## CHAPTER I

#### INTRODUCTION

This chapter introduces the problem to be researched and solved, starting from the background, problem formulation, research objectives, scopes, and outline of the proposal. The details of each sub-chapter will be explained as follows.

# 1.1 Research Background ERSITAS ANDALAS

The Directorate of Information Technology of Universitas Andalas is responsible for planning, managing, and maintaining system infrastructure, as well as directing the development and integration of applications and information systems at Universitas Andalas. Formerly this institution was named as Information and Communication Technology Development Institute. This re-structurization was an effect of Universitas Andalas changes in its status.

The Ministry of Research, Technology, and Higher Education is encouraging universities to transform into State Higher Education Institutions of Incorporated Legal Entity per Article 65 paragraph (3) of Law No. 12 of 2012 concerning Higher Education. As an established university, Universitas Andalas got its new status as a State Higher Education Institutions of Incorporated Legal Entity as per Government Regulation Number 95 of 2021 concerning PTN BH Universitas Andalas, promulgated on 31<sup>st</sup> August 2021, through the 2021 State Gazette Number 203. The shift in the institutional form to State Higher Education Institutions of Incorporated Legal Entity in Indonesia has brought about changes in strategic leadership models, requiring leaders to plan, implement, and evaluate various strategic policies in academic and non-academic fields (Herawati, et. al., 2022).

Changes in legal status are commonly understood as institutional changes, including changes in governance norms, procedures, and organizational structure (Singgih, et. al., 2022). The status change to Legal Entity State University provides opportunities for strategic policy implementation (Hurriyati, 2014). State Universities with legal status have increased independence in asset and institutional management, both academic and non-academic (Herawati, et. al., 2022). On consequence of this, Directorate of Information System of Universitas Andalas faced a massive change in its Organization.

Based on Rector Regulation of Universitas Andalas number 8 of 2022 about Organization and Work Procedures of Organization Management of Universitas Andalas, Directorate of Information System consists of two sub-directorate which are Subdirectory of Management of System Development and Information Technology Services and Subdirectory of Security and Data Center. Subdirectory of Management of System Development and Information Technology Services has three division, they are Information System Services and Information Technology Services, Information Technology System Infrastructure and Information Development, as for the third is Content and Multimedia Services. While for the Subdirectory of Security and Data Center there are two divisions which are Information System Security and Data Center, System and Data Analysis.

Changes in its organization gives a good chance for Directorate of Information and Technology to develop management strategies to ensure its organization to thrive with a good performance with excellent service quality. However, based on satisfaction rating on its performance, Directorate of Information and Technology of Universitas Andalas has not yet gives a good impression to its users as shown in **Figure 1.1** which shows the average of users' satisfaction of Information Services of Universitas Andalas is still below point 3.

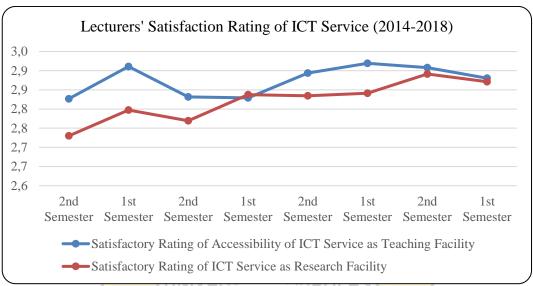


Figure 1.1 Lecturers' Satisfaction Rating of ICT Service

This satisfaction rating clues that there are still some improvements needed in order to increase Directorate of Information Technology's performance. One of them is to develop strategy in human resources management. With human resources management, it put people as the assets of an organization. So, in order to gives a better service, it's crucial to make sure the capability of the people within organization meets the organization standards.

Dubois and Rothwell (2004) explained that designing a competency-based human resources is beneficial for organization to meet business needs, including in developing better quality products and services. Corresponding to Hanafi and Ibrahim (2018), there appears to be a positive correlation between employee competencies and service performance. Competency-based Human Resource Management (CHRM) involves the utilization of competencies, frameworks, and analysis to enhance human resource processes, including recruitment, development, and performance management (Armstrong & Taylor, 2023). To give an overview of Human Resources Management condition at Directorate of Information and Technology of Universitas Andalas, in 2022 Directorate of Information and Technology of Universitas Andalas faced a labor shortage. **Table 1.1** below compares the number of staff of the Directorate of ICTs in Universitas Andalas between 2021 and 2022.

