Implementation of ERP Accounting Process Based on Odoo Using Quick Start Method at XYZ Company

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Abstract. XYZ Company is a subsidiary of ABC Tbk, operating in the property sector. The accounting unit is a crucial part of XYZ Company and is responsible for financial management. The challenges faced by the accounting unit include the lack of an interconnected system linking various units, resulting in the continued use of hard copy data from other units. Financial bookkeeping and recording are still done using Excel and physical record books. Additionally, billing to customers requires physical visits to collect payments as per the specified invoices. The solution proposed by the author is the implementation of an Enterprise Resource Planning (ERP) system, where every unit can be seamlessly integrated. The chosen ERP application is Odoo. Odoo is selected because it is easy to develop and offers a user-friendly interface suitable for non-technical users due to its visually appealing and simple design, with diverse colors and images. The methodology used is the Quick Start method, which provides flexibility in system development and is introduced by Odoo itself. The objective of this research is to design and test the implementation of an ERP system for accounting processes. The results of the implementation testing indicate that every process runs smoothly without any issues, and each process aligns with the targeted business goals and meets the needs of XYZ Company.

Keywords: ERP, Odoo, Accounting, Quick Start, Implementation, Method

1   Introduction

Among the many aspects required for business development in the world today, one of the most critical is information technology (IT), and it can even be considered the primary driver of business advancement. IT is now widely used everywhere to facilitate business activities [1]. One example of a business Company that has grown through IT is XYZ company.

XYZ company is a subsidiary of ABC Tbk operating in the property sector. XYZ company serves as the brand name for XYZ company, reflecting a new business positioning and direction with three main driving components in the property business: land banking, capital, and expertise.

The accounting unit plays a crucial role in XYZ company, responsible for managing the Company's finances. Accounting involves bookkeeping, which classifies, analyzes, summarizes, and records financial transactions such as purchases, sales, debts, and receivables, ultimately preparing financial reports [2]. The accounting unit at XYZ company has already adopted digitalization with the use of the Finest application. However, the Finest application is not integrated with other units like sales and inventory, leading to frequent receipt of hard copy data. Consequently, the accounting department needs to manually input the data again. Additionally, there are other issues faced by the accounting department, such as the billing process, where accountants have to visit customers locations for payments, making the process more time-consuming. Financial bookkeeping and recording processes still rely on Excel and physical record books, requiring financial data to be manually re-entered for financial reporting. The solution proposed by the author is the implementation of a system to aid in managing financial records at XYZ company.

The suggested system is the design and development of an Enterprise Resource Planning (ERP) system using the Odoo Accounting process. Enterprise Resource Planning is an integrated information system within a Company designed to accommodate specific information system needs for each department in a Company [3]. The presence of ERP in a Company can support the smooth operation of business processes, especially in the accounting processes at XYZ company. With the ERP system in place, the Company would no longer require additional digital applications because the ERP system can integrate every unit within the Company. To implement an ERP system, ERP software is needed.

ERP software comes in various types developed by several companies, and one of them is Odoo software. Odoo is an all-in-one management software that is the easiest to use in the world. Odoo includes hundreds of integrated business applications such as Sales, CRM, Accounting, Inventory, Marketing, eCommerce, Project Management, HR, MRP, and more [4]. This research uses Odoo software because it offers several advantages, such as being easy to develop, having a user-friendly interface suitable for non-technical users due to its attractive, simple, and visually appealing design. Odoo is web-based, accessible from anywhere and at any time, including on tablets and smartphones. It can be integrated with other companies also using Odoo, and it is suitable for both large and small-scale businesses. The Odoo software system uses HTML - PHP programming languages, making it easy to customize [5]. Thus, this research provides a model or overview of ERP implementation using Odoo.

This research implements a specific methodology known as Quick Start. The Quick Start method is an implementation methodology for software that consists of four stages: kick-off call, analysis, configuration, and production [6]. Therefore, XYZ company requires an implementation using the Quick Start method, as it offers a flexible system development process and is developed by Odoo itself."

