CHAPTER I

INTRODUCTION

1.1 Introduction

The advent of technology has transformed the manner in which information is disseminated in public spaces, including mosques. Traditional means of communication, such as bulletin boards and paper notices, are being superseded by digital solutions that offer greater flexibility, efficiency, and engagement. This project aims to develop a cost-effective and user-friendly Masjid Digital Signage System for the ICC MSU. The system will display information such as prayer schedules, event announcements, and other relevant content, enhancing communication and fostering a connected community. The project addresses the limitations of conventional digital signage solutions by offering a web-based application that can be managed remotely and updated in real-time. This addresses the specific needs of mosques, which require a solution that can be easily managed remotely.

1.2 Project Background

Digital signage boards are electronic displays that can be used to show a variety of content, such as advertisements, wayfinding information, and event schedules. Digital information screens are often found on highways, shopping centers, and agencies both government and private and are a medium used as a promotional or advertising medium for the community, this information layer or digital layer has been used in mosques that function to provide various kinds of information to include prayer times, religious study schedules and this information can only be seen by people who worship or enter the mosque and sometimes the display of information is still very unattractive because it is not combined with picture and others. Information screen is an electronic media that is often used to display information needed, both in the industrial world, government institutions and in the world of education.(Mishima et al., 2017)

But many mosques have not implemented the use of this digital information layer due to the relatively expensive price so that they only use announcements and fixed to the masjid wall to display or inform prayer schedules, and activity at the mosque so that I took the initiative to make "THE DEVELOPMENT OF MASJID DIGITAL SIGNAGE SYSTEM FOR ICC MSU" with this information layer can make it easier for mosques to display prayer schedules, routine studies, Friday sermons, and mosque activities as well as other important information in an integrated manner so that people can see mosque information that is used through digital media such as smartphones.

Mosque administrators can also manage the content or content of the information media independently according to the needs of the mosque itself. Digital Signage is a model for conveying information through electronic display media that can be done dynamically and interestingly, by utilizing LCD, LED and Plasma technology and Digital Signage Display can convey information in one or two directions using interactive technology.

1.3   Problem Statement

1.   Mosques that have not digitized or advance mosque information.

Many mosques have not carried out the digitization process, a simple example is to use a digital signage board, but the obstacle faced is the high price of the signage board which makes the mosque still choose to use bulletin boards and paper to inform about information and activities from the mosque itself. So the researcher here will design and create a web-based digital information board as a substitute for traditional boards such as paper and notice boards which with this web-based digital information board will be produced cheaply and can be modified according to the needs of the mosque and this digital information board will be made at the minimum possible cost so that it can be accommodated by the mosque.

2.   Limited functionality.

Digital information screens have limitations, mainly that they only have certain features, making it difficult to add or organize existing features, create digital information layers so that in the process of making them you have to consult about your needs. And on

digital information boards that are popular at this time we as users have to buy a set of tools and software separately so that if we want to optimize the use of this tool we have to buy the hardware and software, and we still have to subscribe to the software so that the performance of this product becomes optimal, that's making this product more expensive to get optimal product performance and here the researcher intends to make a web-based digital information board so that cost expenditure can be minimize by eliminating the hardware.

3. Lack of engagement

Digital signage can sometimes fail to engage worshippers if the content is not relevant or interesting to them. To address this, it is important to have a content strategy in place that takes into account the needs and interests of your audience. For example, you could display information about upcoming events, Quranic verses, or hadiths that are relevant to the community. For example, you can display information about upcoming events, Quranic verses, or hadith that are relevant to the community, so that this can allow worshippers to pick and choose what activities they are interested in attending so that they can take part in upcoming religious activities. And it can also be used by the mosque community or mosque officials to promote existing activities such as religious studies, reading the Qur'an together, and donation activities. For researchers, this digital information board not only functions as an information board but also a means of communication between the mosque, congregation and the official mosque community.

1.4 Objective of the study

The research objective is what the researcher expects to achieve in the research of study objective. A research objective is usually expressed in lay terms, which are words or statements that someone outside of specific field can understand. In general, the objective, the objective of this study is to design and develop masjid signage that contain masjid information and masjid activity which aims to improve the efficiency of the promoting masjid activities and information and change the manual system into an application Specifically, the objective of this study is :

1. To create information platform for activities for the worshiper and masjid staff
2. To develop application of masjid signage board contain masjid information and activities.

3. To help the work of the masjid staff to information to the worshiper.
4. To provide a function system that allow different masjid to use

The purpose of this study is to improve masjid life and environment and it easier for admins to promotions the masjid activities and information to encourage other to pray in masjid, so they can know each other on their environment.

1.5 Significant Of the Study

Development of a web-based digital information board application for the following reasons:

- Reduced cost: This web-based Digital Information Board application can reduce the mosque's expenses because users only need to prepare an Android TV or Android-based Set Top Box to use this web-based application to run this application.
- Increase efficiency: In mosques that use this application, the mosque can easily manage what content will be released or what information will be released so that there will be communication between the mosque and its community.
- Improve Accuracy: This web-based application can be easily accessed so that mosque staff can manage the information to be published and make the activities in the mosque more accurate and known by all parties.
- Access to information: This application can be run on any browser that supports it, so anyone can see what information or activities are being carried out by the mosque, wherever they are.

This web based digital information board application can help to distribute information from the mosque to the community more easily and can be accessed anywhere so that the scope of information will be more extensive and with the minimum cost required so that every mosque can accommodate this application. This platform can also assess the literacy of mosque staff using existing technology.

1.6 Scope of the project

The Scope of users (mosque staff) on the digital information board application:

1. Content management: Includes setting up content to be displayed on this digital information board and managing information that has been prepared.
2. User Management: Includes the ability to manage or administer mosque accounts that are used and manage access to applications and facilities that are used and can delete content that is deemed unnecessary.
3. Information Management: Organize what information is worth displaying on the digital notice board.

4. Reporting: Includes if there is a problem, the mosque account manager can report the problem to the digital notice board team.

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1.7 Summary

The development of a Masjid Digital Signage System aims to provide an efficient and cost-effective way to display and manage information in mosques. The system is designed to improve the promotion of mosque activities and information, replacing traditional methods like bulletin boards and paper notices. The development of this system addresses the challenges faced by mosques in implementing digital signage solutions, such as high costs and limited functionality. By creating a web-based digital information board application, the research aims to minimize costs, improve efficiency, and enhance communication within the mosque community.