International Journal Software Engineering and Computer Science (IJSECS)
4 (3), 2024, 916-927
Published Online December 2024 in IJSECS (http://www.journal.lembagakita.org/index.php/ijsecs)
P-ISSN: 2776-4869, E-ISSN: 2776-3242. DOI: https://doi.org/10.35870/ijsecs.v4i3.2975.

RESEARCH ARTICLE Open Access

Implementation of an Asset Management System Using the Straight-Line Method of Depreciation Based on Odoo 14 CE at PT Forecastle Indonesia

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Received: July 24, 2024; Accepted: October 20, 2024; Published: December 1, 2024.

Abstract: The purpose of this research is to implement an asset management system based on Odoo 14 Community Edition (CE) using a straight-line method at PT Forecastle Indonesia. Only the straight-line method is chosen as it gives the simple and efficient way to compute the depreciation of the asset over the useful life. Odoo 14 CE is selected for its rich features for asset management for tracking, depreciation calculation, maintenance, and reporting capabilities built in. The study consists of an analysis of the company needs, design based on straight-line method, Odoo 14 CE configuration, and observation and evaluates the implementation results. Key Outcomes: Increased efficiency in managing assets, accurate depredation tracking, reduced manual errors, better inter- department integration. The system is also expected to help prepare reports on assets-financial relations. We will then assess the implementation outputs against improvements in asset management efficiency and effectiveness (e.g. asset condition monitoring, maintenance costs management per asset, asset value tracking). The study will benefit the company by improving its operational and financial performance.

Keywords: Asset Management; Straight-Line Method; Depreciation; ERP; Odoo; System.

1. Introduction

Asset Management is a crucial component in the operational management of an organization, aiming to ensure that the assets held by the company deliver maximum value throughout their useful life. Effective asset management supports the achievement of strategic objectives by maximizing asset utilization and minimizing associated costs. In practice, asset management encompasses not only the monitoring of the physical condition of assets but also the management of financial aspects such as depreciation calculations, maintenance, and appropriate cost allocation. One of the most commonly applied methods in asset management for depreciation calculation is the straight-line method. This method is widely recognized for its simplicity and effectiveness, as it distributes depreciation evenly over the asset's useful life. In many cases, the straight-line method is preferred by companies because it is easy to apply, requires minimal calculations, and provides consistent results throughout the asset's useful period. As a result, it is the method of choice for businesses that require transparency and ease in managing depreciation costs on a periodic basis.

However, despite the simplicity of the straight-line method, manual asset management can introduce various challenges that impact efficiency and accuracy. One of the primary issues often encountered is human error, which can affect asset recording, depreciation calculations, and the resulting reports. Additionally, manual processes create limitations in tracking asset history, which is essential for monitoring asset condition and value over time. A lack of transparency in data and poor integration between departments also presents challenges that hinder effective asset management in many organizations. To address these issues, the adoption of integrated information systems has become an increasingly popular solution. One such platform for asset management is Odoo, an open-source Enterprise Resource Planning (ERP) system that provides various modules to support business processes, including asset management. Odoo offers an asset management module that enables companies to track assets, calculate depreciation, schedule maintenance, and generate reports that integrate with other modules within the ERP system. By utilizing Odoo, companies can automate many aspects of asset management, reduce reliance on manual processes, and improve efficiency and accuracy in asset recording and reporting.

In Indonesia, the implementation of ERP-based asset management systems, particularly those using Odoo, has seen rapid growth across various sectors. With its adaptability to company-specific needs, Odoo provides significant flexibility in managing various types of assets, ranging from fixed assets to those requiring regular maintenance. Odoo's asset management module allows companies to centralize asset data management, facilitating easier oversight and control across departments. Additionally, its integrated reporting features enable companies to generate real-time asset reports, aiding in faster and more accurate decision-making. PT Forecastle Indonesia, like many other companies, faces several challenges in asset management, including issues related to efficiency, accuracy, and transparency. The manual asset management processes result in difficulties in effectively monitoring asset conditions. Furthermore, the lack of automation in depreciation calculations, combined with the potential for human error, hinders the company's ability to produce accurate and timely financial reports. The fragmented integration of data across departments exacerbates these challenges, as the necessary information is not always readily available for decision-making. To overcome these challenges, the implementation of the Odoo 14 Community Edition (CE) asset management system with the straight-line depreciation method offers a significant solution for PT Forecastle Indonesia. By automating depreciation calculations and asset data integration, Odoo can enhance overall operational efficiency. This system also allows for real-time asset condition monitoring, enabling the company to perform timely maintenance and reduce the risk of asset failure due to undetected damage. Additionally, the integrated system facilitates better collaboration between departments, improving transparency and expediting decision-making processes.

