CHAPTER I

INTRODUCTION

This chapter consists of the background of the research, problem formulation, research objective, research scopes, and outline of the report.

1.1   Background

User Interface (UI) refers to the system and users interacting with each other through commands or techniques to operate the system, enter data, and use the content. Meanwhile, user experience (UX) is an experience related to the perception of both emotions and thoughts, reactions, and habits that users feel and think when using systems, products, content, or services directly or indirectly (Si-Jung Kim, 2014). UI and UX help humans to access information, for example, from a website.

The development of e-Government is efforts to develop implementation electronic-based government in improve the quality of public services effective and efficient. In accordance with the government policy, in the President Instruction Number 3 of 2003 concerning National Policy and Strategy for E-Government Development and Decree of the Minister of Communication and Information, e-Government is designed as a place for interaction between the government and the community so the community becomes an important part in the functioning of e-government. The process of interaction between the government and the community in e-government can run well if there is participation from the community in adopting or utilizing e-government. One of the tangible implementation of e-government applications that are commonly implemented and regulated in Indonesia is the creation of local government websites. However, many local governments identify the implementation of e-government as merely creating a local government website (web presence), so the implementation of e-government is still at the first level (preparation), and only a small number have reached level two (maturation), while levels three (consolidation) and four (utilization) have not been reached. This policy encourages local governments to create websites that provide a good user experience so that people can surf comfortably. One of the local

governments that have started to implement e-government is the Lima Puluh Kota Regency. One of the Lima Puluh Kota Regency websites that are already running is the website of the Department of Trade, Cooperatives, and SMEs (Disdagkopum). This website aims to convey information in the form of the latest news, SOPs, correspondence, and so on so that the public knows the latest information. However, the engagement obtained is still relatively small because the available information is incomplete.

Lima Puluh Kota Regency is one of the areas in West Sumatra Province with the best development of SMEs. This is evidenced by the sending of representatives from West Sumatra, seven (7) SMEs in Lima Puluh Kota Regency to the Mandalika Circuit, West Nusa Tenggara Province, on March 18-20, 2022. This proves that SMEs in Lima Puluh Kota Regency can compete with SMEs from other regions in West Sumatra. Based on the data obtained, there are more than 7 types of SMEs with the types, namely culinary businesses, fashion businesses, education businesses, automotive businesses, agribusiness businesses, internet technology businesses, and other SMEs businesses.

Based on interviews that have been conducted, the website of the Department of Trade, Cooperatives and SMEs in Lima Puluh Kota Regency still does not yet provide a complete description of data access or display related to the trade service. The data in question is how many SMEs are in Lima Puluh Kota Regency, how SMEs run, how the profile of SMEs must also be drawn. Likewise for cooperatives. So, there is a need for an additional special page to display these services. Also, based on interview with head of personal and general subdivision, the website still doesn't give satisfaction to the user because of the unattractive appearance and the long enough user flow to get information.

