

# CHAPTER I. PRELIMINARY

## I.1 Background

Business management at any company size requires the implementation of information systems that enable managers to implement decision-making processes that lead to maximizing efficiency and revenue, finance, and production effectiveness (Avi, 2023). The existence of information systems that are widely implemented in the Company is expected to have a significant positive impact on the Company's revenue and performance. Information system as a set of organizational and technical means for storing and processing information to meet the information needs of users, which provides for the collection, retrieval, processing and transmission of information (Fatieieva, 2020). It is undeniable that the information system is attached to every process that runs in the continuity of the company's operations and affects many manual things that are usually done. It is a change associated with the application of digital technology in every aspect of our lives as customers, consumers or employees. Information systems are essential for creating successful and competitive companies, managing global companies, adding business value, and providing useful products and services to customers (Laudon, 2007).

However, system evaluation is needed to find out system deficiencies and improvements made for the future. Evaluation is a major force in research, development, and applications related to information retrieval systems and processes (Saracevic, 1995). Capwell (2000) writes that evaluation can be used to determine achievement of goals, improve program delivery, provide accountability, increase community support, contribute to scientific foundations, and inform policy making. It can be said that if we want to obtain improvement results, an evaluation stage is needed to seek improvement targets from the results of the evaluation carried out.

To carry out the continuity of tasks within the company, both in terms of operations and coordination, a system is needed that supports the continuity of operational activities. In a technical disposition or assigning tasks to the intended party, an official memorandum is required which contains the division of tasks

from the managerial party to a party. PT Telkom Indonesia has implemented an Electronic Office Memorandum to carry out dispositions, make official notes, and receive warrants. This service official note is applied to all TelkomGroup entities with the aim of email integration. It enables and empowers its employees to be more efficient and adequate, to make more informed decisions using easily accessible data, to link visual dashboards across the organization to create a centralized one (Costich, 2021). This system can be said to be quite important because it is this system that provides task dispositions among stakeholders. However, it turns out that this system has not been tested for the quality of the ISO/IEC 25010:2011 standard system, so there are still complaints from employees of PT Telkom Indonesia as users who use this system.

The ISO/IEC 25010:2011 standard was chosen because of its characteristics which are very suitable for measuring system quality and can even identify system deficiencies from the user's point of view. This ISO standard is widely used in system development. The NDE system, which is the main system for task disposition and formal correspondence, has not conducted a system quality assessment based on ISO/IEC 25010:2011, so the quality of the system still does not meet the standards, so many users complain about several features that should help a lot in official correspondence activities. The Quality in Use dimension was chosen because you want to make improvements that make users feel directly the benefits of system improvements because this dimension assesses from the user's point of view. It is necessary to evaluate existing websites so that the content, appearance, and performance of the website can match user needs. Evaluation of the website involves active users who are expected to be able to provide their views on the system which will become research material to produce system evaluations and recommendations.

Quality in Use Dimension in ISO/IEC 25010:2011 divided into 5 characteristics, they are effectiveness, efficiency, satisfaction, freedom from risk, and context coverage. According to Laudon (2016), an efficient system will bring many benefits, namely increased productivity, reduced operational costs, and lower impact on the environment. This is in line with the meaning of an efficient system itself, namely the ability to achieve goals with minimal resources with

maximum results. In addition, Laudon also stated that fulfilling user satisfaction in using the system has several benefits, namely increased productivity, increased business effectiveness, reduced training costs, and higher usage. This certainly brings positive things to the continuity of the Company's business. In evaluating system quality, ISO/IEC 25010:2011 lists efficiency, satisfaction, and context coverage in the characteristics that measure system quality. The author decided to conduct research on the NDE system with the characteristics of efficiency, satisfaction, and context coverage because these characteristics, if they have high quality, will have a positive impact on the company as already mentioned.

## **I.2 Formulation of the problem**

Based on the explanation of the background, the formulation of the problem that underlies this research are as follows:

1. How is the evaluation of the quality of the Electronic Service Official Memorandum System using ISO/IEC 25010:2011 standards on the characteristics of efficiency, Satisfaction, and Context Coverage?
2. What are the recommendations for improving and improving the quality of PT Telkom Indonesia (Persero) Tbk's Electronic Service Official Memorandum System?

## **I.3 Purpose of Research**

Based on the explanation of formulation of the problem, purpose of research are as follows:

1. To find out the results of evaluating the quality of the information system based on the user's perspective in using the NDE system at PT Telkom Indonesia using the ISO/IEC 25010:2011 standard, the dimension of Quality in Use as a reference for measurement.
2. To obtain draft recommendations that can be used to improve and improve the quality of the NDE system at PT Telkom Indonesia in accordance with ISO/IEC 25010:2011 standards.

#### **I.4 Limitation of Research**

Limitation that set in this research are as follows:

1. The system being analyzed is Electronic Service Official Memorandum (NDE) system.
2. The data sources used in this study came from the results of questionnaires filled out by users of the NDE system and stakeholder interviews at PT Telkom Indonesia Bandung.
3. The standard used is ISO/IEC 25010:2011 on the Quality in Use dimension (characteristics: efficiency, satisfaction, and context coverage).

#### **I.5 Benefit of Research**

Based on formulation of the problem and the purpose of research that have been described, this research is expected to provide benefits to:

1. For Telkom University, this research is a written document that contains scientific benefits that can be used as learning reference.
2. For PT Telkom Indonesia, it becomes a reference in making decisions to making improvement to NDE system.
3. For researchers, get additional insight into ISO/IEC 25010 and how to implement it properly.
4. For other practitioners engaged in information systems, this research can be useful to explain the application of ISO/IEC 25010:2011 standard for official memorandum system.

#### **I.6 Systematically of Writing**

Systematically of writing are as follows:

##### **Chapter I Preliminary**

This chapter explains the background of the topic, an explanation of the problems studied in the research, the purpose of the research, the limitations of the research, the benefits of the research, and systematic writing of the report.

## **Chapter II Literature review**

This chapter describes the various aspects discussed in this research from a literature standpoint. In addition, there is also a discussion of the results of previous research that are considered relevant to the topic of this research to be used as references.

## **Chapter III**

This chapter contains the strategy and the steps to be taken during the research. The research steps include framework of thinking, systematic problem solving, data collection, data processing, evaluation method, and reasons for choosing the method.

## **Chapter IV**

This chapter explains the general description of the research object as well.

## **Chapter V**

This chapter describes the results of the analysis of research on problems and provides discussion of possible recommendations designed to overcome the problems experienced.

## **Chapter VI**

This chapter describes the conclusions of the research result and will be the answer to the problem statement.