

# Odoo ERP Implementation Point of Sale Module at Mc Cake

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**Abstract-** Mc Cake is one of the business people in the food industry. Which was founded in Bekasi, West Java. Mc Cake has constraints and problems including the lack of a system that streamlines the time and division of the job desk at the company. It also shows that the sales order business process has not been integrated with the sales system at Mc Cake. The process that is currently running from the sale transaction is still done manually.

In this problem, the solution considered to be able to handle the problem is by applying the concept of ERP (Enterprise Resource Planning) using the Odoo application with a point of sales module, because the advantages that can be obtained are speed, accuracy, and relatively lower costs compared to other methods. Odoo is a modular application which means it consists of separate modules but can be integrated with each other. The modules in Odoo include sales, purchase, accounting, point of sale, CRM and marketing. In addition, the business processes carried out on each Odoo module are best practices for the open source class and in general Odoo covers the business processes of MSME trading companies such as Mc Cake.

**Index Termss-** ERP, Odoo, Point of Sales, Accounting, Sales, purchase, open source.

## I. INTRODUCTION

**S**GOSH currently the role of MSMEs (Business, Micro, Small and Medium) still dominates as the largest contributor to economic growth in Indonesia. According to the data, that MSMEs contribute up to 60% for national economic growth. Therefore, MSMEs can save Indonesia from the crisis in 1998.

But for the era of UMKM entrepreneurs, it was very difficult to develop. Because they are inferior to large entrepreneurs who are assisted by large financial resources, so that large entrepreneurs can prepare the infrastructure needed. One of the infrastructures needed in the business world is information technology.

There are several benefits when using technology in the business world. The benefits obtained by entrepreneurs are the ease of communication, the ease of conducting business

process mentoring, can save production and operational costs, and facilitate business relationships in spreading information. Therefore, it seems clear that using information technology for the business world has a big influence on the development of the company. This has been utilized by large entrepreneurs with huge financial strength for large-scale investments in information technology infrastructure.

There are several different things with the MSME business process. Because the profits earned by MSME entrepreneurs are not as big as those obtained by large entrepreneurs. For profit alone is uncertain, how they want to use information technology. Information technology is very expensive for MSME entrepreneurs.

Over time, many technological developments are now popping up open source software that is no less sophisticated than paid software to be implemented by the MSME industry. One of the open source-based software that can be implemented by the MSME industry is the ERP (Enterprise Resource Planning) information system, one of which is Odoo application [1].

Odoo System is a business software that covers CRM (Customer Relationship Management). According to his understanding, CRM is a business strategy that combines processes, people and technology. Then the software covers project management, sales (manufacturing), manufacturing (warehouse) and financial management [1].

The problems of MSMEs as above occur also with the Mc Cake shop. Businesses engaged in culinary. At present there is no information system implemented in its operational activities. Daily routines are still manually using Microsoft Excel and Microsoft Word. This can hamper sales reporting and is often inaccurate. Of course, this can hamper the company's decision to policy on business expansion.

Therefore, Mc Cake Of course, shop urgently needs an integrated information system to solve a problem. Implementing a system is not easy. Design and procedures for using information systems are needed so that they can run as expected.

## II. LITERATURE REVIEW

### A. System

According to Gordon B. Davis in the book (Tata Sutabri, 2012) states that the system can be either abstract or physical. An abstract system is an orderly arrangement of ideas or conceptions that are interdependent [2]. According to Bodnar and Hoowood in the book (Muhamad Muslihudin Oktafianto,

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2016) the system is a network of interrelated procedures, gathered together to carry out an activity or to complete a certain goal [3]. According to Jogianto in the book (Jeperson Hutahaeon, 2014) the system is a collection of elements that interact to achieve certain goals [4].

### B. Information

According to Romney and Steinbart, information is data that has been managed and processed to provide meaning and improve the decision-making process [5]. According to Davis in the book (Abdul Kadir, 2014) information is data that has been processed into a form that is meaningful to the recipient and useful in making decisions now or in the future [6].

### C. Information Systems

According to Yakup in the book (Muhamad Muslihudin Oktafianto, 2016) information system is a collection of organizational components related to the creator of the flow of information [3]. According to Bayu Kristiawan and Sukadi, an information system is a collection of elements that work together both manually and computer-based for data processing in the form of data collection, storage and processing to produce useful information for making decisions [7].

### D. Enterprise Resource planning

Enterprise Resource Planning (ERP) is the first generation of enterprise systems whose purpose is to integrate data and comprehensively support the main functions of the organization. The purpose of ERP, to make information flow fast and dynamic. The number of companies switching to using ERP is more efficient, increasing customer access to products, and reducing operational costs [8].

### E. Odoo

Odoo is my company's open source planning platform. Odoo is built with Python, XML, and JavaScript programming languages and uses PostgreSQL for its database. Odoo is available in cloud and on-site forms best suited for small to medium-sized companies [9]. Odoo is made using open object framework technology which has the power of MVC (Model View Controller), workflow or flexible workflow features. A dynamic GUI, and a customizable reporting system according to business needs [10].

