CHAPTER I

INTRODUCTION

1.1. Research Objective Overview

1.1.1. Company Profile

Figure 1.1 Logo of LORAID

Source: LORAID Internal

LORAID is a start-up business built in 2015 by Resha Akbar, a researcher and analyst at Bandung Techno Park, with three other co-founders. LORAID was built to offer their customers with a system based products and services by using long range RFID (Radio Frequency Identification). LORAID claimed that their system has the ability to reach 11 meters range and scan 250 tags per second. LORAID company is located at Bandung Techno Park building in Jl. Telekomunikasi no.01 Bandung.

After four years of business, LORAID have at least 1000 clients or RFID users that are satisfied with their services and products, and LORAID have completed 241 projects until January 2020. A few of satisfied clients that LORAID have served are: Telkom Corporate

University, Yayasan Pendidikan Telkom, Citra Borneo Indah, Polytron, and Telkom Indonesia.

Through B2B (business-to-business) point of view, LORAID serves their customers in Saudi Arabia and Ethiopia in helping their tea business companies by detecting and monitoring their raw materials using the RFID technology made by the LORAID company.

Other than giving their customers a system with the ability of detecting 250 tags per second and the ability to reach 11 meters in range, LORAID also provides their customers with portable design for mobility, and fully integrated system products, which allows their customers to have their customized API to integrate with the existing local/cloud system.

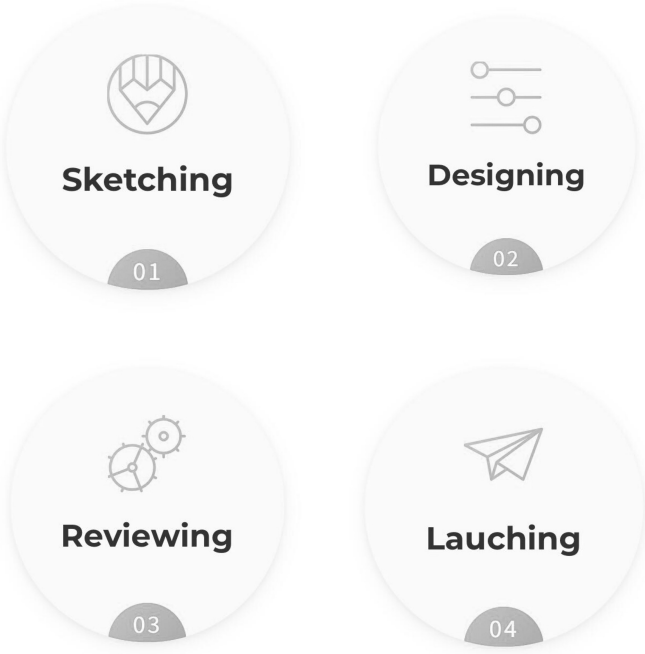

Figure 1.2 LORAID's System Process

Source: LORAID Internal

To maximize the satisfaction of their customers, LORAID have 4 process that need to be done in making their system based products and services, they are:

1. Sketching

   Through sketching, LORAID make a rough sketch or illustration based on the request made by the customer.

2. Designing

   In this process, LORAID then design the system based on the illustration previously made according to the customer's request. In designing the system, LORAID and the customer keep in touch with each other to do confirmations regarding the products and/or services to avoid misunderstanding. This process takes the longest time due to the time needed for communicating with each other.

3. Reviewing

   After LORAID finishes designing the system, LORAID then have a meeting with the customer to review all of the projects they are having to discuss about what has been done and what is left that needs to be done (if there is available). If the customer does not feel satisfied enough with the design, the customer is allowed to ask LORAID to redesign the system. If the customer is already satisfied with the design, then LORAID continue to build the system into real products.

4. Launching

   The last step is the launching of the product(s). This happens after LORAID have finished changing the system design into real product based on the request from the customers.

1.1.2. Company's Vision and Mission

Regarding to its vision, PT. LORAID is a company that has a vision of being the best information technology company specialized in solution and security system in Indonesia and

regional. In order to fulfil their vision, PT. LORAID set three missions as their goals in doing their business. The missions of PT. LORAID are:

1. Guarantee the quality of the information technology solution system to the customers.
2. Guarantee the safety of information technology secrecy of the customers trusted to the company.
3. The application of professional and innovative corporate governance system.