The use of Odoo in asset management provides significant benefits in terms of efficiency, accuracy, and data transparency. Odoo's integrated reporting system offers clear insights into the company's asset condition and value, which is essential for management in planning future expenditures and investments [1]. Moreover, Odoo's capability to automate the tracking of asset depreciation ensures more accurate calculations, making financial reports more reliable and relevant for decision-making processes [2]. The ERP system streamlines asset management by automating critical tasks, thereby minimizing human errors and increasing operational effectiveness [3]. By adopting the Odoo-based asset management system, PT Forecastle Indonesia is expected to significantly enhance its operational and financial performance. Improved efficiency and accuracy in asset management will facilitate better asset oversight, accelerate decision-making, and contribute to the achievement of long-term organizational objectives [4][5]. Additionally, the implementation of this system is poised to set a benchmark for other companies interested in similar ERP solutions, further enriching the body of literature on ERP-based asset management systems in Indonesia [6][7].

Furthermore, Odoo's ability to integrate various business functions, such as procurement, inventory, and accounting, offers a holistic approach to asset management that increases organizational efficiency. This integration is key to streamlining processes and ensuring that asset-related data is consistently accurate across all departments [8][9]. The system's ability to handle both fixed asset management and regular maintenance tracking provides businesses with a comprehensive tool for managing their resources, minimizing asset downtime, and improving overall performance [10][11]. The adoption of Odoo for asset management not only benefits PT Forecastle Indonesia in terms of efficiency, accuracy, and transparency but also positions the company as a leader in implementing ERP solutions. This implementation is expected to serve as a model for other organizations, paving the way for broader adoption of ERP systems in asset management across industries [12].

Based on the previous description, effective asset management plays an important role in supporting the smooth operation of an organization. Although the straight-line method provides convenience in calculating depreciation, manual asset management causes various problems, such as recording errors, unclear transparency, and difficulties in data communication between departments. Therefore, the implementation of an ERP system based on Odoo 14 CE is expected to overcome these problems, especially related to the efficiency, accuracy, and transparency of asset management. The purpose of this study is to analyze the implementation of an asset management system based on Odoo 14 CE with the straight-line method at PT Forecastle Indonesia. This study aims to measure the impact of the implementation system on operational efficiency, depreciation accounting accuracy, and asset data transparency, as well as its impact on the company's financial performance. In addition, this study aims to spread the potential use of Odoo as an ERP implementation model for other companies in Indonesia that face similar challenges in asset management. The results of the study are expected to provide a clear basis for implementing an ERP system for asset management in various industrial sectors in Indonesia

2. Research Method

The research methodology in this study focuses on the implementation of an asset management system using Odoo 14 Community Edition (CE) with the straight-line depreciation method at PT Forecastle Indonesia. The process begins with identifying the key challenges in the company's current asset management practices. These challenges include difficulties in asset tracking, inaccurate depreciation calculations, and the lack of an integrated system for managing asset data. The next phase involves problem formulation, where the specific research question is defined: "How can the efficiency of asset management and depreciation tracking be improved at PT Forecastle Indonesia by using Odoo 14 CE with the straight-line method?" This research question aims to directly address the problems identified in the initial phase. Following this, the primary objective of the study is established: to implement an asset management system using Odoo 14 CE with the straight-line depreciation method to improve the efficiency and accuracy of asset management processes at PT Forecastle Indonesia.

