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RISK MANAGEMENT IN DAKSA MEDIC LABORATORY BUSINESS DEVELOPMENT PROJECT

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Abstract

To provide optimal service, every company must have risk management so that the company can prevent and overcome unwanted risks. The purpose of this research is to analyze the role of risk management in preventing and overcoming the negative impacts of external and internal factors in the Daksa Business planning project. Medical Laboratory. This research uses a qualitative research method with a case study approach. Data collection techniques use literature studies and then analyzed by reduction, presentation and drawing conclusions. External and internal factors were analyzed using Porter and PETS analysis. The results of this research show that risk management is very important and has a big influence on decision making to handle both internal and external risks. The steps used in risk management are identifying and analyzing risks, managing risks, communicating and consulting, monitoring and reviewing as well as recording and reporting. The results show that risk management that runs effectively can help Medical Laboratory Daksa prevent and be able to overcome risks that arise so that they can achieve the expected goals.

Keywords *— Risk Management, External and Internal Factors, Business Planning.*

1. INTRODUCTION

Bekasi Regency is an area with a fairly dense population, with industrial areas and companies which are the largest industrial areas in Southeast Asia (Indradewa & Pranoto, 2023). Since 2019 in Bekasi there has been an increase in population with quite an increase in the presentation of health complaints, so that the need for health services has increased.

The community needs health facilities to carry out their health checks, one of which is a medical laboratory. Daksa Medical Laboratory saw this as an opportunity, so he was interested in opening a medical laboratory in the Bekasi Regency area (Wahid, 2021).

When building a business, you must pay attention to the risks that may occur to avoid losses (Anindita, 2019). Companies that have a good understanding of risk management will increase their chances of success and business continuity (Ferryal Abadi, 2023).

In order to ensure that each division's goals and objectives can be implemented well, awareness is needed to identify risks in each business process (Ketut, 2024). Research conducted by Haris Maknum in 2017 regarding the feasibility of establishing a laboratory clinic explained that the monitoring process was carried out to measure and assess whether the implementation of tasks was in accordance with the plan to be able to achieve targets according to demand projections discussed in the target market. If in this process there are deviations from either internal or external factors, they will be immediately controlled, in this way, it will make the Health Laboratory business progress and develop according to its goals (Muhamad Haris, 2017). In line with other research conducted by Aeda Ernawati

in 2022, she also explains that a business plan needs to be assessed for its feasibility, both external and internal factors, to achieve the expected goals (Aeda Ernawati, 2022).

The establishment of a business will undeniably have various risks that may occur, therefore risk management is needed to assess the business and as a form of anticipation of risks that threaten the business (Indradewa, 2020). Risk management is a series of steps and approaches applied to detect, assess, monitor and control risks arising from business activities. With a good understanding of risk, the Company can plan effective strategies to prevent, reduce and control risk. Effective risk management is the key to dealing with possible risks to increase the chances of business success (Tantri Yanuar, 2024).

Research conducted by Amalia Iskandriani in 2023 explains that the role of effective risk management is very important in realizing corporate governance so that companies can minimize risks and their impacts by being more careful in taking opportunities (Iskandriani, 2023). In addition, research conducted by Ferryal Abadi in 2023 shows that risk management planning includes risk identification, risk assessment, development of risk control strategies as well as continuous monitoring and improvement (Abadi Ferryal 2023).

ISO 31000 provides a structured framework that aims to align risk management objectives with organizational needs (Saputra, 2021). Apart from that, risk management also requires cooperation and support from various parties including suppliers and the government (Tantri Yanuar, 2024). By being guided by ISO 31000 and cooperation from all parties, Daksa Laboratory is expected to develop as expected.

The uniqueness of this research lies in the research object which examines the role of risk management in Daksa Medical Laboratory business planning in the Bekasi Regency area which has never been studied before. Apart from that, this research also provides additional understanding to business people about how risk management affects business and the effectiveness of risk management in achieving business goals. The aim of this research is to analyze the role of risk management in overcoming risks that arise from both internal and external factors in the Daksa Medical Laboratory business planning project.

2. METHOD

This research uses a qualitative research method, which is a research method that aims to study social and human problems with a greater focus on the quality of the entity being studied, compared to quantitative research which focuses more on the amount of data.

Data collection techniques in this research used literature study, interviews and observation. The types of data in this research are secondary data and primary data. The data that has been collected is then analyzed thematically. Thematic analysis was carried out using themes relevant to the research objectives.

3. RESULTS AND DISCUSSION

Daksa Laboratory creates risk management based on the ISO 31000:2018 framework as in the picture below. The strategy chosen in implementing the Daksa Medical Laboratory operations in accordance with Chapter IV, namely product development, certainly has its own risks, for this reason Daksa Medical Laboratory designs a Risk Plan to implement risk management to overcome the possibility of risk events that may occur in operations.