### F. Point of Sale

Point of Sales is an activity oriented to sales activities, and the system helps the transaction process. [11] POS consists of hardware (Terminal / PC, Receipt Printer, Cash Drawer, Payment Terminal, Barcode Scanner) and software (Inventory Management, Reporting Purchasing, Customer Management, Transaction Security Standards, Return Processing) which are both used during the transaction process. [12] POS is now very important, because it is like in the form of a money terminal where the customers receive payments, payment activities are an indicator of business people measuring their income. [11] [12]

## III. RESEARCH METHODOLOGY

The most suitable method used for this system is the waterfall method. Waterfall method is a method that suggests a systematic and sequential approach through the stages that exist in SDLC to build a software. This method is an appropriate method to build a software that is not too large and human resources involved in a limited amount [13].

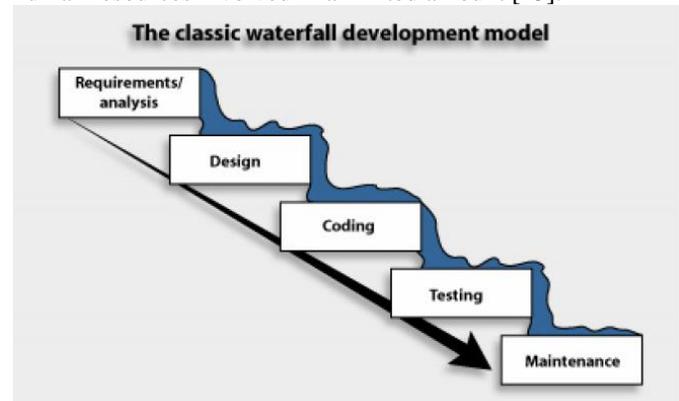


Fig 1. The Waterfall method has the following steps: [14].

### A. Requirement Analysis

This step is an analysis of system requirements. Data collection in this stage of conducting a study, interview or study literature. A system analyst will dig up as much information from the user so that a computerized system will be created that can perform the tasks desired by the user. This stage will produce a user requirement document or can be said as data relating to the user's wishes in making the system. This document will be the system analyst's reference for translating into the programming language

### B. System Design

The design process will translate the requirements of a software design that is estimated before the code is made. This process focuses on data structures, software architecture, interface representation, and procedural details (algorithms). This stage will produce a document that is software requirement. This document will be used by programmers to do system building activities.

### C. Coding & Testing (Implementation)

*Coding* is a translation of design in a language that can be recognized by computers. Performed by a programmer who will translate transactions requested by users. This stage is the real stage in working on a system. In the sense that the use of computers will be maximized at this stage. After the code phase is complete, it will be tested on the system that has been made. The purpose of the trial is to find a system error and then correct it.

### D. Testing

This stage can be regarded as the final stage in making the system. After analysis, design and coding, the finished system can be used by the user.

### E. Maintenance (Maintenance)

Software that has been submitted to users will definitely experience changes. These changes can occur because of an



Fig 5.

**D. Order Data Mock-ups**

This page functions to add and manage order data. Next is the system design of order data pages in Figure 6 and Figure 7.

Fig 6.

Fig 7.

**E. Mock-up Report**

This page functions to view report data from sales results. Following is the report page system design in Figure 8.

Fig 8.

**F. Create Database**

Open a web browser, then click "localhost: 8069" then it will be directed to the address "http://localhost:8069/web/database/manager" to fill in the database configuration first.

Fig 9.

**G. Install the Point of Sale Module**

After successful login directly will be directed to the Apps page, in the right corner there is a search tab type point of sale to look for the point of sale module. After the point of sale module appears, then click Install and wait a few moments until the point of sale module is successfully installed

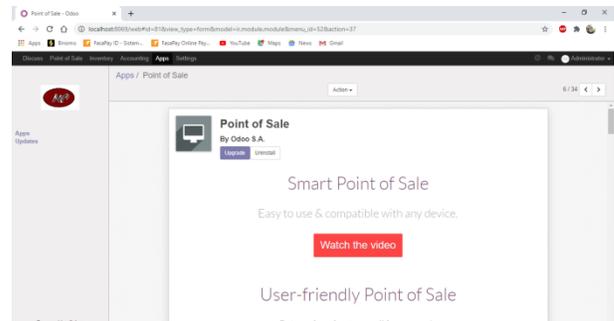


Fig10.

**H. Product Data Page**

On the Point of Sale menu, then on the order-product dashboard to add and manage products. If you want to add a product, click "Create"

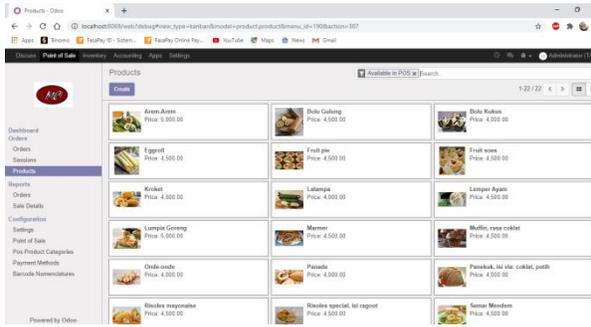


Fig 11.