According to Brama Damuharta, a student who is currently a UI/UX *Designer Intern* at the Blue Bird Group, *he says that for the selection of the information displayed is quite good, but there are still shortcomings in color selection, color contrast that is not right, the arrangement of information that does not fit, the footer is too long, and the lack of information about the usability and services provided by the Department of Trade, Cooperatives and SMEs for the layman*.
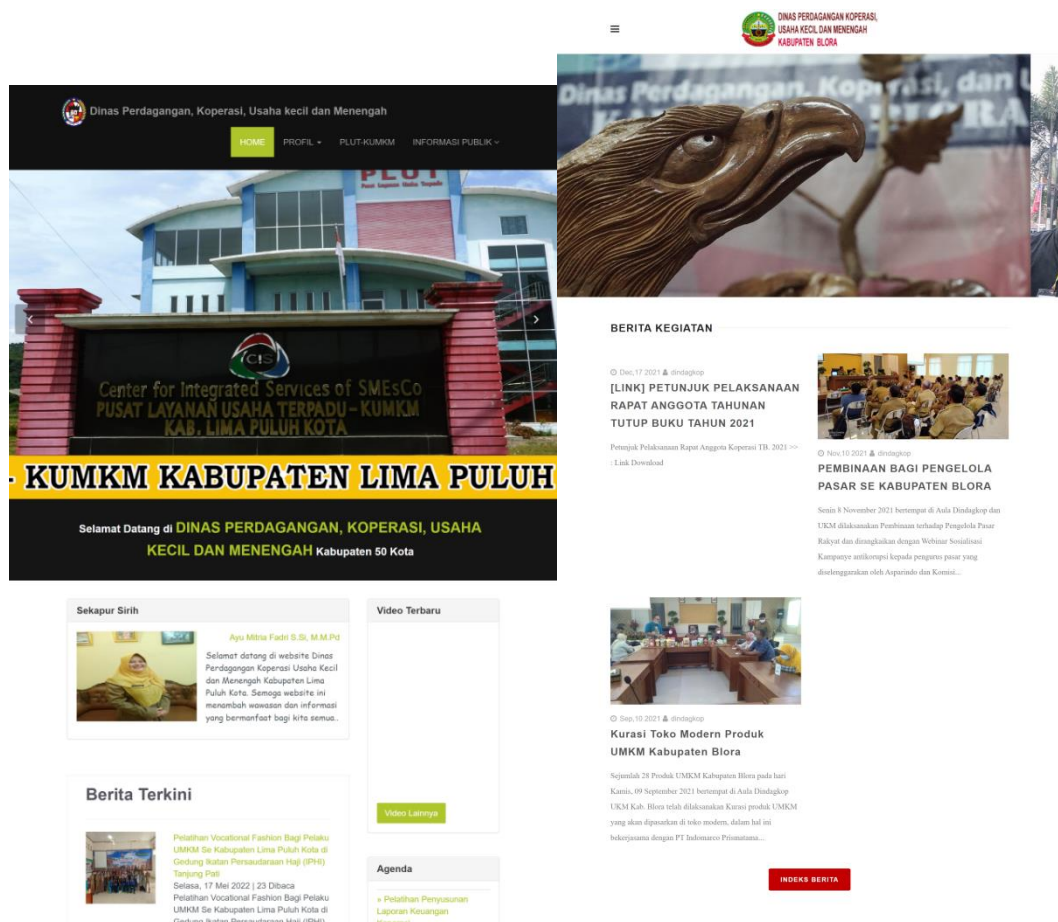
Figure 1. 1 Website comparison

It can be seen in the **Figure 1. 1** above, when compared to the website of the Blora City, cooperative, and UKM websites, the Blora City website is more attractive in terms of design due to the selection of the right colors and fonts. The Kota Blora website provides a good color combination, displays high-resolution images, and on the main page displays the characteristics of the City of Blora. The most striking thing and quite disturbing for users when entering the Disdagkopum website is the top panel. Top panel is too large so it fills the laptop screen. Meanwhile, as seen on the Kota Blora website, the size of the top panel is more suitable and matches the size of the website page so that the top panel is able to convey information without taking up a lot of space. The footer on the disdagkopum website is also too large. Same as the top panel, the footer also fills the laptop screen when user scrolled down. The website has a fairly long sidebar, but there is less information in the middle of the website, so the sidebar makes the page longer. These problems that the users were having were violating some of the UX law, such

as Fitt's law and the law of similarity. The Fitt's Law states the size and distance between assets from the user's position will affect the user experience in operating the designed page (Yablonski, 2020). In the current Disdagkopum website design, suggestion and question boxes are placed in the sidebar where users must scroll down. The suggestion box is also not accessible on some pages, such as the "public information" page, so users have to return to the homepage to access the suggestion box and questions. The law of similarity states that the human eye perceives similar elements in a design as images, hence the need for a clear visual distinction between links and navigation buttons with plain text elements and presented consistently. On the home page of the link list section, some users are not satisfied with the link image because the link display is similar to a regular image or the user though the picture cannot be clicked.

In the initial survey conducted using the Webqual method, based on an online survey conducted using the Webqual method filled out by 58 users. Users judge in terms of design, the Disdagkpum website is still less attractive. Likert scale is used from 1 to 5, with 1 as very unattractive and 5 as very attractive. About 28 users voted for 2 of their answers. Some user says the website design is not innovative and the website design is impressed with the 2000-2015 model year website design aka old school. This can also be seen based on a comparison with the Blora City government website.
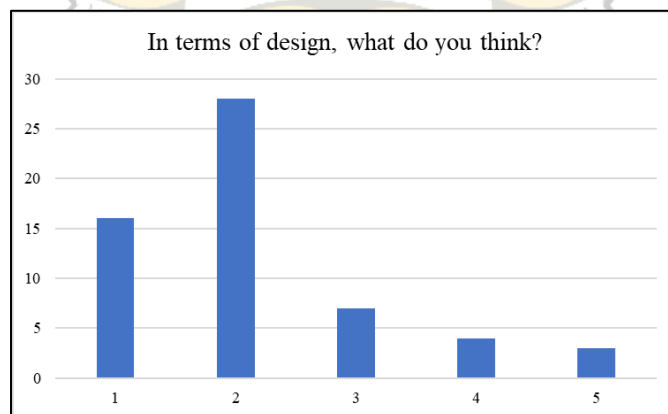

