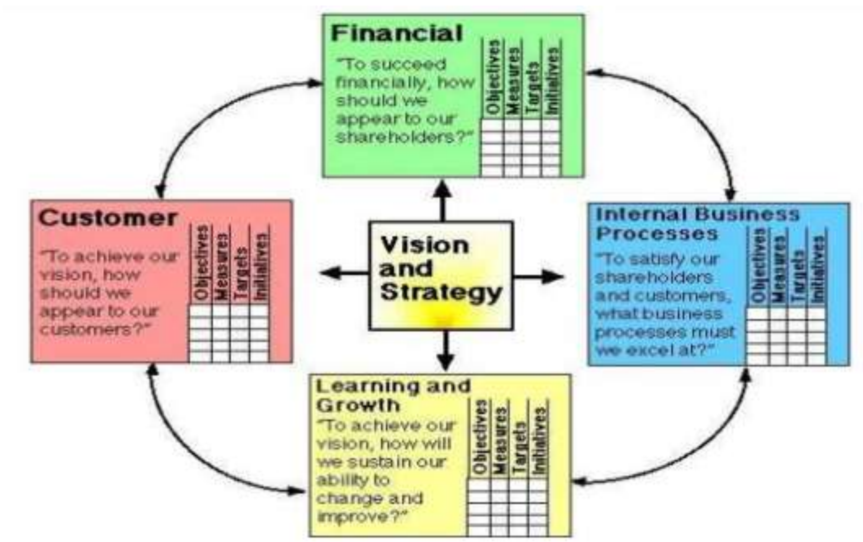

Figure 2. Balanced Scorecard Framework (Beasly, 2006)

ERM and BSC Integration

According to Beasley et al, 2006 in Safitri and Pangeran, 2020, BSC focuses on sustainable development. Besides, it connects the company's vision and strategy with certain performance measurements. The companies use the BSC in order to focus on achieving the future strategic goals. BSC will be linked with the ERM whose risks will affect the strategic objectives of the four BSC perspectives that will be used (Mega Ratri and Pangeran, 2020). According to Monica and Pangeran (2020), the ISO 31000 framework in the risk management process is an important activity in risk management which becomes the implementation of the principles and the framework that will be built. The BSC perspective requires achievement targets; while the ERM will provide additional value in the BSC to identify risks that can obstruct the targets achievement in the four perspectives.

The company's performance is said to increase if the company can achieve the targets in the company's goals even more than that and alligned with the company's operational procedures. In the risk evaluation process, the company will find the most suitable treatment to mitigate each risk. If the company can reduce the risk level, for example from red to orange, orange to yellow; it means that the company can improve its performance. Table 2 describes the types of risk according to the balanced scorecard objectives.

Table 2. Risk Types and Balanced Scorecard

		Perspective Balanced Scorecard			
		Financial Perspective	Customer Perspective	Internal Business Process Perspective	Learning and Growth Perspective
Risk Types	Financial Risk	X			
	Operational Risk		X	X	X
	Environment Risk		X		
	Competitive Risk		X		
	Economic Risk	X			

Source: Survey Data, 2020.

Customer Perspective in the Balanced Scorecard focuses on the customer satisfaction, customer loyalty and new customers that can have an impact on improving the company's financial performance. In this perspective, there are several inherent risks. These risks include: the risk of service offerings request, the risk of an uncertain environment and the risk of competition with similar competitors. Risk management is needed to mitigate risks related to the customer perspective in order to get customer satisfaction and improve the company's financial performance.

Internal Business Process Perspective focuses on the accuracy and speed service; and product development of the company. There are risks which are related in this perspective, and they are connected to the company's operational activities. The risks include the employee professionalism risk, the risks which are related to the cooperation with partners, the developing technology, and the company's operational process risks. If the company can do the precise and fast service according to the customer’s demand; the customers will feel satisfied and loyal to the company.

Learning and Growth Perspective focuses on improving the quality of human resources and the loyalty of the company employees. The inherent risks on the perspective of learning and growth are related to the company’s human resources. The companies need qualified and competent human resources; so that, each business process is in accordance with the company's SOP. Internal business processes will be precise and quickly ready. The company's human resources are of the best quality and competent in their fields. Then, loyal human resources are expected to realize the product development in order to acquire new customers.

