



Fixed Asset Depreciation Information System at PT. Coca Cola Using Service Hours Method

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ABSTRACT

Information System is an organizational component that collects, classifies, processes, analyzes and communicates relevant financial information for decision making to external parties (such as tax inspections, investors and creditors) and internal parties (especially management). This information system is also expected to reduce errors that occur, especially the accounting information system regarding the processing of fixed assets when producing financial information in accordance with accounting standards. Meanwhile at PT. Coca Cola is currently not using a computerized system to cover current weaknesses such as calculating the depreciation of fixed assets at PT. The Coca-Cola. For this reason, it is necessary to make an application using the Microsoft Visual Basic programming language and the Microsoft SQL Server database where it is hoped that the application will be designed to cover the current weaknesses. Where is the program made regarding the processing of fixed assets so that it can cover any weaknesses in the old system.

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1. INTRODUCTION

At present the development of science and technology is increasingly rapidly developing, especially regarding information systems (Simarmata et al., 2020), (Zuhri et al., 2020). This makes a company or government institution must be able to maximize it and must be able to keep pace with the development of science and technology. Government agencies also really need information systems (Rini, 2019), (Herry, 2019).

Information System is an organizational component that collects, classifies, processes, (Novalia, 2019) analyze and communicate relevant financial information for decision making to outside parties (such as tax inspectors, investors and creditors) and insiders (especially management) (Salahudin et al., 2020). This information system is also expected to reduce errors that occur (Mardia et al., 2021), especially the accounting information system regarding the processing of fixed assets when producing financial information that can be in accordance with accounting standards (Azmi, 2018). Meanwhile at PT. Coca Cola does not currently use a computerized system where existing calculations still use the traditional or manual method using a calculator then the data is recorded using an expedition book (Situmorang et al., 2021). in order to cover current weaknesses such as calculating the depreciation of fixed assets at PT. The Coca-Cola.

2. RESEARCH METHOD

2.1 Existing System Analysis

In completing this thesis the author uses 2 (two) study methods, namely:

- a. Field Study
Is a method that is carried out by conducting direct studies in the field to collect data, namely direct observation to the study location. The data collection techniques carried out by the author are: Observation (Observation), Is one method of data collection that is quite effective for studying a system. Activities by direct observation of ongoing activities, namely the activity of collecting data on fixed assets of PT. Coca Cola. Interview (interview), the author conducted an interview (interview) with Mr. Bastian Elnino as an employee of the Finance section.
- b. Sample
Take examples of the data needed, especially data on the assets of the PT agency. Coca Cola (Data Attached).
- c. Library Studies (Library Research)
The author conducts a literature study to obtain data related to thesis writing from various reading sources such as: books about information systems and VB.Net applications, the internet, and others.

2.2 Analysis of Existing Systems

There are several procedures used in this study are as follows: Design Procedure, Represents the procedures and steps needed to achieve the design objectives carried out. The steps are: Analyzing the problems that exist in the process of managing fixed assets of PT. Coca Cola, Designing a new system using the UML (Unified Modeling Language) method, Creating applications with the VB.Net programming language. The following is a scheme for conducting research:

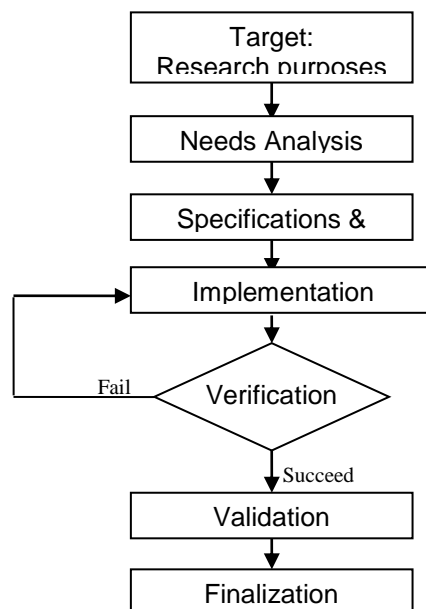


Figure 1. Design Procedure

In the picture above the system design procedure can be described into several stages, namely Research Objectives, Analysis (Analysis), Specifications, Design (Design) and Implementation (Implementation), Verification and Validation stages. And the activities carried out at each stage are as follows:

- a. **Research Target/Purpose**
The research target was carried out to create an accounting information system application so that it can process fixed asset data at PT. Coca-Cola. This system aims to facilitate the performance of employees of PT. Coca Cola in processing fixed asset data and producing more accurate information.
- b. **Needs Analysis**
Contains things that must exist in the results of the design in order to be able to solve existing problems according to the purpose. Some of the things that must be fulfilled are: There is an application that is run to carry out the process of collecting data on assets, There is data regarding fixed assets. There is a database to store company fixed asset data.
- c. **Specifications and Design**
Contains specifications for the designed tools, components, test equipment used and block diagrams of the equipment to be designed. The system design uses the Vb.Net programming language and Sql Server database. The computer specifications used are at least Intel Pentium 4, 512 RAM and 80 Gb Hard Drive.
- d. **Implementation and Verification**
Contains the steps taken in making the tool as well as the stages of testing carried out for each designed equipment block. Analyze some of the errors that exist in the old system. Perform testing of new applications to minimize errors. Perform maintenance on the new system if something goes wrong.
- e. **Validation**
Contains the steps taken when testing the equipment as a whole, the quantities to be tested, and measures to assess whether the tool is working properly according to specifications. After the application is created, it will then be run on the computer if it is appropriate and running properly. Run new applications to be tested on old systems and perform system maintenance. See the results of information from applications that are made with the specifications of the computer used.