Figure 1. 2 User Assessment on Disdagkopum Website Design

User experience is highly related to the user interface. Based on the observation, interview and initial survey, it can be stated that Disdagkopum Website has a unattractive design, website pages are not optimally arranged and some of the website's pages still not exist (such as a special page for the SMEs profile). Therefore, these problems lead to unpleasant user experiences.
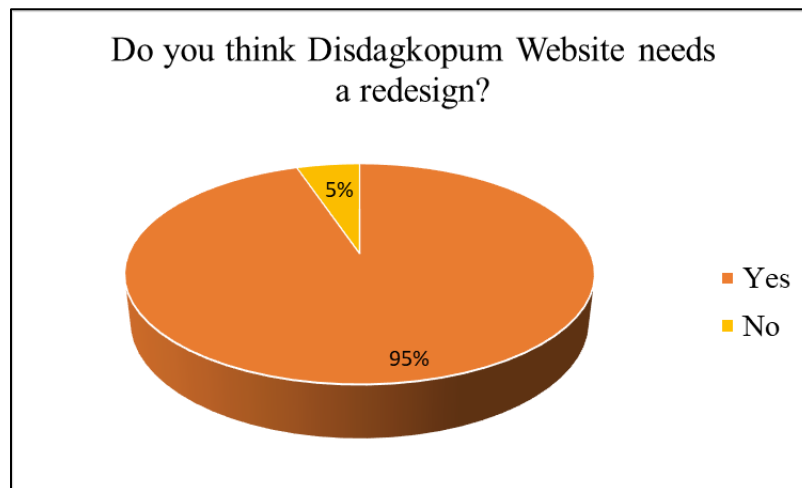

Figure 1. 3 User Thoughts on Disdagkopum Website Redesign

Based on the explanation above, the Disdagkopum Lima Puluh Kota website needs to be redesigned to improve user experience. About 58 users were asked their thoughts on Disdagkopum website redesign and 95% agreed that Disdagkopum Website should be redesigned as seen in **Figure 1. 3**. The process of redesigning the Disdagkopum website uses a design thinking method approach. This method was chosen because this method involves the user in the process in each process. By involving the user, the results produced will be close to the wishes of the user. The proposed Disdagkopum Website design is expected to fulfill users' needs, help users to reach their goals, and provide better user experience.

1.2   Problem Formulation

Based on the background described previously, the problems faced by stakeholders and users are that the website has unattractive design, website pages are not optimally arranged and some of the website's pages still not exist (such as

a special page for the SMEs profile). For this reason, the formulation of the problem in this study is how to improve user experience by involving stakeholders and users in redesigning the Website Interface of the Department of Trade, Cooperatives and SMEs Lima Puluh Kota Regency.

1.3   Research Objectives

The purpose of this research is to improve user experience by involving stakeholders and users in redesigning the Website Interface of the Department of Trade, Cooperatives and SMEs Lima Puluh Kota Regency.

1.4   Research Scope

The research scope of this research is as follows.
1) Testing is only done on the web screen size.
2) Developing a new prototype design focusing on the division of SMEs departement
3) The testing phase is carried out using the usability testing method

1.5   Outline of Report

This report consists of three chapters with the following writing methodology.

CHAPTER I   INTRODUCTION
    The introdustion chapter contains an explanation of the background of the case, problem formulation, research objective, research scope, and outline report.
CHAPTER II   LITERATURE REVIEW

The basic theory chapter contains an explanation of the theories used in this research. This chapter consists of a literature review related to the topic. The literature reviewed is regarding human-computer interaction, user experience, user interface, e-government, webqual method, IPA, design thinking process, usability, and usability testing.

CHAPTER III RESEARCH METHODOLOGY

The Research Methodology chapter contains the methods used in the research process such as preliminary study, literature study, problem identification, problem formulation, method selection, webqual & IPA process, design thinking process, discussions, and conclusions.

CHAPTER IV WEBQUAL AND IPA PROCESS

The discussion of this chapter is about analyzing the quality of the Disdagkopum Website in Lima Puluh Kota Regency using the Webqual method modification and Importance Performance Analysis (IPA).

CHAPTER V DESIGN THINKING PROCESS

The design thinking process chapter contains the design thinking process that has been carried out. The design thinking process in question consists of empathizing, defining, ideating, prototyping, and testing.

CHAPTER VI DISCUSSION

The analysis chapter contains a discussion on the results of the user interface improvement, user experience improvement, and usability testing processes that have been carried out.

CHAPTER VI CONCLUSION

The conclusion chapter contains the conclusions of the research that has been done and the suggestions for future research.