Financial Perspective focuses on the cost efficiency and the revenue growth. Risks that arise are related to the costs and benefits. Any risk management process must consider the costs of dealing with risks which are relative to the benefits. The risks related to the costs and benefits can obstruct the target achievement from a financial perspective. Due to this reason, the companies need to carry out risk assessments and treatent according to the company's ability to face the risks. Financial risk affects the financial perspective; including: liquidity risk, risk management implementation costs, budget preparation, and economic risks, such as: price increasing (inflation), exchange rates and fuel increases.

The BSC and ERM can help in aligning the company efforts in dealing with the company risks. The companies need to focus on the balanced scorecard to achieve each of the company's strategic goals and minimize risks in order to improve the company performance. ISO 31000-based risk management assessments are used as international standards for companies. By implementing risk management and BSC, companies can create value and protect company value by managing risk, making decisions, setting goals and working to achieve them, and making improvements to improve company performance (Susilo and Riwu Kaho,2018). A continuous risk management process will help companies to be able to define strategies, achieve goals, and make decisions with more mature considerations.

If the company has implemented a risk assessment, it is hoped that it can help the company to be able to prepare itself towards risk prevention/mitigation planning or exploiting the organization's opportunities (Susilo and Riwu Kaho, 2018). However, if the target has not been achieved 100%, then the company still needs to control the handling options.

Research Method

This research was conducted at one of the Tour and Travel Companies in Indonesia; YNK. This company is engaged in providing tour and travel services for domestic and foreign countries. This type of research used case study research methods with quantitative and qualitative methods. There were two processes that were carried out in the research. They were: determining company’s goals by making a Balanced Scorecard analysis and implementing ISO 31000-based risk management assessments. In implementing ISO 31000-based risk management assessments; the companies needed to determine the impact criteria, possibilities, and risk level.

Table 3. The Level of Risk Impact Criteria

Impact Area	Insignificant(1)	Low (2)	Medium (3)	High (4)	Catastrophic (5)
Financial	Loss 0 – 1% of Revenue	Loss 1.1 – 5% of Revenue	Loss 5.1 - 10% of Revenue	Loss 10 – 20% of Revenue	Loss >20% of Revenue
Operational	Activity Delay > 1 hour	Activity Delay until 1 Day	Activity Delay until 2 Day	Activity Delay until 3 – 7 Day	Activity Delay more than 1 week

Source: Survey Data, 2020

Table 4. The Level of Risk Probability Criteria

Probability Level		**Probability Criteria** **frequency likely to occur in 1 year**
Almost never occurs	**1**	Very rarely: **0-1 in 1 year**
Rarely occurs	**2**	Rarely: **2-3 in 1 year**
Sometimes occurs	**3**	Quite often**: 4-5 in 1 year**
Often occurs	**4**	Often: **6-10 in 1 year**
Almost ever occur	**5**	Very often: **More than 10 in 1 year**

Source: Survey Data, 2020

Table 5. Risk Level Criteria

Colour	**Level**	**Matrix level**	**Dicription**	**Performance**	**Risk Response**
Red	**5**	**20 – 25**	Extreme	Immediate action is required to manage risk	Risk mitigation / share the risk
Orange	**4**	**16-19**	High	Action is required to manage risk	Risk mitigation
Yellow	**3**	**11 - 15**	Medium	advised to take action	Risk mitigation
Light Green	**2**	**6 – 10**	Low	Actions are suggested, if the resources are available they can be implemented	Risk mitigation / Accept the risk
Dark Green	**1**	**1-5**	Very Low	No action require	Accept the risk

Source: Survey Data, 2020

Result and Discussion

This research stage began by determining each perspective in the Balanced Scorecard. The company filled out a Balanced Scorecard questionnaire by determining the company's strategic goals, performance measurement, achievement targets, and planned activities which would be done. The process of determining the BSC was aimed to be able to see the purpose of the company's goals and help identifying risks that can obstruct these goals. The Balanced Scorecard analysis can be seen in figure 3 about the balanced scorecard.

The next stage was the implementation process of risk management assessment based on ISO 31000 by carrying out risk identification, risk analysis, risk evaluation and risk management.

