

Web-Based Accounting Information System for CV. DirectNet Solution.

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Abstract

DirectNet Solution is a business that sells and services electrical and IT equipment. At the moment, the accounting recording procedure is still done by hand, which frequently leads to mistakes in the recording, the loss of transaction proof, and delays in the financial report production process. The goal of this project is to address these issues by designing and developing a web-based accounting information system. Field research, manual system analysis, UML model creation, CodeIgniter 3 framework implementation, and blackbox system testing are all part of the technique. A general journal, general ledger, trial balance, profit and loss statement, and account management are among the essential components of the created system. According to implementation findings, the finance division can reduce recording errors, speed up the recapitulation process, and provide timely and accurate financial reports with the aid of this system. It is anticipated that this system will work well for managing accounting data and will eventually be able to be used more extensively.

Keywords

information system, accounting, web-based application, financial reporting, CV. DirectNet Solution

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1. Introduction

CV. DirectNet Solution is a company engaged in the sales and services of electrical and information technology (IT) equipment. For more than three years of operation, the company has relied on manual accounting processes, particularly in transaction journals, trial balances, and financial statements. Such manual practices often lead to recurring problems, including recording errors, difficulties in tracing transaction evidence, and the loss of important financial documents. These issues hinder the effectiveness of financial management and increase the risk of data manipulation.

Accounting plays a crucial role in recording, classifying, summarizing, processing, and presenting financial transactions so that decision-makers can interpret them accurately. In the context of CV. DirectNet Solution, the demand for a more accurate, fast, and structured accounting system is becoming increasingly urgent, given the high market needs for networking equipment and related services, along with a considerable daily operational budget. Therefore, the adoption of a computerized accounting system is a strategic step to improve accuracy, transparency, and efficiency in financial management.

One promising solution is the implementation of DNS Count, an accounting application developed in Indonesia. The software provides tools for recording financial transactions and generating automated financial reports, thereby simplifying and accelerating accounting data management. Through the integration of DNS Count, CV. DirectNet Solution is expected to optimize financial performance, minimize errors, and support data-driven decision-making processes more effectively.

1.1 Literature Review

Previous studies have highlighted the importance of accounting information systems (AIS) and internal control in supporting organizational financial management. Saifudin and Firda Pri Ardani (2017) examined

the cash accounting information system at Dr. Kariadi General Hospital in Semarang. Their study emphasized how the implementation of a cash receipt and expenditure system could enhance internal control over hospital revenues. By employing a descriptive method, the study concluded that a well-structured AIS improves efficiency and effectiveness in managing hospital financial transactions.

Similarly, Anidya Rahma and Tantina Haryati (2021) investigated the accounting system at PT. Panca Putri Rahma, particularly regarding cash inflows and outflows. The findings revealed that the company's reliance on manual transaction systems led to inefficiencies and frequent errors, such as in recording LPG cylinder distributions and preparing financial reports. Despite the risks and operational challenges, the manual system was still maintained, which limited the effectiveness of financial reporting and transparency.

Furthermore, David Efendi, Indrian Supheni, and Risa Wida Astutik (2013) analyzed the role of AIS and employee performance in strengthening internal control systems at Koperindo Jatim, Nganjuk branch. The study identified weaknesses in monitoring procedures, managerial responsibilities, and communication flows that undermined the effectiveness of risk management and operational decisions. The research stressed that effective internal control systems are crucial in preventing unexpected losses, ensuring compliance, and supporting organizational performance and profitability.

Collectively, these studies demonstrate that the application of accounting information systems, whether in hospitals, companies, or cooperatives, plays a critical role in improving financial control, reducing errors, and ensuring organizational efficiency. However, the persistence of manual systems in some cases shows the need for more comprehensive adoption of computerized solutions to strengthen transparency and accountability.

2. Research Methods

This study employs a descriptive qualitative research method combined with system development techniques to analyze and design an Accounting Information System (AIS) for CV. DirectNet Solution. The research method consists of several stages, including problem identification, problem-solving strategy formulation, and system design.

Problem Identification

The initial stage involves identifying financial management issues within CV. DirectNet Solution. Currently, the company still relies on manual financial recording for monthly and annual reports. This manual process often leads to delays in report preparation, errors in data entry, and inefficiencies in compiling financial statements. Financial reports are submitted monthly and annually for tax reporting purposes and are later evaluated by the secretary. From this process, it was identified that the main problem lies in the lack of an integrated accounting information system.