**Table 1.1** Information on the Work Divisions of the Directorate of ICT's Workforce

No	Divisions	Workforce Numbers		G
		2021	2022	- Status
1	Data Entry	3	3	Stable
2	Networks	1	1	Stable
3	Multimedia	3	2	Decreased
4	Programming	4	-	Decreased
5	Data Center	2	1	Decreased

(Source: Directorate of Information and Technology of Universitas Andalas, using the previous organizational structure)

This shortage led Directorate of Information and Technology to made an efficiency strategy by merging divisions because it now has the authority to make an autonomy strategic planning. Other than the condition of its satisfaction rating and lack of human resources planning as seen in **Table 1.1**, some of the works in Directorate of Information and Technology is a project-based activity which needs an effective human resources management to fit with the project objectives. These situations make it important for Directorate of Information and Technology to has a Competency Dictionary as a guide to human resources management specially for the division that just had a new combination of work which are Information System and Information Technology Services and Data Center, System and Data Analyst Division.

Based on Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform Number 38 of 2017 on Civil Cervant Competency Standards, a Competency Dictionary is a comprehensive resource that provides information on a wide range of competencies needed in organization. It includes the name of each competency, a definition, a description of the different levels of proficiency, and behavioral indicators for each level. Besides, there are three type of competencies that are regulated in Regulation on Competency Standards for Civil Servants in Indonesia. They are technical competency, managerial competency, and sociocultural competency.

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In order to provide Directorate of Information Technology with a basic human resources management, it is crucial to develop a competency dictionary as the guide to its human resources planning. Directorate of Information and Technology has a skill-specific services. Therefore, the competency dictionary needed for this divisions is technical competency dictionary.

Developing a competency dictionary comes with a various way to done the study. However, the first step is to undergo job identification and job specification to understand the job role of each division. In this research, competency dictionary is identified using delphi technique to allow validation on extended potentials of uncover owned competencies of each division based on the job role. Delphi technique is a series of validation questionnaires, which is suitable for this case.

After list of competencies is defined, the criteria of each competency level then developed to set in a technical competency dictionary. List of competencies and the criteria will be adopted from previous research but mostly guided from Indonesian National Competency Standards (SKKNI). Thus, the framework of competency dictionary for Information System and Information Technology Services and Data Center, System and Data Analyst Division are developed.

The list of competencies in competency dictionary then will be analysed using competency gap analysis to overview the different between owned competency and expected competency for each role within divisions because it was merged which indicates there are possibly new combination of proficiency needed. Competency gap assessment in the Organization will determine the current state of ability and proficiency possessed by employees. Competency gaps can indirectly affect the level of success of an organization. Therefore, the development of competency-based human resources management is needed (Saadah, 2021). Along this in-depth research, expected that Directorate of Information and Technology of Universitas Andalas will be able to develop strategic policy in human resources management based on the role's competency provided.

#### 1.2 Problem Formulation

The problem to be solved in this study is how to design a competency dictionary and determine the level of technical competency proficiency for the Information System & Information Technology Services and Data Center, System & Data Analysis Division at the Directorate of Information and Technology of Universitas Andalas as a competency-based standardization. Also, what is the further solution based on the competency-based human resources management.

## 1.3 Research Objectives

Therefore, several objectives need to be obtained during this research. The objectives are as mentioned below.

- To design competency dictionary as a competency-based standardization of Information System & Information Technology Services and Data Center, System & Data Analysis Division.
- 2. To determine proficiency level for each competency of Information System & Information Technology Services and Data Center, System & Data Analysis Division.
- 3. Providing an overview solution based on the competency gap in Information System & Information Technology Services and Data Center, System & Data Analysis Division.

### 1.4 Research Scopes

As this research is done, some limitations have to be considered during the research.

- 1. Assumed that there are no strategic changes during research is done.
- 2. Research will be focused on developing technical skills competencies.

#### 1.5 Outline of Research Proposal

To understand the structure of the research report, systematic writing is done. The following is the methodical writing process used to create this research report.

#### CHAPTER I INTRODUCTION

This chapter includes background information on the research, problem formulation, research objectives, problem definitions, and writing guidelines for research reports.

#### CHAPTER II LITERATURE REVIEW

To resolve issues in research, the theories in this chapter's literature study are consulted. Theoretical frameworks human resource management, competency study design, competency based human resources, and prior research serve as the theoretical foundation for this study.

#### CHAPTER III RESEARCH METHODOLOGY

This research methodology chapter describes the step by step used in the research. The steps used include preliminary studies, literature studies, problem identification, method selection, data collection, and processing, as well as conclusions and suggestions.

#### CHAPTER IV DATA COLLECTION AND PROCESSING

This chapter elaborates the data collection and explains data processing based on the methodology explained in previous chapter.

#### CHAPTER V ANALYSIS AND DISCUSSIONS

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This part of the writing is going to explain findings of the research based on the research objectives that has been set in previous chapter.

## CHAPTER VI CONCLUSIONS

This chapter contains conclusions of the research and the suggestions of managerial impact based on the findings.