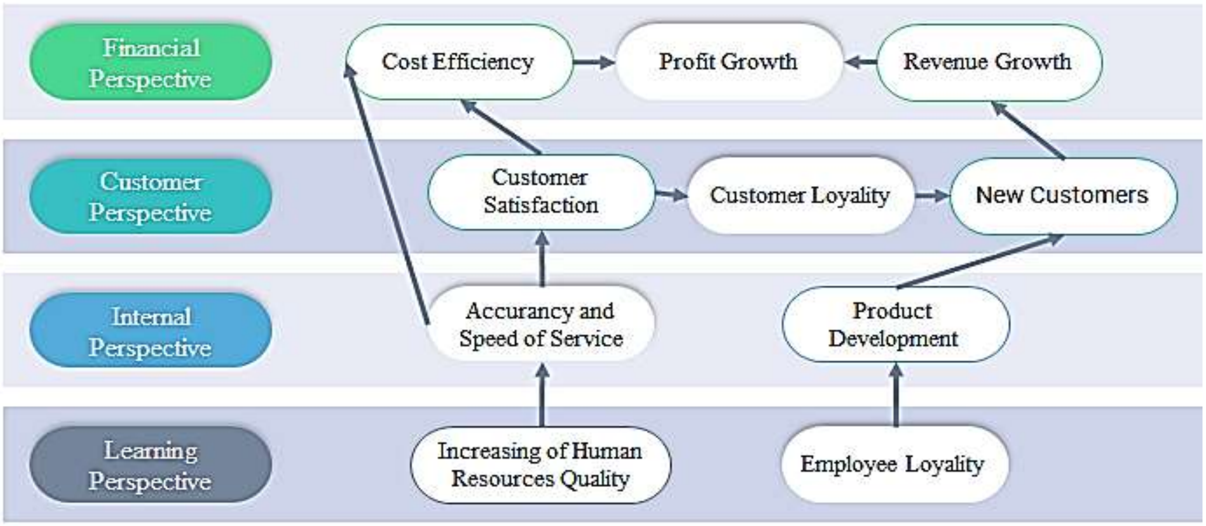

Figure 3. Balanced Scorecards
Source: Survey Data, 2020.

Risk Identification

Risk Identification was used by the companies to find risky events at YNK Tour and Travel Company on business processes related to the company's failure in achieving its goals. Then, risk identification was also used to find the causes of risky events, and their possible impacts. The results of the risk identification that had been carried out; they were obtained 25 risk events. The identified risk events consisted of 13 risks originating from the company's operations, 4 financial risks, 2 risks from the environment, 3 risks from the company's external economic conditions and 3 risks from competition among similar companies.

Table 6. Risk Identification

Risk Types	Code	Risk Events	BSC Perspective
Financial Risk	F1	Excessive unexpected expenses or the budget is not used	Financial
	F2	Inaccurate budget preparation and an error occurred in making decision related to company strategy	Financial
	F3	Customer late in paying full fees according to the agreement	Financial
	F4	Company does not pay on time with the partners	Financial
Operational Risk	O1	Unprofessional employees	Internal Business Process
	02	Transaction recording error occurred	Internal Business Process
	03	Service ordering errors	Internal Business Process

Risk Types	Code	Risk Events	BSC Perspective
	O4	The online reservation and payment program is inadequate	Customer
	O5	Easy search for travel information on the internet	Customer

Table 6. (Continued)

Risk Types	Code	Risk Events	BSC Perspective
	O6	Ease for customers to make payment transactions and make their own trips	Customer
	O7	SOP are not run by employees	Learning & Growth
	O8	The partner (hotel, land tour, and operator) did not full the agreement	Internal Business Process
	O9	The partner (transportation) did not full the agreement	Internal Business Process
	O10	The partner (equipment, T-shirt, suitcase) did not full the agreement	Internal Business Process
	O11	Visa / passport processing late	Internal Business Process
	O12	Late market prices go up, imprecise calculations do not update	Customer
	O13	The price offer is not in accordance with customer demand	Internal Business Process
Environment Risk	E1	Delay and cancellation of tour packages	Customer
	E2	Customers do not follow travel guides (regulations at tourist attractions)	Customer
Competitor Risk	C1	Many competitors (travel service providers both online and offline)	Customer
	C2	Competitive products that are getting updated	Customer
	C3	The selection of prices is less attractive than competitors	Customer
Economic Risk	ER1	Price increases (inflation) in national and international	Financial
	ER2	Currency exchange rates	Financial
	ER3	Fuel / transportation costs go up	Financial