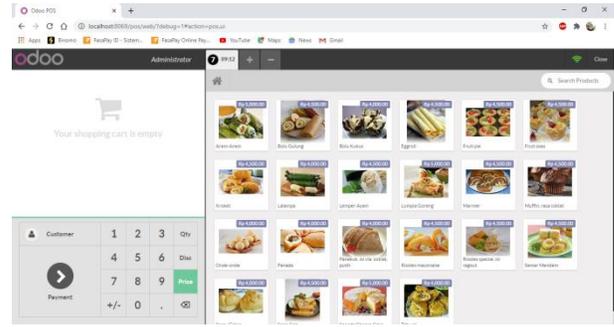


Fig 13

Fill in the product data in accordance with existing data.

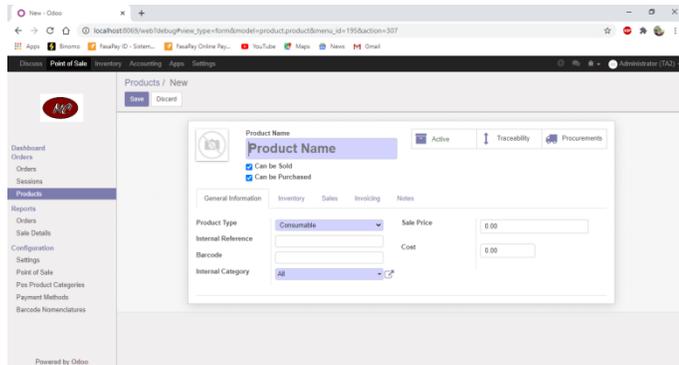


Figure 12

Like the picture below:

- Cash (IDR) : the method of payment is cash.
- Due : the amount of the bill *customer*.
- Tendered : paid by *customer*.
- Change : returns accepted *customer*.

After completing payment, click Validate.

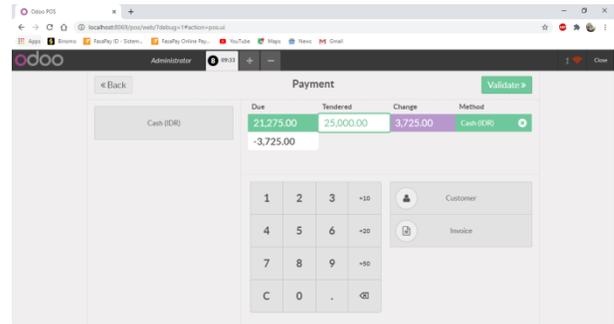


Fig 14.

I. Order Data Page

Furthermore, all products inputted will appear in accordance with the name and price. Before making a purchase activity, we are required to fill in customer data in the picture. Then, as shown below there are qty, disc and price. The following explanation:

- Qty is determining the number of products ordered.
- Disc is determining the discount of the product ordered.
- Price is determining the price of a product manually.

Payment button for payment.

J. Reports page

To find out sales reports of all transactions, click the Point of Sale menu: Reports - Sale Details. The details of the sale details are as follows:

- Start date is the start date of the transaction you want to know
- End date is the end date of the transaction you want to know

After completing payment, click "Print" The printout has the format. Pdf, click "Print" then Odoo will automatically download "Sale Details.pdf". The details of the sale details are as follows:

- Product is a product that is sold.
- Quantity is the quantity of each transaction.
- Price Unit is the price paid *customer*.
- Total is the total income

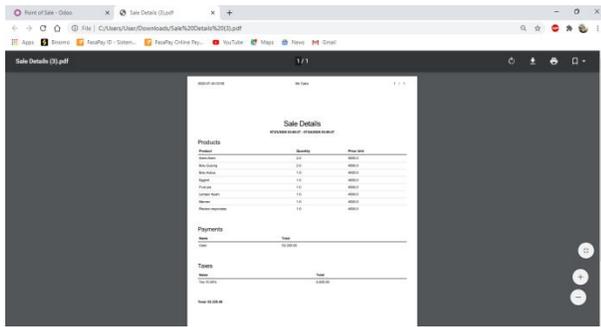


Fig 15.

## V. CONCLUSION

### A. Conclusion

From the implementation and testing of ERP software conducted for purchasing, sales and inventory information systems conducted at the Mc Cake pastry shop, the following conclusions can be drawn:

1. After the business process is clearly illustrated, the appropriate ERP software is chosen and meets the needs of the Mc Cake shop to solve the problem.
2. Based on the selection of ERP software used, Odoo was chosen as the ERP software that could solve the Mc Cake MS. Excel shop problem.

Odoo is implemented according to the proposed business process and tested against the results of the implementation

### B. Suggestion

From the results of the conclusions that have been there, there are some suggestions that can be useful for the Mc Cake cake shop such as:

1. Training is needed on the use of the system and a simple understanding of the ERP system to ensure both existing employees and those who will come to understand using the system.
2. There needs to be integration with other modules in addition to the point of sales to further assist in sales activities in the Mc Cake cake shop because there are some features that cannot function properly without integration with other modules.

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