

Design of Booking Accounting Information System in PPTK, Cimahi Utara District

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Abstract

The development of technology and science is a driving factor in the development of the world economy. This study aims to design a bookkeeping accounting information system in PPTK North Cimahi District. The research method used in the form of interviews, observations and literature review. The results of the study show several display structures on the menu, several hardware and software specifications used in the accounting information system design system. Then there are several problems encountered in the designed system, The design of the information system uses the Waterfall method using the Visual Studio 2010 programming language and the database uses Microsoft Access, so that it is expected to run as needed, and the implementation and testing of this information system can be said to have been appropriate and can run well so that it can be used to facilitate data processing. According to the needs of the institution concerned. Optimal use of accounting information systems in an institution can provide benefits to the organization, namely making it easier for organizations to adapt to a constantly changing environment, better internal control systems, and improving organizational external relations.

keywords

design, accounting information system, PPTK bookkeeping



I. Introduction

The rapid development of science and information technology has become one of the driving factors and has a very important role in the development of the world economy. The existence of increasingly sophisticated technology allows users to make use of appropriate technology. One of them is by building an accounting information system. Accounting information system is a computer system application that is used to process accounting data. Accounting information systems have an important role for companies, because accounting information systems together with other information systems provide information needed by management as a basis for decision making (Bachtiar, 2012). The role of information systems on the progress of the organization is no longer in doubt. With the support of a good information system, a company will have various competitive advantages so that it can compete with other companies. Information is data that has been processed in such a way that it can be used by users in making decisions.

Developments that occur in the field of accounting information lead to the development of information needs for interested parties and the need for quality processes and performance in producing information. In addition, currently many companies are experiencing obstacles in the implementation of accounting information systems, which are located during the process of producing the information. In the process of producing daily accounting information carried out according to the system applied to each company and its implementation is inseparable from problems, for example users who do not understand how

to operate the system so that the performance of the information system is not optimal as expected, and does not the suitability of the system used in a company,

Design is a process of creating and designing a new system with the hope that this new system will be a solution in solving problems that are being faced in a company management. The system is a collection of components that are interrelated and work together in achieving a common goal, and information is the result of data processing that has benefits and uses.

While the information system is a system or collection of interrelated procedures that process transactions within an organization to produce reports and certain information required by certain parties.

Information systems are the most important part that must be owned and managed properly according to their needs. The information system in the company is adjusted to the needs and functions that exist within the company such as sales information systems, product finance, marketing and others. Information will be processed according to the form of their respective information systems. Information that has been processed can be used by organizations or companies as a basis or reference in making decisions and as material for evaluating activities that have been carried out in a certain period. With an evaluation of the activities carried out, the company can develop as needed for the progress of the organization or company.

For government organizations, accounting can prevent and detect crimes of corruption and misuse of public money or don't want to accept bribes through bank transfer because the incident will be recorded in the bank's accounting, which is the party to the eradication of corruption, easily tracing the flow of corrupted funds

The accounting information system is a computer-based system that aims to process financial data related to transaction data in a cycle in accounting which is then presented in the form of financial statements to a company management. Nugroho Widjajanto stated that an accounting information system is a closely coordinated arrangement of forms, records, equipment including computers and supporting tools along with communication tools, implementing personnel, and reports designed to transform financial data into the information needed.

The accounting information system according to Bodnar and Hopwood cited in Yusmalina states that the accounting information system is a system that provides accounting and financial information along with other information obtained from the routine process of accounting transactions, the information generated by this system includes information about sales orders, sales, cash receipts, purchase orders, payments, payroll. This accounting information system is a collection of resources, people and equipment, designed to convert financial and other data into information needed by the management of a company or institution.

There are several components in an accounting information system such as human resources (HR) who are trained and understand accounting, financial accounting procedures, financial data forms, accounting software and hardware such as computers connected in a network. The accounting information system consists of three main subsystems, namely: (1) transaction processing system (Transaction processing systems, (2) General ledger/financial reporting systems and (3) Management control systems.