Source: Survey Data, 2020

Apposition: F (Financial Risk), O (Operational Risk), E (Economic Risk), C (Competitor Risk), ER (Economic Risk)

Risk Analysis

After identifying these risks, the next process was risk analysis. The risk analysis itself includes details related to the risk events, potential causes, effect of the failure (impacts), possibilities, and risk control that can interfere the company's objectives. From the results of the risk analysis questionnaire, the values for the impact criteria, the likelihood criteria, and the risk level were obtained. The determination of the criteria for the impacts, possibilities, and risk level had been determined at the early stage of conceptualization along with the company management.

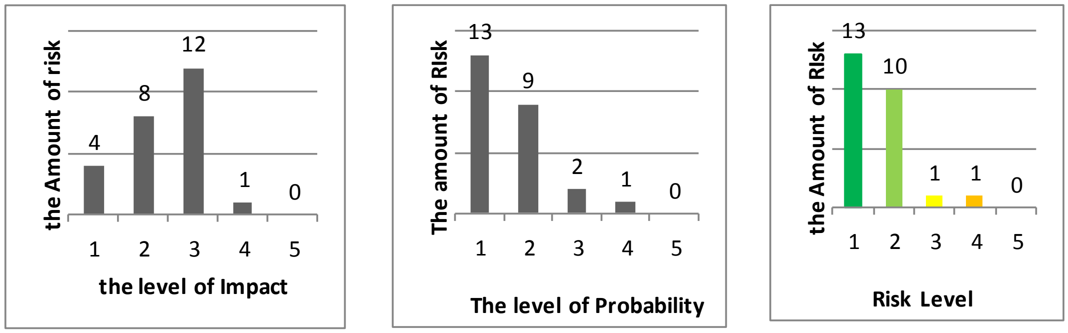

Figure 4. Risk Analysis
Source: Survey Data, 2020

The risk analysis results can be seen in figure 4. At the highest risk level at level 1 with the description *"very low"* as many as 13 risks. Then level 2 with the description *"low"* is 10 risks and at level 3 with the description *"Medium"* is 1 risk; while level 4 with description "high" is 1 risk and level 5; the risk does not exist at all.

Inherent Risk Map

The inherent risk mapping is a description of the risk analysis results and is the multiplication result of the impacts and possibilities. All risks that have been analyzed are mapped based on the risk level. From the risk mapping; evaluation and treatment can be carried out at the risk level above the *risk tolerance* line.

PROBABILITY						
	Almost never occur					
	Rarely occur	O9				
	Sometimes occur			F3	E1	
	Often occur		O7,C2	F1,F2,O1,O4,O5,O6,O8		
	Almost ever occur	O2,C1,C3	O3,F4,O10, ER1,ER2,ER3	O11,O12,O13,E2		
		Insignificant	Low	Medium	High	Catastrophic
		1	2	3	4	5
		IMPACT				

Figure 5. Inherent Risk Map
Source: Survey Data, 2020

Risk Appetite

Risk Evaluation

From the results of the previous inherent risk mapping, it is known the levels of each risk event. After the risk mapping process, the company conducts a risk evaluation. Risk evaluation is aimed to make decisions about the needs for doing the efforts or not and the risk priorities; whether the amount of risk will be accepted by the company or needs further treatment. Risk management is viewed based on the risk tolerance line established by the company.

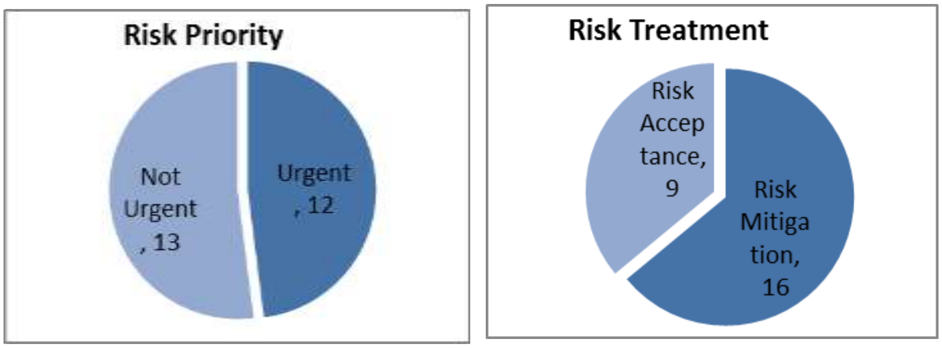

Figure 6. Risk Evaluation
Source: Survey Data, 2020.