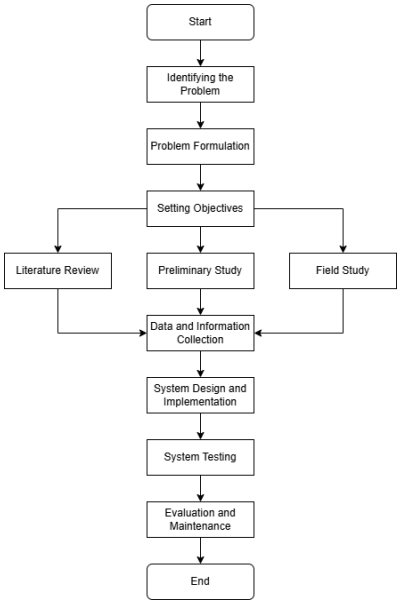

Figure 1. Research Flow Diagram

The research methodology then proceeds with a preliminary study, which consists of two major components. First, a literature review is conducted to explore the theoretical foundations of asset management, the straight-line depreciation method, and the application of ERP systems such as Odoo. This review helps in understanding the best practices and theoretical underpinnings of asset management solutions. Second, a field study is carried out at PT Forecastle Indonesia. The field study involves direct observation and interviews with key stakeholders in the company to gather insights into the company's specific needs and challenges in asset management. This stage is essential for tailoring the solution to the company's exact requirements. The next step in the methodology is the collection of data and information. This phase involves gathering detailed data about the company's current asset management practices, including asset types, tracking methods, depreciation schedules, and reporting practices. The information will also include the system requirements gathered from stakeholders, such as the finance, operations, and IT departments. This data is vital for designing a system that meets the company's needs and integrates smoothly with existing workflows.

Once the necessary data is collected, the system design and implementation phase begins. In this phase, the asset management system will be designed using Odoo 14 CE, with a focus on configuring modules that support the straight-line depreciation method. The system will be customized to fit the company's specific needs, including user-friendly interfaces, scalability, and integration with other business systems, such as finance and inventory management. Implementation will involve configuring the system, migrating data from the previous system, and ensuring that the new solution is fully adapted to the company's asset management requirements. Following implementation, the next phase is system testing. This phase involves several types of testing to ensure the system works as expected. Functional testing will verify that all features of the system, such as asset tracking, depreciation calculation, and reporting, function correctly. End-user testing will involve the staff at PT Forecastle Indonesia to ensure the system meets their needs and is user-friendly. Finally, integration testing will ensure that the new asset management system integrates seamlessly with other company systems, allowing for smooth data flow and uninterrupted business operations. The final phase of the research methodology is evaluation and maintenance. This phase involves evaluating the system's performance post-implementation. Key performance indicators, such as improvements in efficiency, accuracy in depreciation calculations, and user satisfaction, will be used to measure the system's success. Feedback from users will be gathered to identify any issues or areas for improvement. Additionally, system maintenance will be carried out regularly to ensure the software remains up-to-date and continues to meet the company's evolving needs. Updates, bug fixes, and additional customizations will be applied as necessary, and user feedback will be considered for future development and enhancements.

3. Result and Discussion

3.1 Results

The implementation and testing of the solution were carried out systematically, following a structured approach. Each stage is explained in detail, with relevant examples of input and output to demonstrate the process.

3.1.1 Identifying the Problem

The process of identifying the problem started with an initial analysis of asset management at PT Forecastle Indonesia. Observations and interviews with staff revealed that asset tracking was performed manually using spreadsheets, which led to errors and data loss. Key issues identified included unstructured asset tracking, inconsistent depreciation recording, and a lack of an integrated system. These problems formed the basis for developing an appropriate solution using the Odoo 14 Community Edition (CE) asset management system.

3.1.2 Problem Formulation

Based on the identified issues, the specific problem to be addressed was formulated as: "How can the efficiency of asset management and depreciation tracking be improved at PT Forecastle Indonesia using Odoo 14 CE with the straight-line method?" This formulation provides clear focus for the system's implementation, aiming to enhance efficiency and accuracy in asset management and depreciation recording.

3.1.3 Setting Objectives

The objective of this research is to implement an asset management system using Odoo 14 CE with the straight-line depreciation method to improve the efficiency and accuracy of asset management at PT Forecastle

Indonesia. With clear objectives in place, the system's implementation is designed to achieve improvements in asset management efficiency and the accuracy of depreciation tracking.

3.1.4 Preliminary Study

The preliminary study was conducted through both literature review and field study. The literature review examined theories related to asset management, the straight-line method for depreciation, and ERP systems such as Odoo. The field study involved direct observation at PT Forecastle Indonesia to understand their specific needs and challenges regarding asset management. The results of this study provided both a theoretical and practical foundation for the design and implementation of the system.