In carrying out its role, AIS has the following objectives: (1) providing information for managers of new business activities, (2) improving information generated by existing systems, (3) improving accounting controls and internal checking, namely to improve the level of reliability (reliability). Accounting information and providing complete records regarding the responsibility and protection of company assets and (4) reducing clerical costs in maintaining accounting records.

An accounting information system is a collection of resources that are designed and then processed so as to produce financial information that is useful for use in making decisions that suit the needs of those who use it.

Accounting information system is a very important part to improve organizational efficiency and support competitiveness by providing financial and accounting information for management. The system can be said to be effective if the system is able to produce acceptable information and is able to meet information expectations in a timely, accurate, and reliable manner.

The accounting information system consists of several cycles (1) The first cycle of the SIA is the Revenue Cycle, consisting of all activities related to the basic exchange of economics from the sale of goods and services and obtaining cash from these sales. (2) The Expense Cycle Cycle) which involves various activities related to obtaining and paying for goods and services, (3) Production Cycle which consists of various activities related to the use of labor and equipment to convert raw materials into finished goods, (4) focuses on the Human Resource Management/Payroll cycle, which addresses the issues of the effective development and management of an organization's most valuable resources; employees (employees), and the payroll system, and (5) the General Ledger and Reporting System which talks about various problems in providing accurate and timely financial and non-financial information to management, namely regarding the effectiveness and organizational efficiency in carrying out various business activities

Onaolapo and Odetayo (2012) say that accounting information systems affect organizational effectiveness. The effectiveness of accounting information systems is highly dependent on the successful performance of the system, users (users), and sponsors. Important factors that can affect the effectiveness of the accounting information system are expected to have a positive influence that can indicate the level of success of the system in carrying out its functions. Accounting information is information obtained from economic activities and the condition of the organization itself (Sihombing, 2020). Accountants provide the duty to an organization to provide clear details for choice-making (Gassama, 2021). One of the accounting courses is the Accounting course for Trading and Manufacturing Companies (Sihotang, 2021). Audit quality is selected from the role of auditors who have adequate competence and are independent so that they become parties who can provide assurance on the integrity of the accounting numbers reported by management (Utami in Sitanggang, 2020).

Previous research on accounting information systems has been carried out by several researchers. Ismail and King (2007) found a positive and significant relationship between the influence of information technology sophistication on the alignment or suitability of information technology with business strategy. Ekayani, et al. (2005) stated that information technology facilities are able to create good relations with external parties of the company and affect the competitiveness of the company.

Optimal use of accounting information systems in an institution can provide benefits to the organization, namely making it easier for organizations to adapt to a constantly changing environment, better internal control systems, and improving organizational external relations.

PPTK North Cimahi District in its operations still does not use detailed and automatic electronic accounting books. So that in practice it is still doing the recording manually.

With these problems, it is necessary to design a bookkeeping accounting information system in PPTK, North Cimahi District.

PPTK North Cimahi District in its operations still does not use detailed and automatic electronic accounting books. So that in practice it is still doing manual recording so it is necessary to design a bookkeeping accounting information system at PPTK, North Cimahi

District. This study aims to design a bookkeeping accounting information system in PPTK North Cimahi District.

II. Research Methods

2.1 Interview

The interview involved the writer as the interviewer and the Head of the Sub-District of Finance and Programs in Bandung Kidul District, Bandung City as resource persons. Interviews were conducted by submitting a number of questions from the interviewer to the resource person with the aim of obtaining the right information.

2.2 Observation

The author makes observations by looking directly at the workings of the section related to recording the results of the activities carried out, after that the author is given the opportunity to see the system that works in data processing in the process of calculating income tax

2.3 Literature Review

This literature study was conducted to collect theoretical data and expert opinions which were then used as support related to the problems studied by the author. While the software development method used is the waterfall method because it has the advantage that it is more systematic, structured and is a complete document, so that the maintenance process can be carried out easily.

