CHAPTER I

INTRODUCTION

This chapter is an overview of the research consisting of background, problem formulation, research objectives, scope of research, and outline of research.

1.1   Backgrounds

Risk is often referred to as a condition with an uncertainty that will cause adverse events to occur (Paramita et al., n.d., 2023). A risk will not be resolved if avoided, but must be faced with the hope of minimizing these risks. These risks require a structured management so as not to experience a loss in the future. The solution that can be done in overcoming this problem, one of which is by implementing risk management.

Risk management is a policy by identifying, analyzing, evaluating, and controlling as a procedure potential risk in order to prevent them from occurring (Paramita et al., n.d., 2023). The main goal of risk management for a business or organization is to identify potential hazards and take appropriate action to avoid losses that could negatively affect the wealth of shareholders and owners. However, risk management is not only applied to a company or organization, but also an important part in the context of higher education.

According to Law No. 20 of 2003 Article 19 paragraph 1, states that higher education is the level of education after secondary education which includes diploma, bachelor, master, specialist, and doctoral education programs organized by universities. Based on previous articles, the UK higher education funding council in 2000 required all universities to implement risk management as a governance tool because it is expected to increase efficiency in decision making (Huber, 2011). The implementation of risk management in higher education is

important because it helps protect the sustainability and reputation of the institution, identify and manage risks that can affect various operational and academic aspects, and ensure compliance with applicable laws and regulations (Pradesa et al., 2021). The identification, assessment, and mitigation of risks pertaining to financial, reputational, legal compliance, operational, academic, information technology, human resources, crisis, internationalization, marketing, assessment, policy, and regulatory aspects are all included in risk management in higher education.

According to (Putri & Wijaya, 2023), information technology is very important in universities in Indonesia as an integrated work system in improving academic services, so implementing risk management is a must to overcome all potential risks. Through the above statement, it shows that Information Technology (IT) is an important aspect of higher education in Indonesia. Through the above statement, it does not address the idea that it is impossible to do research on the subject of risk management's application in Information Technology (IT) at Indonesian universities, including Universitas Andalas.

Universitas Andalas or UNAND is a legal entity state university. The directorate of Information Technology (IT) is responsible for providing services related to information and communication technology in every access unit at Universitas Andalas. The IT Directorate is led by a director and the head of the sub-directorate which is equipped with several section heads in each section which can be seen in the following organizational structure.
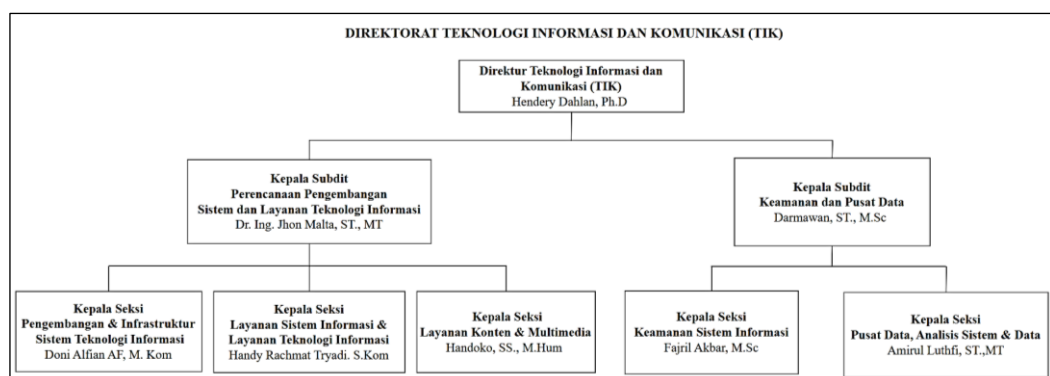

Figure 1.1 Organizational Structure of Directorate of Information and Communication Technology (ICT)

Initial observations were conducted directly with Dr. Ing. Jhon Malta, S.T., M.T who served as head of the sub-directorate of system development planning and information technology services. Based on the results of the interview, it is known that there are several potential risks and risk events that have occurred in the directorate of Information Technology (IT), namely broken networks, inaccessible websites, non-optimal employee performance, data theft, and others. The probability of a risk not occurring in life cannot be denied. This can be seen from the potential risks that have occurred in the directorate of Information Technology (IT).