3.1.5 Data and Information Collection

The data collection phase involved surveys and interviews with various stakeholders at PT Forecastle Indonesia to gather data related to the company's asset management, current practices, and system requirements. The data collected included information on asset types, residual values, useful life, and asset locations. This information served as the basis for designing an asset management system that aligns with the company's needs.

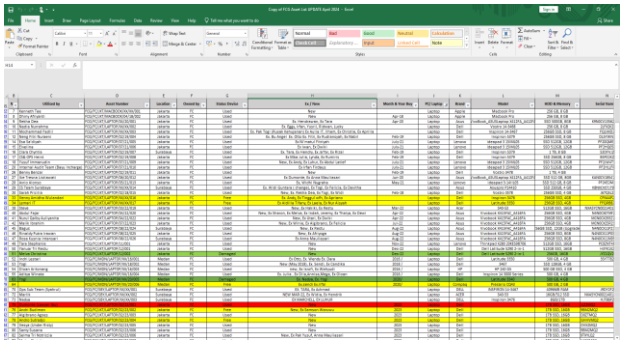

Figure 2. Raw Data of Company Assets

Figure 3. Proof of Asset Purchase

3.1.6 System Design and Implementation

System design and implementation were carried out by configuring Odoo 14 CE according to the company's requirements. This process included configuring the asset management module, setting up the straight-line method for depreciation, and customizing features to meet the specific needs of PT Forecastle Indonesia. Implementation also involved migrating asset data from the old system to Odoo, ensuring that all asset information was properly stored and easily accessible in the new system.

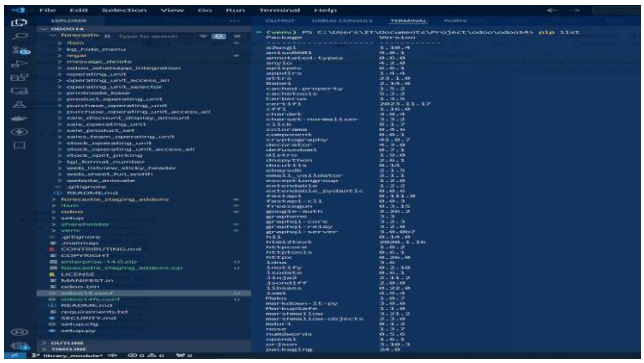

Figure 4. Python Library

Figure 5. Odoo System Configuration Syntax

In Figure 6, the Accounting Module view in Odoo 14 CE, to manage the company's financial operations. This module integrates various accounting functions, such as managing invoices, tracking expenses, and processing payments. The interface provides an overview of the company's financial status, ensuring that all accounting processes are simplified and accessible to users, improving financial control and reporting efficiency. Figure 7 shows the Accounting Module view, but from a different perspective or screen within the module. In this module, there are additional features, such as financial reporting tools or transaction management options,

and the accounting module supports comprehensive financial management, from tracking transactions to generating real-time financial reports, allowing PT Forecastle Indonesia to make the right financial decisions.

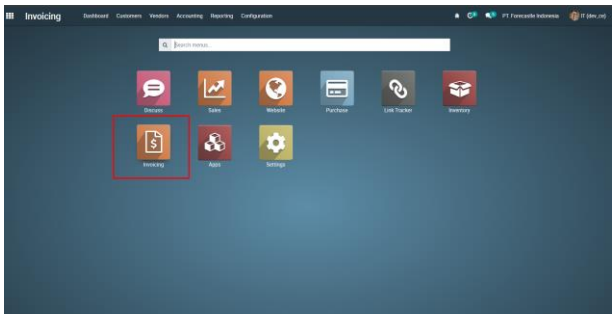

Figure 6. Accounting Module Display

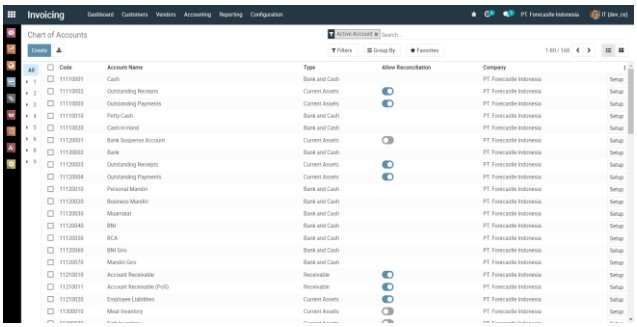

Figure 7. Accounting Module Display

Figure 8 shows the Master Data configuration: Asset Type. This part of the system categorizes the company's assets by type, such as machinery, equipment, or vehicles. By organizing assets into specific types, PT Forecastle Indonesia can track and manage them more effectively. This setting is important for accurate depreciation calculations and proper asset classification, helping to ensure that each asset is managed according to its category and use within the company.

