

CHAPTER I

INTRODUCTION

This chapter consists of the research background, problem formulation, research objectives, research scope, and outline of this report.

1.1 Background

Information technology is continuously developing every year. The development of information technology is unavoidable in this globalization era, especially when the world is dealing with a COVID-19 pandemic that requires online activities. As a result, information technology develops more quickly, serving as an information media. Information technology consists of infrastructure, systems, or methods for obtaining, storing, processing, and transmitting information that can be accounted for (Nuryana, 2019). The need for information technology as an information media is closely related to the need for the internet. The internet has been growing rapidly, connecting many things worldwide in the last few years. Such things are of varying processing capabilities, sizes, and computational power supporting various applications (Chopra,2019).

Internet network is essential in this globalization era. The internet and the website are intertwined. People may share information via the internet by using a website. A website is a collection of web pages published on the internet network with a URL (Uniform Resource Locator) that all internet users can access by typing the address (Arief in Ibrahim, 2018). The website serves as a sharing information media and distribution of information. A website has to be well-design to fulfill users' expectations. As a result, to determine if a website is good or not, it must conduct a measurement, one of which is the usability method.

Usability is defined by ISO 9241-11 as the extent to which specified users can use a system, product, or service to achieve specified goals with effectiveness,

efficiency, and satisfaction in a specified context of use (ISO, 2018). Usability is a science of Human-Computer Interaction (HCI). A usable system should be learnable, efficient, and memorable. It should also satisfy the expectations and needs of the users with its features. Companies aware of the importance of usability try to design and develop more usable websites.

According to the definition of usability, every website must conduct a usability test to ensure that users can use the website comfortably. The summary of website usability is how efficiently, satisfactorily, and effectively people can get the required information from the website. This usability test is available on the University's website. The University website is a tool to communicate with its stakeholders effectively and speedily (Karani, 2021). Andalas University has an academic website that facilitates communication and interaction between lecturers and students. Andalas University implements a Learning Management System (LMS) using Interactive Learning (i-learn) which can be accessed at ilearn.unand.ac.id. This i-learn enables interaction between lecturers and students in face-to-face meetings and online learning with various assignments and materials (i-learn Andalas University, 2021).

Based on the benefits discovered on the I-learn Andalas University website, it is crucial to analyze this to give users a good experience. One way to analyze the website is by measuring usability on the i-learn Andalas University website. The survey shows that almost all Andalas University students use i-learn. According to 160 Andalas University students survey, only two people have never used i-learn Andalas University. **Figure 1.1** below represents a user comparison diagram for i-learn Andalas University.

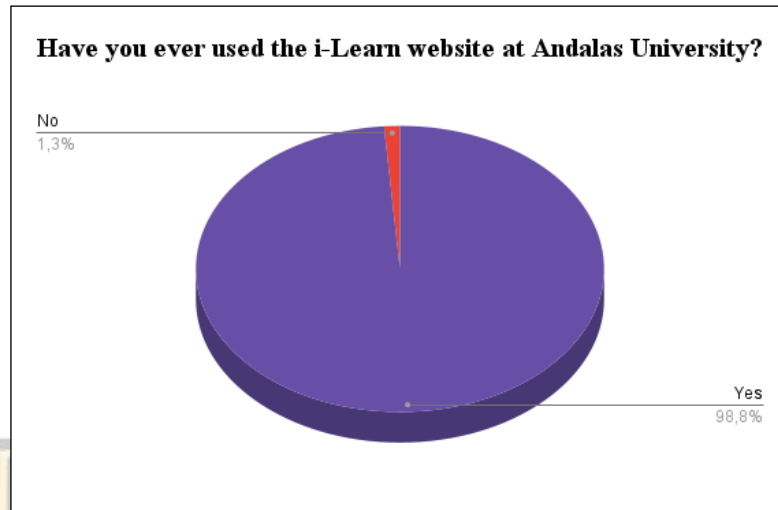


Figure 1.1 Result of Andalas University Students Use i-learn Andalas University Website

According to the survey, 129 of the 158 respondents complained about the i-learn Andalas University website. Fifty-two of them complained about the incorrect time, 47 complained about the display of a boring website, 79 complained about the feature that required logging in every time they visited the website, and 39 complained about the difficulty of finding the necessary information. Thirty-five of the respondents complained about a confusing website, 52 complained that the information provided was not up to date, four complained about a slow website, 12 complained about an error that occurred, and 24 nothing have to complain about i-learn. The pie chart in **Figure 1.2** below depicts Andalas University student complaints about the i-learn Andalas University website.

