

The Implementation of Enterprise Resource Planning (ERP) on Sales Management Module using Odoo 11

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ABSTRACT

The development of information technology is often used in business world, one of which is Flowride_sc. Flowride_sc is company that run in the field of clothing sales. The order system of Flowride_sc products is still conducted manually, so that it takes quite long time. Recording of product data and transaction data are still conducted through recording in books, this causes data search needs quite long time and susceptible to the loss of data. One of the applications that can assist in solving that problem is Odoo. Odoo is Enterprise Resource Planning based software which is used as company system that can handle a lot of company complexity.

KEYWORDS: Information Technology, Flowride_sc, Enterprise Resource Planning, Odoo

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1. INTRODUCTION

Competition in business world becomes more complex, many companies try to improve the number of consumers with many ways so that they can be more superior than competitors. One way to increase the number of consumers can be conducted by integrating information system so that it results management which is more efficient in process business of company. Flowride_sc is a fashion industry that run in clothing sales starts from clothes, trousers, jackets, socks until hats. Ordering system of Flowride_sc product beside come directly to the store, it also can be done online but still using the screenshot of the product picture from Instagram and send order format through whatsapp, so that it takes quite long time. Recording of product data and transaction data is still conducted manually which is by noted/recap in books. The application of business software that has been developed currently can becomes solution in solving that problem, one of which is Odoo application. This Odoo is integrated to each other and can be adjusted with needs in its usage. Odoo has client and server component. Server runs separately from client, for server handles business logic and communicate with database application, while client presents information to users and make it possible to operated with server, with client application provided.

2. LITERATURE REVIEW

Research which implement business software application in solving business problems has been conducted in research entitled "Design and Implementation of ERP (Enterprise Resource Planning) Modul Sales and Warehouse Management in Cv. Brada" (Christian Hardjono, 2017) and it resulted a system that can help in managing sales system and warehouse system well.

Research entitled "The Implementation of ERP Purchase Management Module Application Using Odoo 10 (Case Study Pt. Albasia Nusa Karya)" (Umar Yunan, 2018) also has been conducted and resulted a business application system that can make all business process in company becomes more effective.

3. RESEARCH METHOD

Research methodology contains of stages and illustration of research. Methodologies used in the implementation of Enterprise Resource Planning are data collection, data processing, testing and system implementation.

3.1. Data Collection

Data collection methodology is conducted by interview and direct observation. Interview is data collection

method by conducting question and answer directly to the owner of Flowride_sc company.

3.2. System Overview

System overview of system to be worked on is analysis of system to clothing sale company which is conducted by users, in this matter, the clothing store company is Flowride_sc. The next process after users analyze the system, then the ERP system is being implemented into Odoo software with PostgreSQL database.

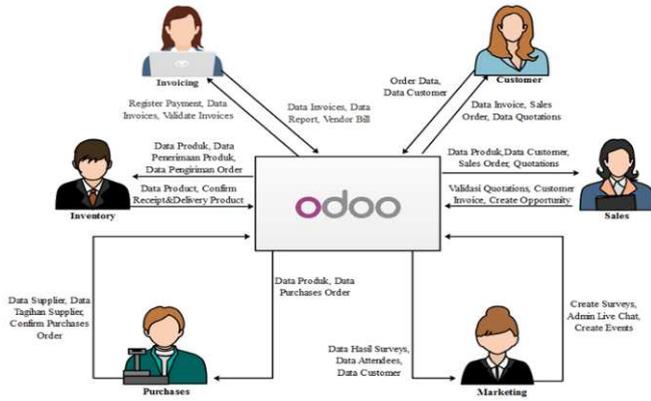


Figure 1. System Overview

System overview in figure 1 shows the duties of each user. There are 6 users, which are Customer, Invoicing User, Inventory User, Sales User, Purchase User, Marketing User that can use modules related to customer management such as making survey on customer satisfaction, live chat admin, and events management.