Problem-Solving Strategy

To address the identified issues, a structured problem-solving framework is formulated. The solution proposed is the development of a computerized accounting information system that can automate financial recording, reduce human errors, and accelerate the process of generating financial reports. This system will ensure that monthly and annual financial data can be presented more accurately and efficiently, thereby supporting better financial decision-making and tax reporting.

System Design

The design stage focuses on developing an Accounting Information System tailored to the needs of CV. DirectNet Solution. The system involves three main users: the Director, the Secretary, and the Finance Division. A use case diagram is designed to describe the interactions between these users and the system. The AIS is expected to support recording, processing, and reporting of financial data systematically, thereby addressing the current limitations of manual financial management.

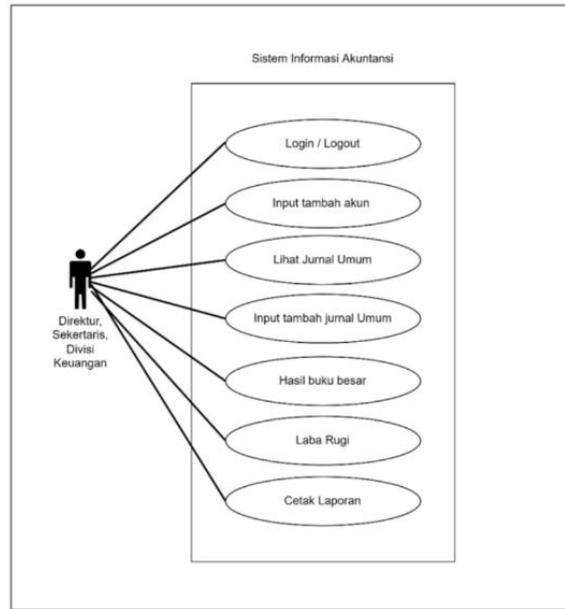


Fig 1. Use Case Diagram.

3. Result and Discussion

Accounting System in the Company

Based on interviews and observations, the accounting system used at CV. DirectNet Solution is still conventional and manual, relying on notebooks and pens. This traditional approach has led to several challenges, including undocumented transaction data, potential data loss or physical damage, human errors such as miscalculation or misclassification, and inefficiencies in financial reporting. As highlighted by the company's secretary, manual accounting often results in additional costs for stationery and difficulties in retrieving important financial records.

The findings confirm that manual accounting practices are one of the root causes of inefficiencies in financial management. These practices hinder accuracy, reliability, and timeliness in financial reporting, thereby affecting the company's ability to make informed decisions.

Data Processing

The observation further shows that financial data processing at CV. DirectNet Solution follows the standard accounting cycle but is not performed optimally. The identified stages include transaction recording, journal preparation, ledger posting, trial balance preparation, and the preparation of financial statements. However, several weaknesses were found: irregular and incomplete journal entries, delays in ledger posting, misclassification of accounts, and inaccuracies in trial balances. These shortcomings significantly reduce the quality and reliability of financial statements such as profit and loss, balance sheets, and cash flow reports.

Proposed Solutions

Referring to the analysis, several solutions are recommended to address the identified issues: (1) adopting a computer-based accounting information system to standardize and accelerate data processing; (2) establishing clear Standard Operating Procedures (SOPs) for the accounting cycle; (3) improving staff literacy and technical capacity through periodic training; and (4) implementing a digital data backup system to prevent data loss.

By applying these solutions, the company is expected to improve efficiency, reduce errors, ensure better documentation, and strengthen decision-making through more accurate and timely financial reports.

4. Conclusions

The implementation of an Accounting Information System (AIS) can significantly simplify the financial recording process and improve the efficiency of accounting activities within the company. However, the findings show that CV. DirectNet Solution still relies on manual input in several areas. This limitation is often caused by the relatively high cost of developing computerized or web-based accounting systems, which makes small and medium-sized enterprises less likely to adopt them compared to larger companies.

To address this issue, continuous improvement is necessary, particularly in providing additional accounting training for directors, managers, and financial staff outside of formal education. Such training will enhance financial literacy and support better financial management practices. Furthermore, future research should consider additional variables and alternative approaches in implementing accounting systems, as different companies may require different methods of financial data processing and reporting.

5. References

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