The directorate of Information Technology (IT) has so far carried out risk management without making Standard Operating Procedures (SOPs) based on the ISO 31000 standard. Since these issues are now solely discussed in meetings in an attempt to find solutions, there hasn't been a systematic approach to documenting challenges or potential risks that have arisen. Potential risks in the future can be prevented by implementing risk management based on the ISO 31000 standard in managing risks. However, the obstacle lies in the fact that the risk management system has not been implemented in Information Technology (IT). Risk management based on ISO 31000 in the Information Technology (IT) directorate is still not running, causing a lack of attention to risk management that should be done.

The University has implemented risk management with the existence of The Universitas of Andalas Rector Regulation No. 13 of 2023 about Risk Management. According to Article 15, the risk registers serve as an aid in the implementation of risk management by periodically providing a list of the outcomes of risk identification. Therefore, Universitas Andalas risk management provides new innovations by creating a system, namely SIMANIS in order to facilitate managing risk management in all units within Universitas Andalas.

Figure 1.2 SIMANIS Website Display

Units at Universitas Andalas can access SIMANIS and input the risks that occur by the risk owner in each unit, so that they have a risk register that will be managed by Universitas Andalas risk management. Universitas Andalas units currently have a risk register. Although as of right now, the risks listed in the Information Technology (IT) directorate's risk register are still quite low. In order to minimize the likelihood of future risks, a research titled "Risk Identification and Analysis at the Directorate of Information Technology (IT) Universitas Andalas" was carried out to investigate and identify the risks that have already occurred.

1.2   Problem Formulation

The problem formulation in this research is as follows.

1.   What are the risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas?

2.   How is the classification of risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas?

3.   How is the mitigation strategy in tackling the risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas?

1.3   Research Objectives

The objectives of this research are as follows.

1.   Identify the risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas.

2.   Analyzing and evaluating the risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas.

3.   Formulate a form of mitigation strategy in tackling the risks that may occur at the directorate of Information Technology (IT) at Universitas Andalas.

1.4   Scopes of Research

The problem limitations in this study are as follows.

1.   Risk assessment based on ISO 31000.

2.   Mitigation strategies are only carried out on high priority risks.

3.   The formulation of mitigation strategies is not carried out until the implementation stage of the Information Technology (IT) Directorate at Universitas Andalas.

1.5   Outline of Research

The final project has a writing systematic consisting of six chapters which can be seen as follows.

CHAPTER I   INTRODUCTION

Chapter I contains the background, problem formulation, research objectives, scope of research, and outline of research of the final project research at the directorate of Information Technology (IT) at Universitas Andalas.

CHAPTER II   LITERATURE REVIEW

Chapter II contains basic theories as a reference guide related to research, so as to facilitate the final project research

process at the directorate of Information Technology (IT) at Universitas Andalas.

CHAPTER III   RESEARCH METHODOLOGY

Chapter III contains stages that are structured as procedures in the implementation of research, so that it can help the final project research process at the directorate of Information Technology (IT) at Universitas Andalas run smoothly.

CHAPTER IV   RESULTS AND DISCUSSION

Chapter IV contains data collection obtained through interviews and data processing through previously obtained data to determine the results of the research have been achieved in accordance with the research objectives.

CHAPTER V   ANALYSIS

Chapter V contains an analysis of the results of data processing in the form of forms of mitigation strategies that can be applied to the directorate of Information Technology (IT) at Universitas Andalas which are useful in minimizing the risks that occur.

CHAPTER VI   CONCLUSION

Chapter VI contains conclusions from the results of research that has been done, as well as some suggestions that can advance further research.