4. LITERATURE REVIEW

Part of literature review loads basic theory or supporting theory that support knowledge related to research conducted.

4.1. Definition of Implementation

The definition of implementation in general is an implementation or action conducted based on plan that previously has been compiled or made carefully and in detail.

4.2. Definition of Enterprise Resource Planning (ERP)

Enterprise Resource Planning, is an information system that is intended for manufacture or service company that have role to integrate and automate business process related to aspect of operation, production or distribution in the related company.

Enterprise Resource Planning is often known as Back Office System which indicate that customer and public in general are not being involved in this system. This is different with Front Office System which is dealing directly with customers such as system for e-Commerce, Customer Relationship Management (CRM), or e-Government.

4.3. Odoo

Odoo is an Enterprise Resource Planning application which is open source, Odoo was previously named OpenERP then changed into Odoo by the developer because of several things. Odoo has various choice of modules that can help company business process such as

Sales, Inventory, Purchase, Customer Relationship Management, Human Resource Management and many other modules.

This Odoo is integrated to each other and can be adjusted to the needs in its use. Odoo has client and server component. Server runs separately from client, for server which handle business logic and communicate to database application, while client presents information to users and make it possible to operated to each other with the server, with client application provided.

5. IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING USING ODOO

Implementation is conducted by presenting the success of simulation that has been conducted. Process of ERP system implementation starts with installation process of Odoo server, make the database, and installation of module needed. After installation is conducted, then it is continued with adjustment process to application and needs that have been defined before. That process will be explained as follows.

Database

flowride_sc

Select

Email

kadekyuni30@gmail.com

Password

.....

Log in

Don't have an account?

Reset Password

Figure 2. System Login Display

The display of login form to enter into Odoo system. Email option is order to put email that has been registered in Odoo, and password that has been made before.

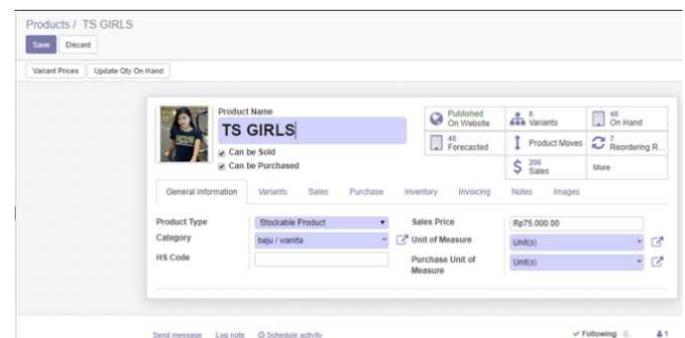


Figure 3. The Making of New Product

The making of new product consists of product name, general information such as type, category, sale price, and measure unit of products. The variant chosen which consist of product attribute such as color and size and general information related to product to be sold.

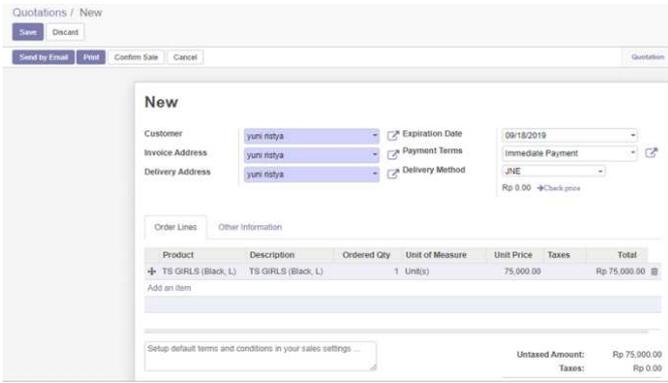


Figure 4. Display of New Quotation form

New Quotation is used to make new offer to a product conducted by Sales user. Offer can be cancelled if customers and sellers do not agree with the price of product offered. If both parties have agreed then Quotation will change into Sales Order and being continued to Invoicing stage.