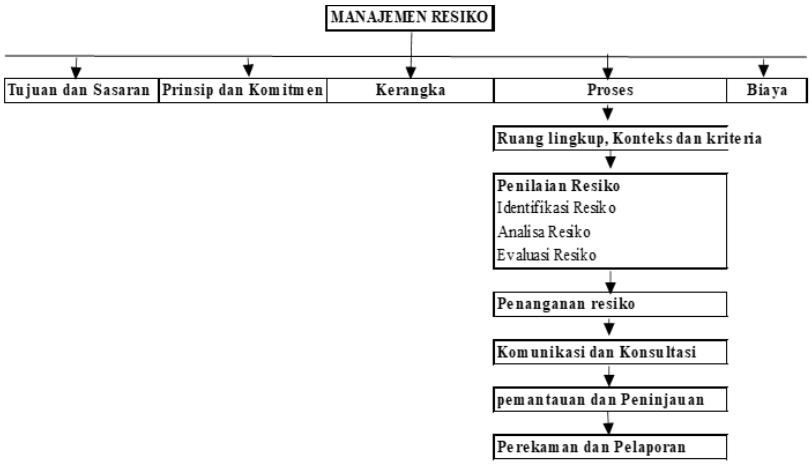

Figure 1. Risk Management Framework

Risk Management Process

The Daksa Laboratory risk management process is a series of steps designed to identify, evaluate, reduce and manage risks related to laboratory operations. This is adapted from ISO 31000:2018 as in the image below:

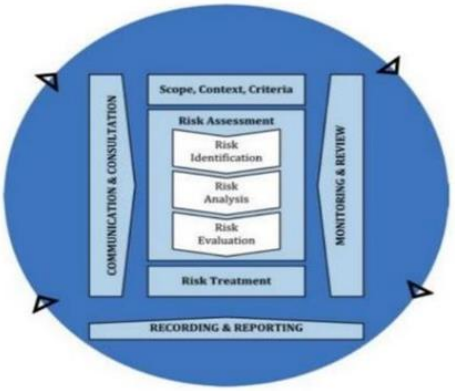

Figure 2. Risk Management Process

Risk Identification

Referring to Chapter II regarding Threats and Chapter III regarding weaknesses that exist in Daksa Laboratory, these two things can cause unwanted risks.

Table 1. Risk Identification

No	Risk Context	Risk Events	Causes of Risk	Qualitative Impact
R1	Marketing	Daksa Medical Laboratory which is still new	Daksa Medical Laboratory is a new entrant that does not yet have extensive relationships	The maximum sales target has not been achieved
R2	Operational	Don't have your own lab equipment yet	Daksa does not yet have its own inspection tool	Expenditures increase for renting KSO
R3	Finance	Target *payback period*not achieved	The new prices are close to competitive Sales target not achieved	The profit target has not been achieved

R4	Finance	Changes in regulations/regulations, increase in minimum wage and increase in interest rates	Changes in government regulations regarding medical laboratories and increasing employee salary costs	There are changes and licensing arrangements that must be fulfilled Increased expenditure on
R5	Security & IT	Emerging Risk (Fire/short circuit, theft, information technology disruption/hackers)	Short circuits from electricity, chemicals or electronic devices, theft, things that endanger the security of information systems such as hackers and data theft.	Lab operational disruption Fire and material and financial losses
R6	Operational	Natural disasters, global health threats	Unexpected natural disasters, climate change, increasing infectious diseases and others	Material and financial losses, mental health problems and disrupting Lab
R7	Operational	Negative public perception of B3 waste	Public perception about B3 waste which will be contaminated and endanger the surrounding environment	Risk of protests from the surrounding community, disrupting Lab operations and

Risk Analysis

The purpose of the analysisrisk is to understand the nature and characteristics of risk including risk ranking. During this process, the probability and impact of each risk is estimated in order to decide on risk priorities.

Table 2. Risk Analysis

Code	Risk Context	Risk Events	Inherent		
			Probability	Impact	Risk Priority Number
R1	Marketing	The new Medical Laboratory Daksa is not yet well known	4	4	16
R2	Operational	Don't have your own lab equipment yet	3	3	9
R3	Finance	Targetpayback period not reached	3	4	9
R4	Finance	Regulatory changes, wage increases, interest rate increases	3	4	12
R5	K3 & IT security	Emerging Risk of Fire/ short-circuiting, theft, information technology disruption, hackers	3	5	15

R6	Operational	Natural disaster, global health threat	3	5	15
R7	Operational	Negative public perception of B3 waste	4	4	16

Risk Evaluation

EvaluationRisk is carried out by creating an inherent risk map. The risk position in the risk map is divided into 4 levels: Low, Moderate, High, and Extreme, shown in red, orange, yellow, and green. The yellow area is the area of management's risk appetite. Risks that are outside management's risk appetite cannot be tolerated and must be addressed immediately.