2.4 System Design Method

Writing in this design uses the waterfall method or linear sequential model (classic life cycle or waterfall method). This method begins by analyzing the system requirements for the user to design the system design and continues with the coding or implementation process. The system is tested to make sure it runs as expected. Lastly is system maintenance to avoid errors and bugs.

a. Requirements

At the Requirements stage. Must know information. What is required from using the system. At this stage the authors collect information through interviews, consultations, and observations.

b. Design

At the design stage, before coding, we need a system design or interface design

1. At the implementation stage or programming stage, the author uses the Microsoft Visual Studio 2010 programming language and uses the Microsoft Access 2013 database
2. System integration and testing
At this stage the program that has been fully integrated into a system will be checked and tested before being sent to the system examiner to avoid errors or failures in the system designed. The operation of the system is carried out using black box testing.
3. Operation maintenance
At the operation and maintenance stage, which has been designed, it will begin to be used together with the maintenance stage. Where the author provides additional new functions and upgrades the appearance of the existing system into a better display.

c. DFD Level 0

DFD (Data Flow Diagram) is one of the stages of making software tools before creating a data base. DFD is useful for describing a flow of incoming and outgoing data, where data is stored in a system.

In DFD discussed what functions are required by a system and the flow of data contained between the processes in it. DFD is useful as a tool to verify whether the system to be built has met the criteria desired by the user or not. Data flow diagrams can be developed from the lowest level to the higher level. DFD level 0 is the development of the context diagram, level 1 DFD is the development of the level 0 DFD. Each process of the DFD can be further developed into more detail until these processes can not be developed anymore.

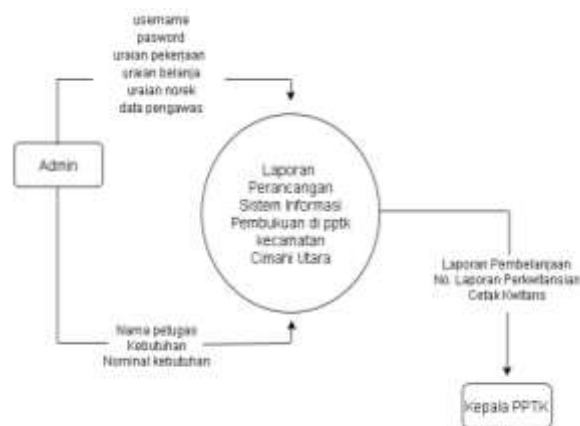


Figure 1. DFD Level 0

d. Context Diagram

Context diagrams describe the relationship between the system and its external entities. Context diagram serves as a transformation of a process that transforms input data into output data. The entity in question is an entity that has a direct relationship with the system.

