Designing Financial Information Systems And Customer Management On Website-Based CCPA And P3A

Rafael Anthonio¹, Erdhi Widyarto Nugroho², Alexandra Adriani Widjaja³

¹²³Department of Information System, Soegijapranata Catholic University
¹Jl. Pawiyatan Luhur Sel.IV No.1, Bendan Duwur, Kota Semarang, Jawa Tengah 50234
¹17g40010@student.unika.ac.id
²erdhi@unika.ac.id
³alexandra@unika.ac.id

Abstract— Business competition that is increasingly fierce in this era, requires companies to not only focus on profits but also focus on the needs of consumers and stakeholders. Along with the development of information technology, the company's efforts in meeting the needs of consumers and stakeholders, can be supported with the help of information systems. With the help of a well-integrated information system, companies can collect, process, analyze and store data more quickly, precisely and accurately and can maximize marketing, sales and service efforts to consumers. In CCPA and P3A, the recording of transactions and customer data is still done manually. Because of this, a financial information system and customer management were developed. Based on the results of the functionality test and the results of interviews with users, it proves that the system developed can support the performance of CCPA and P3A in terms of recording transaction data and customer data.

Keywords— Financial Information Systems, Customer management, Financial reports, Laravel, MySQL.

I. INTRODUCTION

Business competition that is increasingly fierce in this era requires companies to not only focus on profits but also focus on the needs of consumers and stakeholders. With a good customer relationship management, a company can not only retain old consumers but can also attract interest from new consumers. Not only focusing on consumer needs, companies are also required to be able to meet what the stakeholders need. The need for data and information from financial statements that can be presented quickly and precisely is an important factor. The sooner a financial data and information can be presented, the faster the decisions that can be made, and the more accurate the data and information presented, the more correct the decisions will be made.

This research will be conducted at CCPA and P3A which are certification service bodies. This research will focus on processing financial data and customer data in the CCPA and P3A. In terms of recording every transaction carried out by CCPA and P3A so far, it still uses a manual system, namely using Microsoft Excel. This can hinder the performance of CCPA and P3A because with a financial system that is still manual, it can cause many errors and the financial data it produces cannot be fast and accurate. In terms of recording consumer data, CCPA and P3A still use Microsoft Excel. This is of course an obstacle because the consumer data recorded cannot be analyzed and cannot be processed further. The design and development of a special information system for CCPA and P3A based on websites with the help of the laravel framework, can be a solution to solve this problem. With a system, CCPA and P3A can record and process financial transaction data more quickly and accurately and can better collect, process and analyze consumer data.
II. LITERATURE

Financial Statements

Financial statements are the final result of the accounting process in a certain period that contains data and information related to the financial situation in an enterprise. Financial statements are used by stakeholders as a guideline for analyzing the state and financial position in an enterprise.

Consumer Relationship Management (CRM)

CRM or better known as customer relationship management is a business strategy consisting of a combination of people, business processes and technology that aims to create a product value for customers with the help of information technology and supported by quality customer data (Rosmayani, 2016) [1]. With the existence of CRM, a company can establish good relations with customers and increase the value of their products and services in the eyes of customers. Not only that, CRM also makes a company able to know what is needed by customers, analyze customer behavior, know the improvements needed to improve service to customers, and get new customers.

Information System

An information system is a system consisting of input components, models, outputs, hardware, software, databases, and humans that are interconnected to collect, process and present information to obtain a certain purpose.

Financial Information System

The accounting information system integrates all related elements or subsystems into the accounting information system to provide high-quality information that is flexible, efficient, and easily accessible, as well as providing useful financial information to policyholders.

III. METHOD

The objects taken in this study are CCPA (the Certification Centre of Professional Accountant) and P3A (Center for Accounting Training and Development). The data collection method in this study was carried out by means of interviews, observations, and collection of documents and records related to the flow of recording financial transactions and customer data in the CCPA and P3A.

IV. RESULTS AND DISCUSSION

The process of recording and processing customer data starts from inputting customer data into the system, connecting consumer data with project data, and will end with connecting consumer data with related financial data (such as receivables). Meanwhile, the flow of the process of recording and processing financial data will begin with inputting income, expenses, and other transactions, the process of making project income statements, the process of making income statements, and will end with the process of making financial statements or balance sheets.

A. System Design

Use case diagrams are used to illustrate a relationship between one or more actors/users and the system to be created. Use case diagrams can also be used to find out what functions will be contained in the system to be created.

Figure 1 Use Case Diagram Of financial information system
This ERD is used to describe and describe the design and structure of the database used in a system.

*Activity diagrams* are created with the aim of describing and explaining the workflow of a system to be built.

The picture above is a consumer data master page. On this page users can add, edit and delete data.

The picture above is a page of the offer letter. On this page users can add, edit and delete data.
The picture above is a service order page. On this page users can add, edit and delete data.

The picture above is an invoice page. On this page users can add, edit and delete data.

The picture above is a revenue page. On this page users can add, edit and delete data.

The image above is an expense page. On this page users can add, edit and delete data.

The picture above is a receivables page. On the page, the user can see the details of a receivable and can pay it off.

The picture above is a petty cash page, where users can see the flow in and out of cash.

The image above is the result of the implementation for the head dashboard page. On this page, the head can see some important
information including the number of offer letters, service orders, and invoices that have not been validated and the number of projects that take place. In addition, on this page, the head can see the balance of income, expenses and also cash in a period.

Figure 15 General Ledger of Revenue

The picture above is a revenue ledger page where the head of CCPA and P3A can see the details of the ledger of income accounts in a certain period.

Figure 16 General Ledger of Expense

The picture above is an expense ledger page where the CCPA and P3A heads can see the details of the load account ledger in a given period.

Figure 17 General Ledger of Cash

The picture above is a cash ledger page where the head of CCPA and P3A can see the details of the ledger of cash accounts in a certain period.

Figure 18 General Ledger of Receivables

The picture above is a receivables ledger page where the head of CCPA and P3A can see the details of the general ledger of accounts receivable in a certain period.

Figure 19 General Ledger of Debt

The picture above is a debt ledger page where the heads of CCPA and P3A can see the details of the debt account ledger in a certain period.

Figure 20 Project Profit and Loss Statement

The picture above is a page that will display information about the income statement.

Figure 21 Profit and Loss Statement

Figure 22 Output Profit and Loss Statement
System Testing

Testing this system is carried out in two ways, namely by testing functionality and interviewing with users. This test aims to ensure that this system can run properly and in accordance with user needs. From the results of the functionality test above, we can see that this system is running well without any obstacles and obstacles. And this system has been built and developed in accordance with the system design that has previously been adapted to the needs of users. Interviews were conducted with the admins and heads of CCPA and P3A after they tried the existing system themselves. The following are the results of the interview:

<table>
<thead>
<tr>
<th>No.</th>
<th>Interview Results Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>[Information]</td>
</tr>
<tr>
<td>2.</td>
<td>[Information]</td>
</tr>
</tbody>
</table>

And based on the results of the interviews that have been conducted, information is obtained that this developed system is in accordance with their needs and helps their performance. Not only that, based on the results of the interview as well, this system has an easy-to-understand appearance and flow.
IV. CONCLUSION

Based on the results of the study, the results of testing the functionality and the results of interviews with users can be concluded that:

The process of designing and creating a system starts from data collection, designing use case diagrams, entity diagrams, activity diagrams, system creation and ends with system testing.

The system that has been completed can run well, and is in accordance with the existing design and needs. It is evident from the results of the system functionality test that suggests that all existing components and features can run well. And this system has a look and flow that is easy for users to understand.

REFERENCES