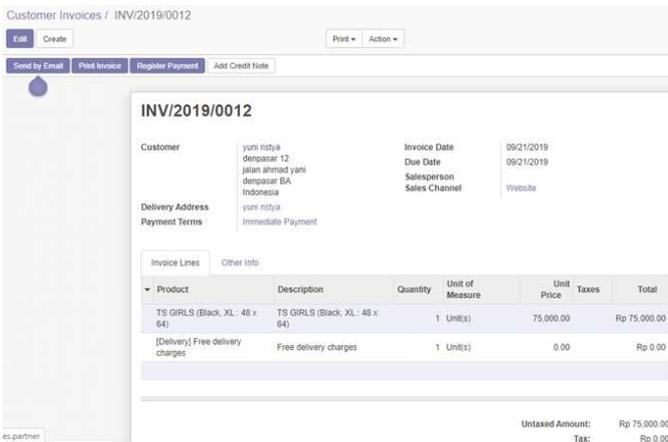


Figure 5. Display of Customer Invoice Form

Customer Invoice is bill of payment for customers made by Invoicing User. Customer Invoice contains of total payment that has to be paid by customers which is sent through email.

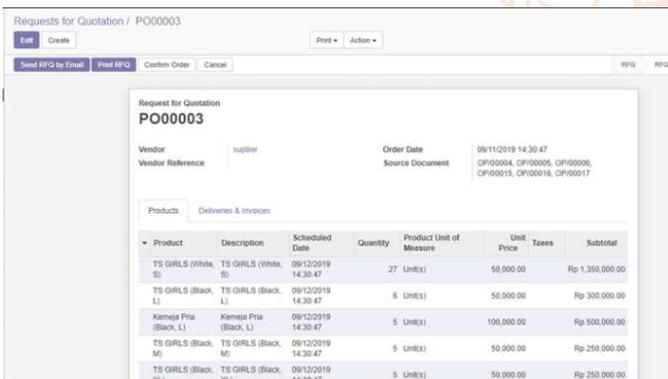


Figure 6. Display of Request for Quotation

Request for Quotations in Odoo is used to send list of product needed to supplier, after supplier confirm the product request then company can continue the offer and purchase or can cancel the offer.

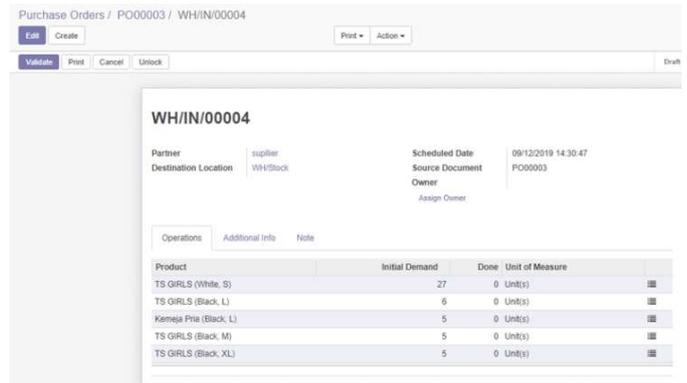


Figure 7. Validation of Product Receipt from supplier

Modul Inventory in Odoo is used to manage product delivery to customer, product receipt from supplier, supply of raw material, manage product storage. There is Validate menu which is used to validate the product receipt from supplier conducted by Inventory User.

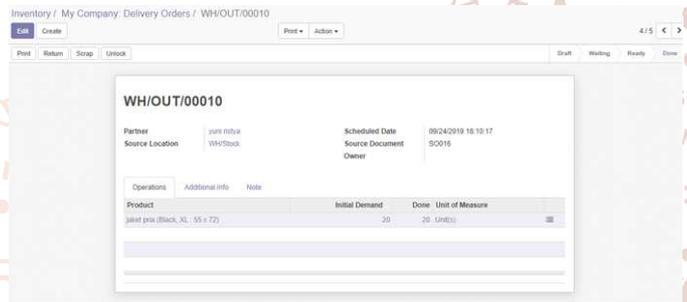


Figure 8. Delivery of product to customer

Delivery of product to customer is conducted automatically by system if product stock is still provided or after the product purchase process to supplier if products are used up. Delivery of product can be conducted through Inventory→Delivery Order→To Do then choose the product based on customer names or sale order document from list of order delivery.