2   Literature Review

2.1   Enterprise Resource Planning

Enterprise Resource Planning (ERP) is an integrated information system in a Company so that each department can be connected specifically [7]. The ERP system needed by companies today is a system that has good flexibility capabilities because changes in business processes in a Company have a dynamic nature and ERP can be customized according to the needs of a Company [8].

2.2   Odoo

Odoo is a web application built using python, XML and javascript programming languages and postgresql as its database. In history, Odoo was first named TinyERP, then in 2009 it changed its name to OpenERP after which it was developed again into version 8 renamed Odoo.

Odoo is also one of the applications of the Enterprise Resource Planning (ERP) application which is made in the form of Open Source [9]. Odoo is the only management system that is not only used by large companies, but also by small and independent companies. Odoo can also be applied to various sectors, such as trade, textile, agriculture, and others. These differences illustrate Odoo's high level of flexibility that allows it to cover all types of companies. The following are the advantages of Odoo[10]:

1. Access to reliable information.
2. Avoid redundancy of data entry and operations.
3. Reducing the lag time of information and report display.
4. Cost reduction, time savings, and increased control with enterprise-scale analysis.

2.3   Accounting

Accounting is the process of recording, managing, and presenting transactional data related to finance, so that it is easily understood by people for decision making and other purposes. Accounting comes from a foreign language, namely accounting, which means calculating or taking responsibility in Indonesian. Accounting is also defined as a service activity (service) that has the ability to provide quantitative information, especially those related to finance. This information must serve as input in determining economic and rational decisions [11].

Accounting, which we have studied until now, is classified as part of the social sciences. There are several questions that arise, what exactly is science, how many classifications of science are there, is accounting suitable to be called a science in the sense of pure science, but why is it also called accounting theory. Before we discuss what science is, we first examine some definitions of accounting. To add insight into the understanding of accounting, the following are given some definitions of accounting

from some literature and authors. Accounting Principle Board (APB) states, Accounting is a service activity that serves to provide quantitative information, especially of a financial nature, about business entities that are considered useful in making economic decisions, in determining logical choices between alternative actions [12].

2.4   Modules in Odoo

There are several modules in Odoo software including the following[13]:

1. **Sales management**: A module that functions to manage activities related to product sales.
2. **e-commerce**: Module that functions to manage activities related to product sales online using the website.
3. **Manufacturing**: Module that serves to manage activities related to the production process.
4. **Purchase management**: Module that serves to manage activities related to the purchase of raw materials from suppliers.
5. **Warehouse management**: Module that serves to manage activities related to the storage of raw materials and finished products.
6. **Accounting**: Module that serves to manage accounting and financial activities.
7. **Social Network**: Module that serves for communication between users.

3   System Development Method

3.1   Odoo QuickStart Methodology

Fig. 1. QuickStart Methodology Phase

The Odoo QuickStart Methodology is illustrated in Fig. 1, which depicts the phases of the quick start method [14]:

1. **Kick-off call**

   The research will be conducted by means of interviews and observations with position holders in the Company that will implement Odoo software regarding the explanation of the method and work steps to be carried out.

2. **Analysis**

   The research at this stage will analyze the Company's current business processes and determine the targeting business processes. Then from this stage, GAP Analysis will be obtained.
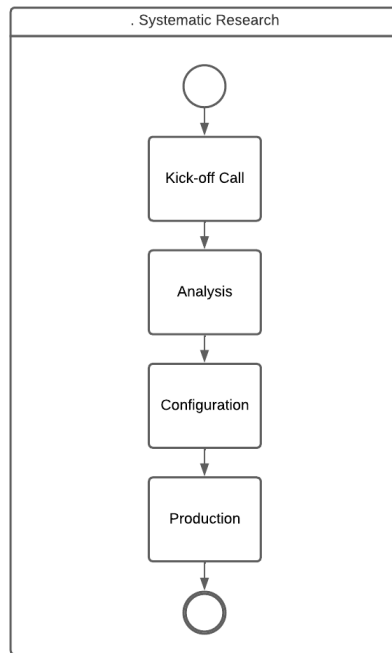
3. **Configuration**
    From the GAP Analysis obtained, we will prepare the configuration and customization of the system to produce a system that supports the final business process.