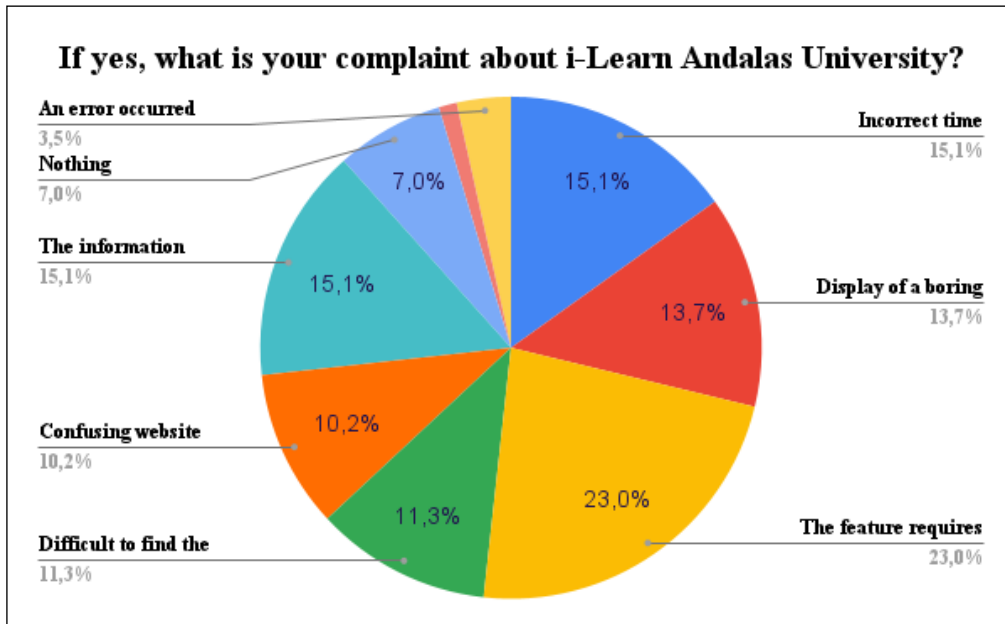


Figure 1.2 Result of Andalas University Student Complaints About the I-learn Andalas University website

According to the above conditions, many students still complain about the i-learn Andalas University website. According to the survey results, 148 respondents agreed, and 12 did not agree to review the i-learn Andalas University website. **Figure 1.3** below shows this answer.

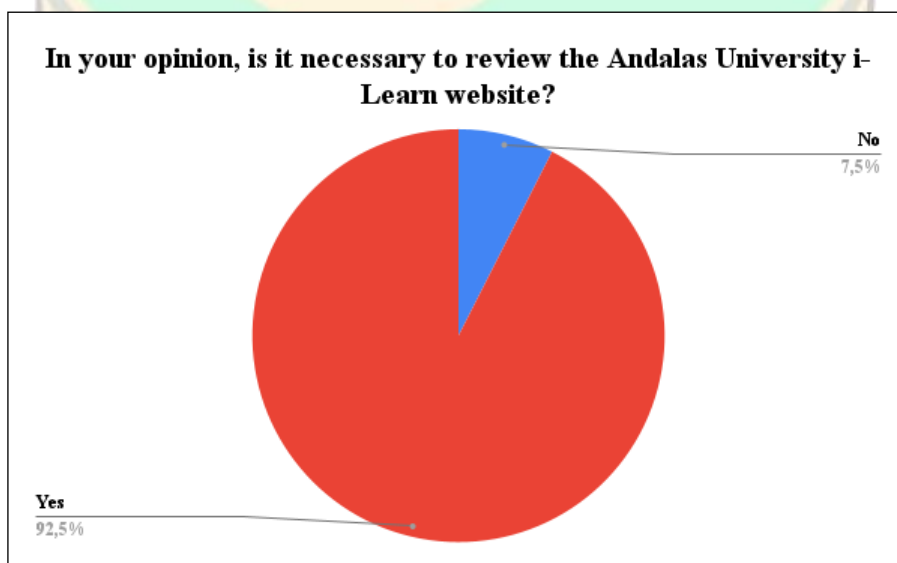


Figure 1.3 Result of Andalas University Student about I-learn Andalas University Website Needs to be Reviewed

Many measurements can be used to measure a website's usability. The suitable measurement for evaluating the i-learn Andalas University website is (Usefulness, Satisfaction, and Ease of Use) USE Questionnaire. USE Questionnaire consists of usefulness, ease of use, ease of learning, and user satisfaction to measure usability. Based on ISO, usability factors consist of efficiency, effectiveness, and user satisfaction. The form of items aimed to make the items as worded and general as possible to understand respondents easily (Lund, 2001). This research expects to determine the usability of the latest version of the i-learn Andalas University website. If there are problems found from this usability research, this research can evaluate the i-learn Andalas University website development team.

1.2 Problem Formulation

Based on the background explanation above, the problem formulation in this research is:

1. How to determine the level of usability on the i-learn Andalas University Website?
2. How to analyze the indicators that need to be improved on the i-learn Andalas University website?
3. How to improve i-learn Andalas University website?

1.3 Research Objectives

The purpose of this study are as follows:

1. Determine the level of usability
2. Analyze the indicators that need to be improved on the i-learn Andalas University website.
3. Give a design recommendation to improved i-learn Andalas University website

1.4 Research Scope

Research scope for this study is the questionnaire respondent of Andalas University students that use i-learn Andalas University website newest version (version three).

1.5 Outline of Final Project

The outline of this report is:

CHAPTER I INTRODUCTION

This chapter contains the background, problem formulation, research objectives, research scopes, and the outline of the final project report.

CHAPTER II LITERATURE REVIEW

This chapter contains a literature review related to this report. The literature review is human-computer interaction, ergonomics, usability, usability evaluation, i-learn Andalas University, statistical data processing, and previous studies.

CHAPTER III RESEARCH METHODOLOGY

This chapter contains the steps for conducting research. This research methodology consists of a preliminary study, research objectives, method selection, data collection, data processing, analysis, design recommendation, and closing.

CHAPTER IV DATA COLLECTION AND DATA PROCESSING

This chapter contains the data collection and data processing results used to calculate the usability level of i-learn Andalas University website version three.

CHAPTER V DISCUSSION

This chapter contains the analysis of data processing results and design recommendations based on data obtained in this research.

CHAPTER VI CLOSING

This chapter contains conclusions and recommendations for this research.