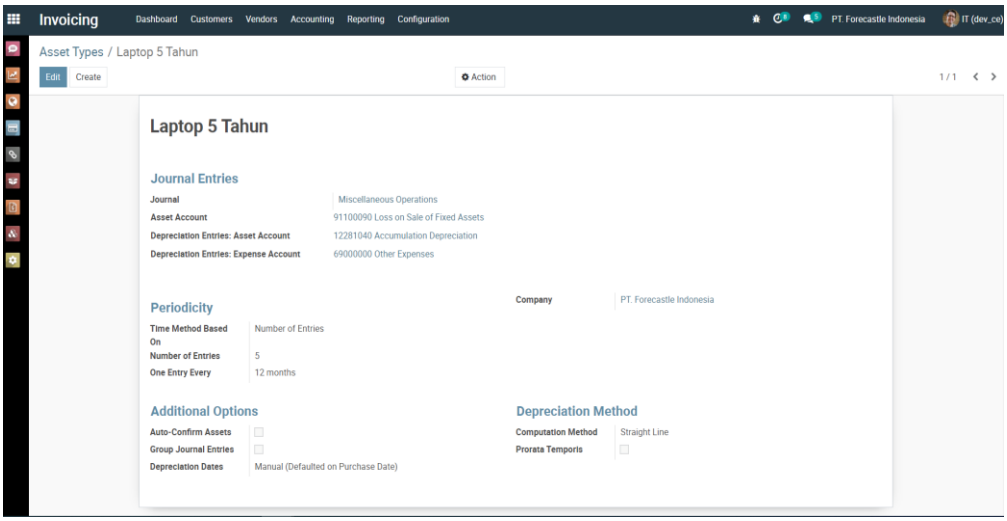

Figure 8. Asset Types Master Data Display

3.1.7 System Testing

After implementation, a series of tests were conducted to ensure the system functioned as expected. Functional testing was carried out to verify that all key features of the system were working correctly. End-user testing involved company staff to ensure the system was user-friendly and met their needs. Integration testing was performed to ensure the asset management system integrated well with other company systems, such as accounting and inventory systems. The test results confirmed that all features functioned as intended, the system was easy to use, and integration proceeded smoothly.

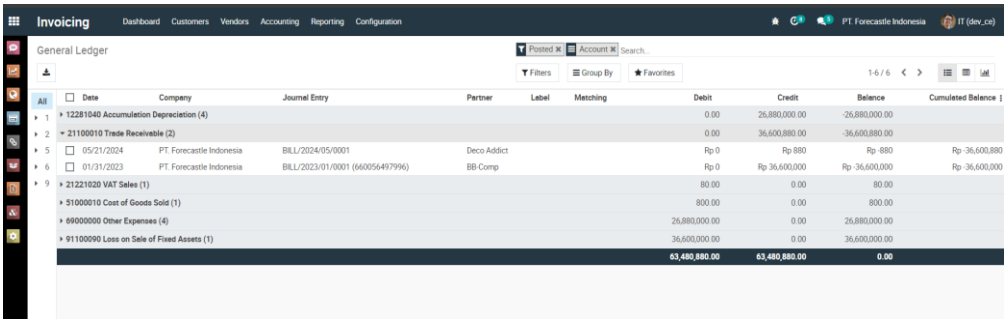

Figure 9. General Ledger or Company Bookkeeping Display

The first phase of testing, functional testing, involved a thorough examination of the system's core functions, including asset tracking, depreciation calculations, and reporting. The goal was to verify that each feature of the asset management system was functioning accurately and meeting pre-set specifications. The results confirmed that all key features were fully operational and producing the expected results. Next, end-user testing was conducted to assess the usability of the system. In this phase, key personnel at PT Forecastle Indonesia interacted with the system to perform daily tasks such as entering and modifying asset records. The goal was to ensure that the system was intuitive, easy to use, and capable of supporting the operational needs of staff. Feedback gathered from end users indicated that the system was accessible and that users could navigate it without difficulty. Integration testing was conducted to evaluate how well the new asset management system integrated with existing systems, specifically the company's accounting and inventory management platforms.