1.1.3. Company's Organizational Structure

LORAID is a start-up business company that is specialized in system information technology, especially in a field that is related to RFID, Resha Akbar—as the Chief Executive Officer stated that they do not need that much of employees to make it easier for LORAID company to handle the customers and to finish the products provided to the customers. The amount of employees that LORAID have is 13 people that is divided into three divisions. LORAID's organizational structure of the company is:

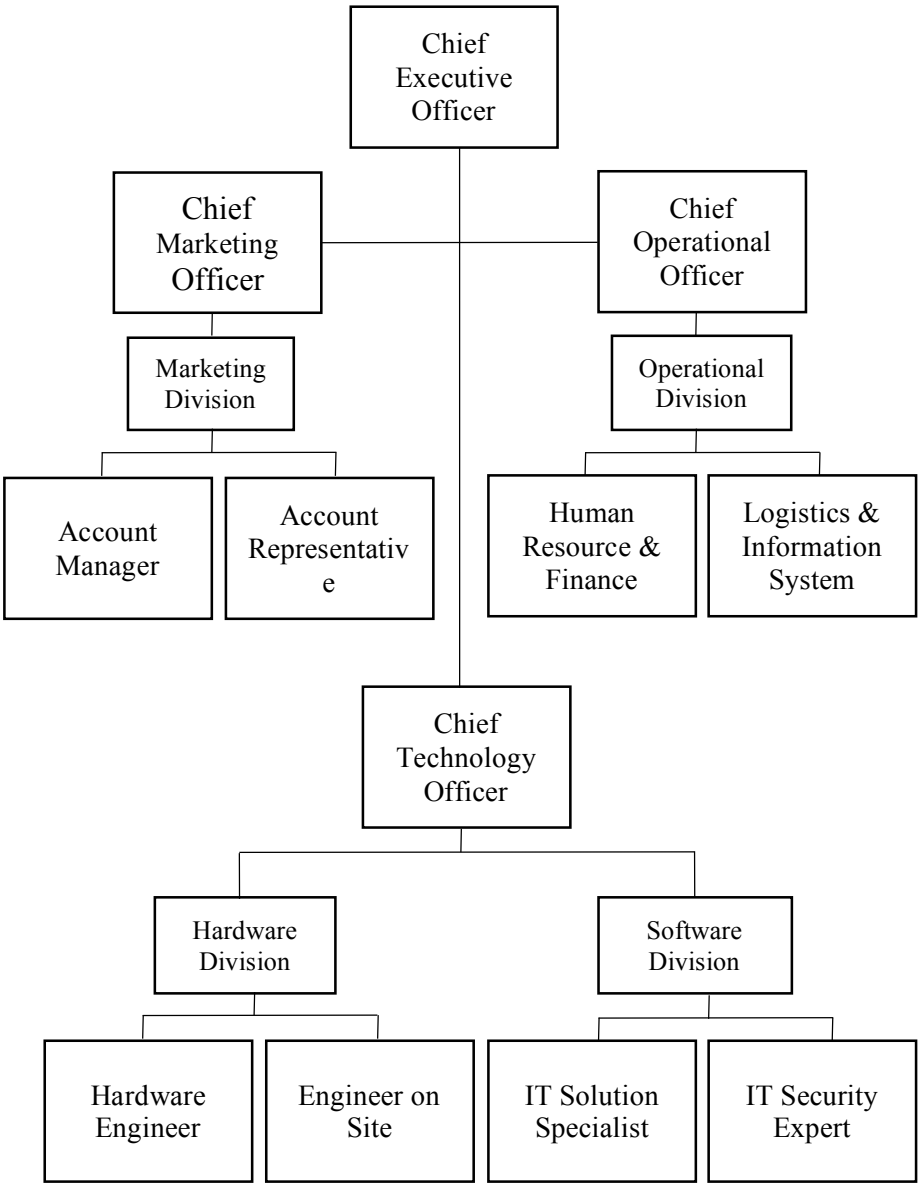

Figure 1.3 LORAID's Organizational Structure

Source: LORAID Internal

Just like any other companies, the CEO of LORAID functions as the leader who directs other chiefs in doing the business. The CEO of LORAID is Resha Akbar himself. Since a CEO cannot stand alone in a business, Ahmad Syarifudin is chosen to be the chief marketing officer for the company that manage the marketing

division including the account manager and the account representative. The account manager in the company functions as the one who markets the products while the account representative acts as the one who represents the company to communicate with the customers after the selling. Donny Rhomanzah is chosen to be the chief technology officer to manage both the hardware and the software divisions, and Rahmat Pamungkas is trusted to be the chief operating officer to manage the operational division that includes the human resource and finance and logistics and information system. These four people are the ones whose job is to maintain the business going in LORAID based on their own task according to their position.