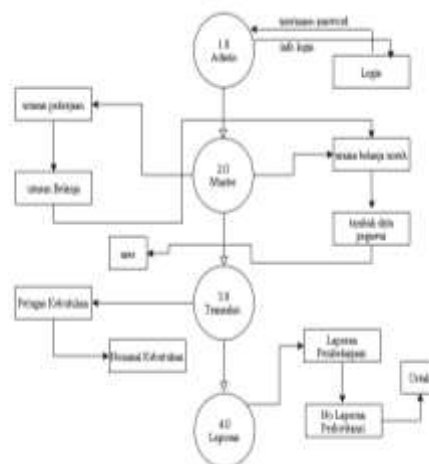


Figure 2. Context Diagram

III. Discussion

3.1 Menu Display Structure



Figure 3. Welcome Menu

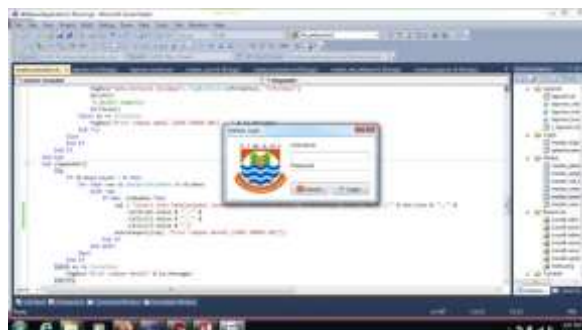


Figure 4. Login Menu



Figure 5. Officer Report



Figure 6. Transaction Report



Figure 7. *Chart Report per Partner*

Figure 8. *Transactions/Expenditures*

Figure 9. *Add Employee Data*

Figure 10. *Partner Master*



Figure 11. Add Partner Data

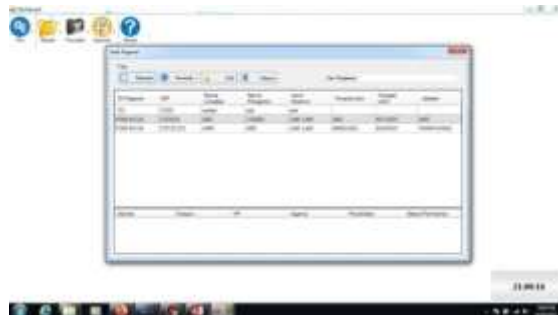


Figure 12. Employee Data

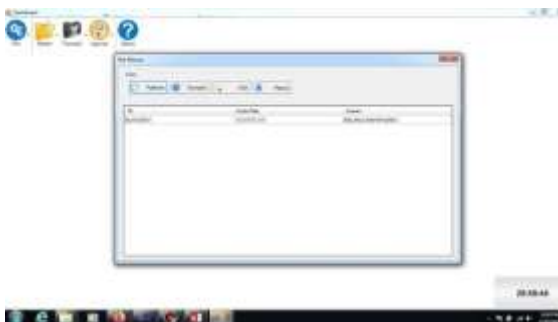


Figure 13. Shopping Account

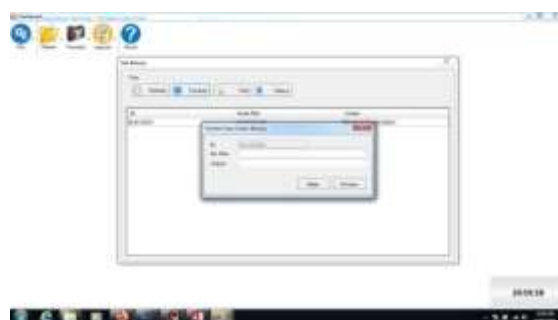


Figure 14. Add Shopping Account Data

3.2 Hardware and Software Specifications

Hardware or hardware needed is a set of PCs/computers with the following hardware specifications:

- Processor : Intel(R) Core(TM) i3-2310M CPU @ 2.10GHz 4(CPU), ~2.1GHZ
- Hard disk: 500 GB capacity
- Printer
- Mouse and Keyboard

- e. Monitor
- f. Flash Disk

The software or software used is a set of PC/Computer with the following specifications:

- a. Operating System : Microsoft Windows 2007
- b. Database application : Microsoft Access 2007
- c. Application Program : Microsoft Visual Studio 2010
- d. Supporting Application : Microsoft Visio Standard Correl Draw x6

IV. Conclusion

4.1 Conclusion

Based on the results and discussion in the previous description, there are several conclusions, namely:

- a. PPTK North Cimahi District in its operations still does not use detailed and automatic electronic accounting books.
- b. Problems faced from the existing system include: (1) Recording is still manual using Microsoft Office Excel in its operations, causing frequent errors in terms of data input (2) There is no special system for electronic accounting in detail and automatically in PPTK North Cimahi District; (3) The process of recording requires inputting one by one which will then be combined into an accounting report where at the time of merging the reports, errors are prone to occur in the recording; (4) The reporting system used is also still prone to various errors due to the gradual repetition of data input which is prone to errors and takes a long time.
- c. The design of the information system uses the Waterfall method using the Visual Studio 2010 programming language and the database uses Microsoft Access, so it is expected to run as needed.
- d. Implementation and testing of this information system can be said to have been appropriate and can run well so that it can be used to facilitate data processing according to the needs of the agency concerned.

4.2 Suggestion

The suggestions that the author can convey to PPTK North Cimahi District, among others:

- a. There needs to be a technician who takes care of information technology.
- b. Utilizing existing computer technology to facilitate data processing, especially electronic accounting bookkeeping systems.
- c. Provision of hardware to optimize the electronic accounting bookkeeping system carried out at PPTK, North Cimahi District.

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