4. **Production**
    In this stage, the Odoo system will be implemented according to the configuration of the developed application. And closed with the system testing process.

3.2   Systematic Research

Fig. 2. Odoo Quickstart Research Systematics

In Fig 2, it explains that this research was only carried out at the kick-off call, analysis, configuration and production stages.

4   Analysis and Design

4.1   Kick Off Call

At this strategic planning stage, the management of the boundaries of the existing problems will be carried out based on the problems and conditions that exist in the XYZ Company. With the problem boundaries, the author can take strategic steps related to the needs of the XYZ Company.

Tabel 1. Strategic Planning

Environment	Research	Basic Science
People : 1. Accounting 2. Sales 3. Logistic Organization : 1. XZY Company Technology : 1. Finest 2. Network 3. Database	Build : "Implementation of Odoo-based ERP System." Evaluate : "Evaluate the performance of the existing users"	1. Enterprise Resource Planning 2. Odoo 16 3. Quick Start 4. Modul Accounting 5. Enterprise Resource Planning

In table 1 above, it is explained that the existing application in accounting has not been integrated with other units such as sales and logistics. So that when receiving data from other units it is still in the form of hard copies so that the accounting must re-input the data that has been given. There are also other problems faced by accounting, such as the billing process for customers, accounting must go to the customer's location to make payments. This causes the process to take longer. The process of bookkeeping and financial recording also still uses excel and notebooks, so that the financial reporting process must re-input financial data in notebooks and excel.

4.2   Analysis

In this step, the researcher analyzes the existing business processes at XYZ company, especially in the accounting unit. After analyzing the existing business processes, the author will make a target business process to get a GAP analysis, where the results of the analysis will get GAP and shortcomings from each accounting business process at XYZ Company.

1.   Fit and GAP
       The next step taken by the author is to conduct a Fit & Gap analysis of the existing business processes and targeting business processes in the Odoo software. Fit/gap analysis is based on two conditions, namely the fulfilled state and the potential state. By conducting a fit and gap analysis, the company is

expected to be able to maximize existing performance to refer to potential and resources that should be fulfilled [15].

The Fit & Gap analysis of existing business processes and targeting business processes in the Odoo software is presented in Table 2.

Tabel 2. Fit and GAP

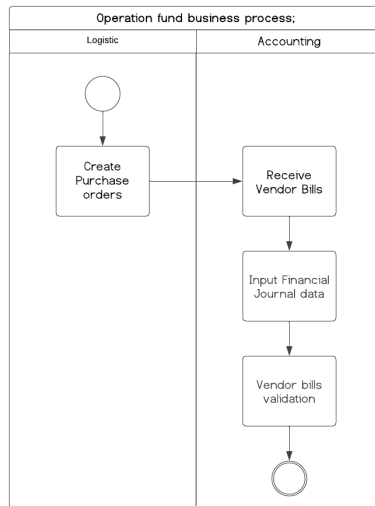| Existing Business Process	Needs	Fulfillment	Solution
Operating fund business process	A system is needed to carry out operational fund activities that serves to clarify the flow of operational fund business processes, as well as integrate between several related parts.	N	By using the Odoo system, the operational fund business processes are better, faster and reduce human errors.
Market Sales business process	A system is needed to carry out the market sales process that can help bill customers without having to go to the customer's location.	P	With odoo, the market sales process is more quickly resolved and does not waste time.
Financial Statement Business Process	A system is needed where financial reporting can be made automatically without having to calculate or re-input in excel.	P	With odoo, the financial reporting process can be done quickly because it can be created automatically in odoo.

- N (Never) which means that the business process does not fulfill the requested and required requirements at all.
- P (Partial) means that the business process partially fulfills the requested and required requirements.
- F (Full) which means that the business process strongly fulfills the requested and required requirements.