1.1.4. Company Services and Products

LORAID has two services that include the goods for each services, they are:

1. Presence System

   Presence system is a service for LORAID's customers that is made directed towards employees or a person of a company. Presence system uses LORAID's long range RFID to detect a person with a presence tag. The example of presence tag or RFID tag of LORAID's presence system can be seen in Figure 1.4.

Figure 1.4 RFID Tag

Source: LORAID Internal

The presence system made by LORAID works when employees or visitors enter a building or certain places by taking their RFID card with them that includes their identification in it, such as employee's name and/or ID number. The LORAID's device then detect the RFID card with a maximum distance of 11 meters and it will immediately process the ID of the card to be displayed in a display system that is connected with the presence system of the client's company.

The implementation of this presence system can be seen inside Telkom Corporate University in Jl. Gegerkalong Hilir, Bandung that have been using LORAID presence system since May, 5 2018. The RFID reader are placed in where Telkom Corporate University wants to in order to be able to scan the RFID tags of its people of the company as their presence system. This way, the people inside the company does not need to tap their RFID card to the RFID reader. They can simply just walk past it and the RFID reader will detect their tags while they are walking past the RFID machine reader. The picture of the presence system can be seen in Figure 1.5.

Figure 1.5 Presence System at Telkom Corporate University

Source: LORAID Internal

2. Asset Management System

Asset management system is a system made by LORAID to manage the assets of a company by using handheld (portable design) and mobile module. To manage their assets or livestock, the client of LORAID needs to use ID tags.

Figure 1.6 Asset RFID Tag

Source: LORAID Internal

The asset management system works when all inventories or livestock are attached to ID tags. When the inventories or the livestock enter the warehouse of the company, the LORAID will automatically detect them and send information to the local data server that then will be collected and stored to the central server. When some inventories or livestock leave the warehouse, LORAID will automatically detect them and inform the company regarding the leaving of an inventory or a livestock.

Figure 1.7 RFID at Cows Ranch

Source: LORAID Internal

The implementation of asset management system by LORAID can be seen at Citra Borneo Indah in Central Kalimantan. Citra Borneo Indah uses LORAID to mobilize their cows in their ranch.

1.2. Research Background

The growth of technology all around the world allows companies or businesses to improve their business strategy in increasing the service quality to their customers by utilizing the growth of the technology itself. The using of technology in information system is believed to improve the efficiency of a business in doing their activities. The accuracy of information is the core requirement for a business to apply the information system to their business.

One of the information system technologies that are currently being developed is radio frequency identification technology or better known as

RFID. According to nordicid.com, RFID technology is currently being used by institutions to identify objects that may replace the using of barcode or QR code that is still common to be used by retailers. Radio frequency identification is a technology that is flexible, easy to use, and compatible for automatic operation. RFID is available in two forms: the first one is the read-only RFID, and the other is the read-or-write RFID that allows the user to rewrite the data of the RFID. According to Tarigan (2004), RFID is able to identify a certain size of data of an object without any contact and without parallel scanning to the object (unlike barcode or QR code). Other than being contactless, RFID is able to provide high integrity data and is difficult to be fabricated or cloned. Thus, making RFID technology has a high security level (Orlovsky, 2005).

According to Parkash, Kundu & Kaur (2012) on their publication with the title of *The RFID Technology and its Applications: A Review*, due to the different frequencies used by RFID technology, RFID has been used in different ways by different manufacturers or industries. Some of the applications of RFID include the use of RFID in toll road that uses the RFID card to make a faster toll payment transaction, the use of RFID in asset tracking and locating objects to track the movement of the asset, the use of RFID for animal identification that contains information of the animal, and the use of RFID for national identification such as electric identification card for the citizens.