Table 3. Risk Evaluation

Risk analysis matrix		***Impact***				
		Isignificant (1)	*Minor (2)*	*Moderate (3)*	*Major (4)*	*Catastrophic (5)*
Possibility	*Certain (5)*	5	10	15	20	25
	Likely (4)	4	8	12	16 R1,R7	20
	Possible (3)	3	6	9 R2	12 R3,R4	15 R5,R6
	Unlikely (2)	2	4	6	8	10
	Rare (1)	1	2	3	4	5

Risk treatment

Some risks that require special handling have been previously determined in the risk evaluation matrix.Risk treatmentincludes a selection of several risk management options that will be implemented. Risk treatment includes an assessment of whether the level of risk can be tolerated or not, if not, a new risk treatment will be created and then an assessment of the effectiveness of the treatment will be carried out.

Table 4. Risk Treatment

Code	Risk Context	Risk Events	Inherent			Risk Treatment	P.I.C	Residual		
			Probability	Impact	Risk Priority Number			Probability	Impact	Risk Priority Number
R1	Marketing	The new Medical Laboratory Daksa is not yet well known	4	4	16	Increasing promotion of service packages created offline and online continuously through social media, social activities, banners, flyers and collaborating with health facilities and other agencies.	Marketing Team	2	3	6
R2	Operational	Don't have your own lab equipment yet	3	4	12	Collaborate with KSO to provide Lab tools and materials	Marketing Team	2	2	4
R3	Finance	Target *payback period*not achieved	3	4	8	Improve marketing, efficient fund management	Finance Team	2	2	4
R4	Finance	Regulatory changes,increase in wages, increase in interest rates.	3	4	12	Carry out regulatory reviews continuously and in stages to be able to meet applicable regulatory requirements Improve marketing continuously. The sales price	Head Office Team	2	2	4

R5	K3 & IT	Emerging Risk Fire/short circuit, theft, information technology disruption,	3	5	15	Recruit an IT Team, ensure the security and maintenance team always checks all security every day, backs up data and improves data security.	Security team, IT team, K3 team	2	3	6
R6	Operational	Natural disasters, global health	3	5	15	Mitigate/Prepare by improving environmental risk control	Security team	2	3	6
R7	Operational	Negative public perception of B3 waste (hazardous and toxic waste)	4	4	16	Collaborate with KSO or vendors to manage B3 waste. Starting from waste classification to determining appropriate handling methods, transportation and storage, disposal, reporting (including the amount of waste, to determining and Educate the	Head Office Team	2	3	6

After the risk getsTreatmentthen the risk changes can be seen in the risk map tableResidualbelow this:

Table 5. Residuals

Risk analysis matrix		***Impact***				
		Isignificant (1)	*Minor (2)*	*Moderate (3)*	*Major (4)*	*Catastrophic (5)*
Possibility	*Certain (5)*	5	10	15	10	25
	Likely (4)	4	8	12	16	20
	Possible (3)	3	6	9	12	15

	Unlikely (2)	2	4 R2,R3, R4	6 R1,R5,R6,R7	8	10
	Rare (1)	1	2	3	4	5

Communication and Consultation

The communication and consultation stage is determined at an early stage, regarding the risk problem, the causes of the risk, the consequences of the risk and what actions must be taken to handle the risk.

Table 6. Escalation

Risk Score	***Escalation Levels***
1-5	Employees in all divisions are coordinated by management
6-10	PIC of all divisions
11-19	All head office teams
20-25	Owner of Daksa Lab

Monitoring and reviewing

The next stage is monitoring and reviewing, which is carried out periodically regarding the risk management that has been carried out. Each team must clearly know its duties and responsibilities in monitoring and reviewing. The results of monitoring and review are then recorded or documented clearly and precisely.

Table 7. Monitoring and Review

No	**Activity**
1	Management prepares a risk profile template
2	Each Department fills out a risk profile report every 3 months
3	Profl The risks are summarized by each Manager and then reported
4	The Director together with all Managers monitors and reviews as well create a summary Risk Profile Report
5	Management (Director and Manager) makes a report on the results of mitigation implementation,*Risk Treatment*
6	The risk profile is concluded in the annual risk management report as well evaluation is carried out for improvement

Recording and Reporting

At this stage, storage and reporting of risks that may occur are carried out. The team responsible for managing risk must analyze and understand the reports made, because the results of the analysis will be conveyed to management.

Table 8. Recording and Reporting

No	**Time**	**Activity**	**P.I.C**	***MonitoredBy***
1	Quarterly (3 Monthly)	Make reports of risk events that occur during3 months	All Employees	operational manager
2	Semester (6 Monthly)	Create a summaryrisk events that occur within 6 months	All Managers	Director
3	Annual	MakeRisk Management Report	operational manager	Director

4. CONSLUSION

The results of this research illustrate the importance of implementing risk management in handling internal and external factors in the Daksa Laboratory business planning project. Analysis of internal and external factors can use Porter analysis and PEST analysis. The steps that can be used based on ISO 31000 are identifying risks, analyzing risks, evaluating risks, handling risks, communication and consultation, monitoring and reviewing as well as recording and reporting. Implementing risk management effectively can help the Medical Laboratory Daksa team in preventing and handling risks that arise, changes that may occur, can ensure the smooth running of business and achieve the expected goals.

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