2.3 Research sites

The research location for writing this thesis was carried out at PT. Coca Cola is located at Jl. Medan Belawan Km 14.

3. RESULTS AND DISCUSSIONS

3.1 Results Display

The results of the design of the program that the author has made can be seen in the following figure:

- a. Login form display.



Figure 2. Login Form display

The login page above is used to verify the username and password in order to access the existing system

b. Main Menu Page.



Figure 3. Display of Main Menu Form

The main menu page above is a menu selection display that will be accessed, before this main menu the actor must first log in.

c. Fixed Assets Page

The screenshot shows a web interface for managing fixed assets. At the top, there are four buttons: 'Simpan', 'Ubah', 'Hapus', and 'Batal'. Below these is a form with the following fields: 'Tanggal Perolehan' (08/18/2013), 'Id Aktiva', 'Nama Aktiva', 'Satuan', 'Harga Perolehan', 'Taksiran Penggunaan' (Tahun), and 'Taksiran Produksi'. Below the form is a table with columns: 'Tanggal...', 'Id Aktiva', 'Nama Ak...', 'Satuan', 'Harga Perolehan', 'Taksiran...', and 'Taksiran ...'. The table is currently empty.

Figure 4. Fixed Assets page

The fixed asset page above is the form used to manage existing fixed asset data.

d. Shrinking Page

The screenshot shows a web interface for managing depreciation. It features a form with fields: 'Id Susut', 'Tanggal Sekarang' (08/18/2013), 'Id Aktiva', 'Nama Aktiva', 'Satuan', 'Harga Perolehan', 'Taksiran Penggunaan' (Tahun), 'Taksiran Produksi', 'Tanggal Perolehan' (08/18/2013), 'Masa Guna' (Tahun), 'Jumlah Produksi', 'Nilai Residu', 'Biaya Susut', and 'Nilai Susut'. Below the form is a table with columns: 'Id Susut', 'Tanggal...', 'Id Aktiva', and 'Nama'. At the bottom, there are four buttons: 'Hitung', 'Simpan', 'Batal', and 'Hapus'.

Figure 5. Shrinking Page

The depreciation page above is the form used to manage existing fixed asset depreciation data

e. Report Page

directly store data in the database with the actual conditions, which are stored in which table, which column, and what data type is used when storing.

4. CONCLUSION

Based on the research that has been done, the authors draw the following conclusions: The program that has been designed is used to process fixed asset depreciation data at PT. Coca-Cola. The program is made using the Microsoft Visual Basic application with the SQLServer database and the service hours method in calculating depreciation of fixed assets. The system that the author designed has been programmed and automated in processing fixed asset depreciation data and is equipped with reports that support fixed asset processing activities so that it makes it easier for users to use it.

REFERENCES

- Azmi, N. (2018). Application of accounting information systems to improve good governance and appropriate reporting procedures for fixed asset management, (a case study of financial and asset management bodies in the District of Deli Serdang Lubuk Pakam). North Sumatra State Islamic University, Medan.
- Heri, El (2019). The Challenges of National Police HR Development in the Era of the Industrial Revolution 4.0. *Journal of Police Science*, 13(2), 16.
- Mardia, M., Tanjung, R., Karim, A., Ismail, M., Wagiu, EB, Sudarmanto, E., Supitriyani, S., Sihotang, JI, Martina, S., & Damanik, EOP (2021) . *Accounting and Business Information Systems*. Our Writing Foundation.
- Novalia, I. (2019). Cash Receipt and Disbursement Accounting Information System at Permata Bunda Hospital. University of Northern Sumatra.
- Rini, YT (2019). Unraveling the accounting roadmap for the industrial era 4.0. *Reference Journal: Management and Accounting Sciences*, 7(1), 58–68.
- Salahudin, I., Nugroho, GW, & Kartini, T. (2020). Accounting Information System and Internal Control of Sales Effectiveness. *BUDGETING: Journal of Business, Management and Accounting*, 2(1), 194–207.
- Simarmata, J., Chaerul, M., Mukti, RC, Purba, DW, Tamrin, AF, Jamaludin, J., Suhelayanti, S., Watrianthos, R., Sahabuddin, AA, & Meganingratna, A. (2020). *Information Technology: Applications and Applications*. Our Writing Foundation.
- Situmorang, RB, ST, S., Keb, M., Yatri Hilinti, SST, Keb, M., Syami Yulianti, SST, Keb, M., Iswari, I., ST, S., & S KM, MM (2021). *Midwifery Care in Pregnancy*. CV. El Queena Library.
- Zuhri, S., Fajriah, N., Wibowo, RTH, Prakoso, AAD, Indriani, RO, Windari, AT, Thomas, C., Auliya, AZ, Annisa, M., & Yusuf, M. (2020). *Mass Communication Theory and Societal Change (Vol. 5)*. Communication Studies Study Program, University of Muhammadiyah Malang, in collaboration with