2. Business Process Design

Business processes are the basis for organizing activities that aim to improve mutual relationships in business processes in organizations and technical, so that companies can evaluate the performance of business processes that help companies to determine and measure achievements by comparing with initial

goals[16]. After analyzing the existing business processes in the accounting unit of XYZ company related to operational funds, market sales and financial reports. The author will design a business process which will be implemented using odoo software with the ERP concept as a solution to the problems that exist at XYZ company. The business process design of the accounting unit will be integrated with the logistics and marketing units. The following is an overview of the business processes that have been designed by the author using the accounting module odoo software:

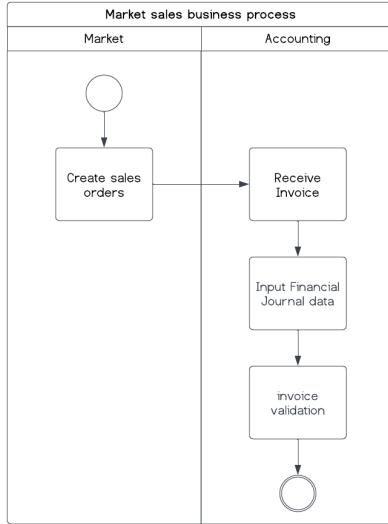   a.   Operational Fund Business Process

Fig. 3. Operational Fund Business Process

Fig 3 shows the operational fund business process that is carried out with 4 stages. Actors in this business process include logistics and accounting.
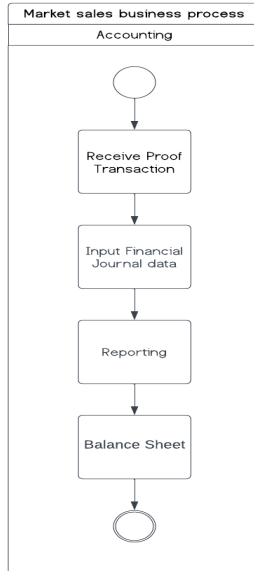
   b.   Market Sales Business Process

Fig. 4. Market Sales Business Process

Fig 4 shows the market sales business process that is carried out with 4 stages. Actors in this business process include market and accounting.

c.   Financial Statement Business Process

Fig. 5. Financial Statement Business Process

Fig 5 shows the financial report business process that is carried out with 4 stages. Actors in this business process are the accounting unit.

4.3   Configuration

Configuration is an action to carry out the plan that has been made. The configuration results will be maximized if the configuration is carried out in accordance with the previously made plan [17], [18]. At this stage, the installation and configuration process of the Odoo system at XYZ company will be carried out. The focus of installation and configuration at this stage is the accounting process including the operational fund process, the market sales process and the financial reporting process. Furthermore, black box testing and user acceptance testing will be carried out which aims to make all business process flows in accordance with the Company's wishes and the functions of each process run well at the XYZ company Company.

4.4   Production

This phase is where the designed system is implemented in the XYZ Company. In this stage, the focus is on installation and configuration in accordance with the development carried out in the previous stage. Subsequently, testing is conducted on the Odoo system that has been implemented in the XYZ Company. Here, we evaluate the performance of the existing users in the company. The following are the user performance data. Here, we evaluate the performance of the existing users in the company, as shown in Table 3.

Tabel 3. Evaluate The Performance of The Existing Users

Process	Success/Failure	User
Operational Fund Business Process	Success	Mrs. Mina Sri
Market Sales Business Process	Success	Mrs. Mina Sri
Financial Statement Business Proces	Success	Mrs. Mina Sri

5   Conclusion

Based on the results of the research conducted, the following are the conclusions of the ERP implementation of the accounting process at XYZ company. ERP design at XYZ company using the quick start method which starts from a kick-off call, analysis and configuration that displays the ERP process in Odoo with the accounting process resulting in good integration between the accounitng, logistics and marketing or sales processes. The results of implementation testing show that every process that is carried out runs successfully without any obstacles and every existing process is in accordance with the targeting business process and in accordance with the needs of the XYZ Company.

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