In addition, the system offered easy-to-use portal access, where users could log in and navigate through the various modules securely. Upon accessing the system, users were greeted with an initial interface, which served as a central dashboard. This dashboard provided an overview of the system's key features and options, helping users quickly find the functions they needed. The accounting module dashboard presents a comprehensive view of the company's financial data, allowing users to manage transactions, monitor asset values, and track expenses seamlessly. Within the system, users can easily access the Asset Management menu, which provides a clear and organized tree or list view of all assets. This structure allows users to efficiently browse and manage assets within the system, simplifying asset tracking and management. To add a new asset, users can enter detailed information such as asset type, purchase date, and value, as well as adjust depreciation settings, ensuring accurate and timely depreciation calculations.

The built-in Log Note feature allows users to track and document changes made during the asset management process, ensuring transparency and providing an audit trail for all actions taken. Furthermore, the system's smart button for items allows users to quickly access related asset details or actions, improving workflow efficiency. The asset list view provides an overview of all assets, and each asset record is displayed in a detailed form view, which includes relevant data such as purchase history, depreciation status, and maintenance records. As part of the asset management process, users can change the status of an asset from Draft to Posted, facilitating the approval process for asset records. The system supports bulk updates, allowing users to process multiple records at once efficiently.

For financial reporting, users can navigate to the asset reporting menu, which provides detailed reports on asset values, depreciation, and overall performance. The asset reporting menu displays data in a structured format, allowing stakeholders to make informed decisions based on up-to-date information. The system includes the option to sell or dispose of assets, allowing users to manage the entire asset lifecycle from acquisition to disposal. The general ledger feature tracks and manages all financial records associated with an asset, ensuring accurate financial reporting and seamless integration with other accounting processes. The results of all these tests confirmed that the system met the functional, usability, and integration requirements. The asset management system is fully operational, easy to use, and seamlessly integrates with existing company systems, ensuring PT Forecastle Indonesia can manage its assets efficiently and accurately.

3.1.8 Performance and Efficiency Evaluation

The performance of the asset management system based on Odoo 14 CE was evaluated through interviews with employees responsible for asset management. The interviews revealed that previously, the company managed assets manually using spreadsheets, which often led to inaccurate records, difficulties in asset maintenance, and lack of integration between departments. The implementation of Odoo 14 CE with the straight-line depreciation method had a significant positive impact. The system reduced the risk of data loss and enabled better integration between departments, eliminating the need for manual file transfers. The integrated system drastically reduced asset tracking time, and depreciation recording errors were nearly eliminated. Although the company had not previously applied a specific depreciation method, Odoo 14 CE enabled the implementation of the simple and effective straight-line method for asset depreciation. This has assisted in financial planning and more accurate management of asset values. Overall, users reported high satisfaction with the new system, confirming that the Odoo 14 CE asset management system successfully met the operational needs of PT Forecastle Indonesia. The system has improved efficiency, accuracy, and transparency in asset management, which has ultimately supported the company's overall performance and operational efficiency.

3.2 Discussion

The implementation and testing of the solution followed a structured approach, as detailed in the methodology section. The phases of the study were designed to ensure that each aspect of asset management, from identifying problems to evaluating system performance, was thoroughly addressed. By integrating the straight-line depreciation method into Odoo 14 CE, the research sought to optimize the asset management process at PT Forecastle Indonesia.

The process of identifying the problem began with an initial analysis of asset management at PT Forecastle Indonesia. Observations and interviews with staff revealed that asset tracking was done manually using spreadsheets, resulting in errors and data loss. The main issues identified included the unstructured nature of asset tracking, inconsistent depreciation recording, and the lack of system integration. These findings provided a solid foundation for the development of a solution, specifically using an asset management system based on Odoo 14 CE. Similar studies have shown that traditional asset management methods often lead to inaccuracies and inefficiencies, especially when manual processes are involved [13][16]. Therefore, addressing these challenges was crucial to improving the company's overall asset management.