Urgent decisions are based on the *"Low", "Medium" and "High"* level categories; so that the management priority is needed as soon as possible. Meanwhile, the non-urgent decision is based on the category of *"Very Low"* risk level; so that risk management can be carried out but it is not a treatment priority for the risks that are treated first. The determination of the risk mitigation treatment plan is based on the risk level that is above the risk tolerance line. Meanwhile, the risks that are above the risk tolerance line; namely: at the *"low", "medium", "high"* and *"catastrophic"* levels, require treatment; such as: risk mitigation, risk sharing and risk avoidance. In this study, 25 risks were obtained with priority decisions and treatment as described in Figure 5. From the results of the risk evaluation, 12 urgent risks were obtained while 13 risks were not urgent. The risk mitigation would be carried out as the risk management plan on 16 risks; while 9 risks would be accepted by the company.

Risk Treatment

The next stage was planning for further handling and control. Risk management is an effort that a company can make to minimize or overcome any risky events that can obstruct the company's goals or objectives. In the risk management process, the company needs to determine a risk management action plan, the expected output results, the person in charge (PIC) for the risk management plan, and the expected residual risk for the risks that have been prioritized and the risk management. The expected residual risk is a risk that remains after risk management and becomes the company's hope if the risk management results can be reduced after the treatment is carried out. It means that the risk management carried out by the company can be successful and reduce risky events that obstruct the company's goals.

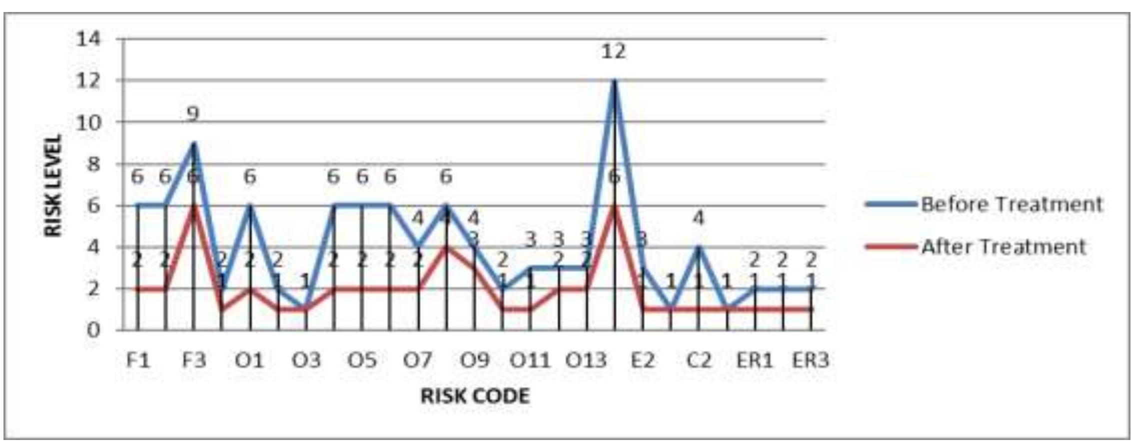

Figure 7. Risk Treatment
Source: Survey Data, 2020.

Conclusion

The purpose of this research was to improve the performance of YNK Tour and Travel Company in Indonesia by implementing the Risk Entrepreneur Management (risk management assessment) based on ISO 31000 and Balanced Scorecard. The ERM and BSC were expected to improve the company performance by assisting companies in mitigating risky events that could create a failure in achieving the company's strategic goals.

The companies could handle risks by carrying out the action plans that have been given. The risks that wee in the excess of the company's risk tolerance limit need to take measures. It was done in order not to have an adverse impact on the failure in achieving the company's goals. While the companies; especially those who were given the responsibility for carrying out these actions, were supervised by the company's leaders; so that, the company's goals could be achieved. It was hoped that the action plan can assist the company in dealing with risky events that could prevent the company's goals from being achieved. The risk mitigation was expected to reduce the impact level and the risk possibility; so that, the company could improve its performance.

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