The previous paragraphs prove that RFID technology is getting attention by industries because it can be applied for so many functions as stated by Parkash, Kundu, and Kaur. In Indonesia, the use of RFID (short range RFID) has been applied in companies for their presence system, transportations card and payment cards for a faster transaction, even the use of RFID chips in the ID card of Indonesians for an easier access of getting information by the government.

According to marketwatch.com, the RFID market worldwide is expected to continuously grow until at least 14.8% until 2024. Based on a

new research study, the worldwide RFID market will reach USD3400 million in 2024.

Due to the advantages and the growing market of the RFID technology, LORAID company is built to offer their customers with detection system solution based on long-range RFID. Specializing in the system information, especially radio frequency identification, LORAID choose to focus in helping their customers with inventories, or presence system that needs the utilization of RFID technology as their target market, e specially when their target segmentation is already chosen to be big organizations and big institutions with a more complicated requests and huge amount of products requests. PT. LORAID also pursuing to have more clients from abroad or outside of Indonesia as their target market, making them in urgent to know which strategy that can be implemented to increase their amount of clients from abroad and from Indonesia also.

As one of the companies that work in the RFID industry and has been established for 5 years, Mr. Resha Akbar, as the Chief Executive Officer admit that PT. LORAID needs to know whether their business performance can be considered good and whether if there is a strategy that can be done and implemented by the company in order to make their company to be better and in a better position than where they are currently in. Being a company that is focusing in an RFID technology especially the long range RFID, PT. LORAID is given more opportunity to improve their business due to the coronavirus pandemic that has been spreading since the end of 2019 until now that forces people to lessen physical contact and its relation with the fact that RFID technology is a touchless technology. This makes PT. LORAID is in urgency to determine an (alternative) strategy to improve their business performance with such situation.

1.3. Research Questions

The continuous growth of technology (including the information system technology) makes a company that focuses on that field needs to

keep improving their performance and renew their business strategy in serving and fulfilling their customers' needs if they need it.

As a company that has been established for five years in an information system technology market and as a company that is specialized in an RFID technology (specifically in the long range RFID) that keeps developing, LORAID need to find alternative strategy in doing their business that can be used as their new business model in order to keep serving their target market.

Based on the problem statement mentioned on the previous part, the research questions are:

1. What are the strengths, weaknesses, opportunities, and threats of PT. LORAID?
2. Which is the alternative strategy that can be used by the company?
3. How is the implementation of the alternative strategy?

1.4. Research Objectives

1. To determine the strength, weaknesses, opportunity, and threats of the company.
2. To discover another business strategy that LORAID can use as their alternative strategy.
3. To illustrate the best alternative strategy and how to implement the strategy in the company.

1.5. Research Usability

1.5.1. Practical Use

1. To help LORAID to evaluate their strengths, weaknesses, opportunities, and threats.
2. To give recommendations to LORAID regarding their current situation and position with alternative strategies.

3. Expected to be the empirical data about the corporate governance of LORAID as the result of the research to develop LORAID business performance.

1.5.2. Academic Use

1. To be the comparison used by other researchers in business strategy field, especially that is related to IFE & EFE matrixes.
2. To be used as reference and study to other parties that are interested in studying strategy management.

1.6. Systematics of Writing

The content in this research is related to the research overview that is done by the author (the writer of this mini thesis) in a systematically order. The systematic of this research includes 5 chapters, they are:

CHAPTER I INTRODUCTION

This chapter discusses about the research objective overview, including the company profile, organizational structure, logo, and vision and mission. This chapter also describes the research background, problem statement, research focus, research questions, research objectives, and the significance of the study as much as the scope of the research.

CHAPTER II LITERATURE REVIEW

This chapter discusses about the theories that are related to the research objectives to support the researches in answering the research questions. This chapter includes the previous researches the writer used to write the research and the research framework.

CHAPTER III RESEARCH METHODOLOGY

This chapter discusses about the research methodology that includes the research objects, research location, research stages, operational variables,

key informants, data analysis technique, and the validity and reliability of the research.

CHAPTER IV RESEARCH ANALYSIS AND RESULT

This chapter discusses about the analysis and the result of the research in result of conclusion and suggestion pulled by the writer of the research for the next chapter.

CHAPTER V CONCLUSION AND SUGGESTION

This chapter provides the conclusion of all the previous chapters in the research paper. This chapter also includes the suggestion towards the research object by the author in hope to giving good contribution to them and also to others.