Based on the identified issues, the specific problem was formulated as: "How can the efficiency of asset management and depreciation recording be improved at PT Forecastle Indonesia using Odoo 14 CE with the straight-line method?" This formulation provided a focused direction for the system implementation, aiming to streamline asset tracking and enhance depreciation accuracy. The approach aligns with existing research that highlights the effectiveness of the straight-line depreciation method for its simplicity and accuracy in managing assets [19][18].

The main objective of this study was to implement an asset management system based on Odoo 14 CE with the straight-line depreciation method to improve the efficiency and accuracy of asset management at PT Forecastle Indonesia. With clear objectives set, the system's design and implementation were aimed at enhancing asset tracking, improving depreciation accuracy, and ensuring a higher level of integration with the company's other financial systems. This goal reflects the broader trend in organizations adopting ERP systems like Odoo to improve operational efficiency and financial management [23][15].

The preliminary study involved a combination of a literature review and a field study. The literature review covered theoretical aspects of asset management, depreciation methods, and the application of ERP systems such as Odoo. The field study at PT Forecastle Indonesia revealed the company’s specific asset management challenges and the need for an integrated solution. This combination of theoretical and practical research laid the foundation for the design and implementation of the asset management system. Research has consistently shown that integrating ERP solutions with asset management processes can improve overall efficiency, reduce errors, and enhance decision-making processes [27][22].

Data collection involved surveys and interviews with key stakeholders at PT Forecastle Indonesia to gather information about the company’s asset management practices, current system issues, and system requirements. The collected data included information on asset types, residual values, useful life, and asset locations. This data was essential for designing a system that meets the company’s needs, ensuring that the asset management system could handle the specific requirements of PT Forecastle Indonesia. Previous studies have indicated that effective data collection is critical for the successful design and implementation of ERP systems [28][24].

The system was designed by configuring Odoo 14 CE to meet the company’s specific needs. This process involved setting up the asset management module, configuring the straight-line depreciation method, and ensuring proper integration with other company systems. Data migration from the previous system to Odoo was carefully managed to ensure all asset information was transferred accurately. Studies have shown that proper system configuration and data migration are crucial for the success of ERP implementations, as they help reduce errors and streamline business processes [15][14].

A series of tests were conducted after the system was implemented to ensure it met the company’s requirements. Functional testing ensured that all key features worked correctly, including asset tracking, depreciation calculation, and reporting. End-user testing confirmed that the system was user-friendly and met the operational needs of staff. Integration testing demonstrated that the asset management system worked seamlessly with other systems used by the company, such as accounting and inventory management. These results confirm that ERP solutions, like Odoo, can provide reliable, integrated, and efficient asset management solutions [16][20].

The performance of the asset management system was evaluated through interviews with employees responsible for asset management. Before the system was implemented, assets were tracked manually, which often led to inaccuracies and inefficiencies. The introduction of Odoo 14 CE with the straight-line depreciation method significantly improved the tracking and management of assets. The integrated system reduced data

loss, improved inter-departmental communication, and eliminated the need for manual file transfers. The system also helped reduce asset tracking time and virtually eliminated depreciation errors. These improvements are consistent with findings in other studies that have shown ERP systems improve operational efficiency and financial accuracy [19][18]. Users reported high satisfaction with the new system, confirming that the Odoo 14 CE asset management system successfully addressed the company's needs. The implementation improved efficiency, accuracy, and transparency in asset management, which supported the company's operational performance and financial health. This confirms the growing body of research advocating for ERP systems as key tools in improving business processes, particularly in asset management [22][27].

4. Related Work

The implementation of Enterprise Resource Planning (ERP) systems, especially Odoo, has been widely studied due to its effectiveness in optimizing business processes, including asset management. Various studies have shown that ERP systems increase efficiency, reduce errors, and improve data integration across organizational functions, such as asset tracking, depreciation calculations, and financial reporting. In their study, Fadillah (2022) examined the design of an inventory management system for small businesses, focusing on how Odoo can simplify asset and inventory tracking, thereby reducing human error and improving data consistency. Their findings are in line with those at PT Forecastle Indonesia, where asset management was initially done manually using spreadsheets, which led to data inaccuracy [13]. Similarly, Efendi and Aditya (2022) analyzed the use of Odoo to optimize business processes at Captain Gadget Store. The study emphasized the benefits of automating inventory, purchasing, and sales activities, which further supported the integration of Odoo for more efficient asset management [29].