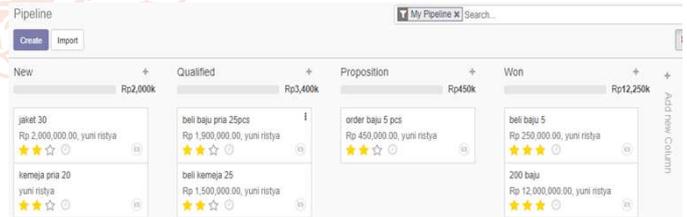


Figure 9. Customer Relationship Management Module

Customer Relationship Management in Odoo is module of customer relationship management. Company can see all prospects/opportunities of sale in a location, manage it from one stage to other stages, and analyze the result of sale. Company can also determine the schedule of meeting with customer candidates through Calendar feature. Customer Relationship Management module has several parts which are Leads, Pipeline, dan Quotations.

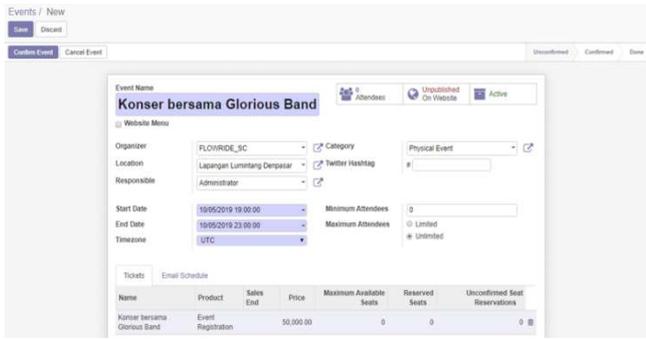


Figure 10. Events Module

Events Module is a module for even management such as seminar, conference, formal parties, or concert. Events Module in Odoo is present with management system of simple event, that help to plan, manage, and conduct the event properly and efficiently. This also can improve the prospect of sale in company.



Figure 11. Surveys Module

Survey Module is used to keep managing relationship with customer after customer bought the product or service from company. It is important for company to ensure that customer will again do purchase for product or service sold by company. Survey is usually proposed to customer who conduct online purchase, and usually company will propose several simple questions to customers.

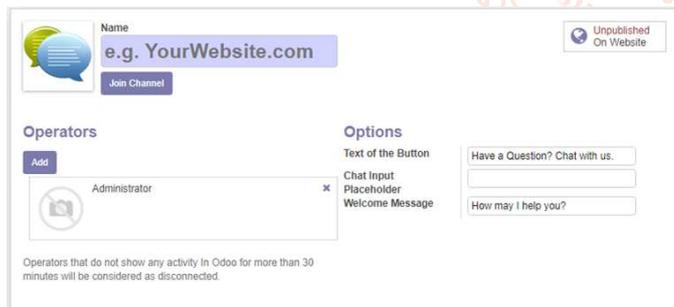


Figure 12. Live Chat Module

Live chat module is a module provided by Odoo to ease communication with websites visitors through direct chat. Visitors can propose questions through dialog box provided and they will be served directly by the operator.

6. CONCLUSION

Conclusion from research that has been conducted is implementation of Enterprise Resource Planning system using Odoo which is conducted in Flowride_sc can reduce the problems that happen also make work becomes more efficient. Odoo also can help to manage product availability, manage the purchase and sale data properly. All processes conducted in Odoo have been integrated and all data is stored automatically.

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