Odoo role in depreciation management is also well documented. Nendi *et al*. (2024) explored how Odoo was used in small and medium enterprises (SMEs) for asset depreciation, noting that system integration with the straight-line depreciation method improved accuracy and transparency in asset valuation. This approach is in line with the objectives of a recent study at PT Forecastle Indonesia, which focused on improving depreciation accuracy using the same method [15]. Similarly, Endaryati and Subroto (2020) examined the use of straight-line depreciation in an accounting information system in Odoo, showing how the method improved fixed asset management by providing real-time data and improving financial forecasting [18].

Another relevant study by Saputri *et al*. (2024) investigated the impact of accurate asset tracking and depreciation in the food industry. The study found that accurate asset management is key to maintaining business quality and financial health. This is in line with recent research, where asset tracking and depreciation were also identified as critical to improving operational efficiency at PT Forecastle Indonesia [14]. Furthermore, Wiendhyra *et al*. (2022) show how Odoo integrates asset tracking and depreciation calculations into one system, reducing manual work and increasing overall efficiency. This integration mirrors the approach taken in this study [22]. Purwanto *et al*. (2019) also studied the straight-line depreciation method and its application in an asset management system. Their findings showed that this method simplified depreciation calculations and improved financial planning, supporting the choice of this method for asset management at PT Forecastle Indonesia [19]. The use of Odoo in business performance optimization has also been explored in the context of the supply chain. Mefid and Ahlunnazak (2023) analyzed how Odoo improved supply chain operations in the coffee industry. Their study highlighted Odoo's flexibility in improving business performance through better asset and resource management, reinforcing the value of implementing Odoo 14 CE in various industries, including asset management [31].

In addition, Sabariman *et al*. (2024) examined the development of FIFO (First In, First Out) in Odoo, showing how the system can manage multiple inventory methods. While their focus was on inventory, the study supports the broader application of Odoo in improving business processes, such as asset management, by providing automation and better data handling [32]. Nurkhafidoh and Ariyani (2019) looked at the integration of Odoo ERP with the sales module, further demonstrating Odoo's flexibility in handling various business functions. The ability to develop custom APIs and extend system functionality allows Odoo to be tailored to the specific needs of asset management at PT Forecastle Indonesia [33]. It is known that Odoo 14 CE is an effective solution for improving asset management. By automating asset tracking, depreciation calculations, and financial reporting, Odoo significantly improves operational efficiency and financial accuracy.

5. Conclusion

The study successfully implemented an Odoo 14 CE-based asset management system with the straight-line depreciation method at PT Forecastle Indonesia. The implementation addressed several issues the company faced in managing assets manually through spreadsheets, including data inconsistencies, errors in depreciation calculations, and lack of system integration. With the introduction of Odoo 14 CE, the company experienced significant improvements in efficiency, accuracy, and transparency in managing its assets. The system enabled PT Forecastle Indonesia to simplify asset management by automating asset tracking, maintenance, and management tasks. The integration of the straight-line depreciation method has ensured more consistent and accurate depreciation calculations, leading to reliable financial reporting. In addition, the seamless integration of the system with other business functions has enabled more efficient coordination between departments, resulting in smoother operations and better decision-making processes.

Test results confirmed that the system performed as expected. All core functions, including asset tracking, depreciation calculations, and reporting, worked well. User feedback indicated a high level of satisfaction, with the system meeting their operational needs. Automation of manual processes significantly reduces human errors, resulting in more reliable data and a smoother asset management process. The implementation has helped improve communication and collaboration between departments, increasing overall operational efficiency. Features such as the Log Note function to track changes, and the ability to bulk update multiple asset statuses, have provided better control over the asset management process. The Odoo 14 CE asset management system has had a positive impact on PT Forecastle Indonesia, improving operational efficiency and financial transparency. The system has also provided the company with a reliable and efficient approach to managing assets, improving asset tracking and depreciation management. The results of the implementation show that ERP solutions such as Odoo can effectively address asset management challenges and offer long-term benefits to businesses.

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