Analysis and Design ERP System in Order to Cash Module using NetSuite One Methodology

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Abstract— *One of the bakery companies in Surabaya has a problem in the sales process, because all entities have not been integrated in their business processes. The locations are scattered in Surabaya, resulting in the sales reporting process and financial reports are often not timely. Even though each outlet uses a POS system, the POS system cannot yet integrate sales transactions between outlets. Seeing this, we need a system that can integrate between outlets, so that every transaction entered into the system can present sales and financial reports in real time. In addition, the availability of reliable human resources in the IT field is not sufficient enough, so we need a user friendly system to be easily understood by users. One ERP system that presents a cloud-based integrated system is Oracle NetSuite with the NetSuite One methodology which divides the implementation process into seven stages, namely: initiate, analyze, design, configure, validate, deploy, and optimize. The results obtained from this study are the proposed design for the creation of business process integration between entities consisting of sections: Outlets, Store Admin Staff, Logistics Staff, Production Staff, and Income & Accounting Staff. So that sales and financial reports can be formed in real time.*

Keywords— ERP, Oracle NetSuite, NetSuite One Methodology.

I. INTRODUCTION

Based on the results of observations on business processes in a bakery company, there are several shortcomings. The main thing that needs to be sought for the best solution for shortcomings in business processes is that the recording of every transaction is done manually, starting from the production process of raw materials to finished goods, the process of sending finished goods from production to logistics, the process of receiving finished goods by the logistics department, the delivery process finished goods from the logistics department to the outlet or to the customer, the process of receiving finished goods by the outlet or customer, to the payment process from the customer.

The process of recording transactions manually, of course, results in other deficiencies in each section. In the Accounting & Finance section, delays often occur in providing financial reports for each period to the Board of Directors, resulting in difficulty in making decisions by the Board of Directors for the progress of the company. Meanwhile, in the production and logistics department, sometimes there is a mismatch between the number of stocks available physically and the amount of stock recorded manually. Referring to this problem, it is necessary to have an integrated system, namely an ERP system, especially the Order to Cash module.

II. LITERATURE REVIEW

A. Enterprise Resource Planning

Based on the definitions and descriptions put forward by Travis Anderegg and Daniel O'Leray, it can be concluded that there are similarities in the main ideas and keywords in ERP, namely the existence of an integrated planning aspect in an organization/company, is cross-functional, consisting of various features with the aim that can plan and manage organizational resources more efficiently and can respond to customer needs well. (Rahman, 2018)

There are two types of ERP systems, namely Open Source ERP systems and Closed Source ERP systems. The Open Source ERP system is a web-based ERP system that can be used without having to buy an ERP system. There are many Open Source ERP available such as: OpenERP (Odoo), ERPNext, xTuple, ADempiere and others. Meanwhile, Closed Source ERP is an ERP system that has owners and is distributed under agreement to users with personal modification, copying, and restriction of republication. There are several Closed Source ERP such as: SAP owned by SAP AG, Microsoft Dynamics AX 2012 owned by Microsoft, Oracle NetSuite OneWorld, Syspro and others. (Purba, 2019)

B. Oracle NetSuite

One of the types of Closed Source ERP is Oracle NetSuite OneWorld. Oracle NetSuite OneWorld is an integrated business system, formed from the Software as a Service (SaaS) model that can be accessed by users via the internet so that users can log in anytime and anywhere. NetSuite uses a Relational Database Management Structure (RDBMS), storing data into several tables that can be connected from one table to another, so that it can store financial data, manufacturing and logistics information, as well as integrated personal data.

NetSuite uses a unique and proven methodology based on best practices gained from extensive experience in providing NetSuite solutions to customers. It is called NetSuite One, because this formal methodology is the first to be specially designed for mid-market implementations, which have been customized based on customer demand. (Oracle and/or its affiliates, 2019).

III. RESEARCH METHOD

The following are seven stages in implementing NetSuite:

A. Initiate

Implementation begins at this stage with several activities such as: Project Kick Off, determining resources, preparation for project implementation. At this stage, it is a high-level planning in defining the project timeline, scope, and deliverables.

214

B. Analyze

At this stage there is a process of describing the project scope along with further business needs of the customer, then documenting the solution according to the best recommendations. The project scope and project timeline are defined more accurately from the start to the end in the form of a Business Requirement Document (BRD) that must be agreed upon.

C. Design

The design stage of all solutions is a strategy that has been defined in the form of a task list. Furthermore, from the task list, it is followed up to be assigned to the Project Team. The solutions that have been designed will be further executed according to the project schedule and the desired success criteria.

D. Configure

The project execution commencement stage is based on the BRD document that has been prepared and agreed upon along with the solutions that have been designed to make it easier at this stage. Activities carried out at this stage include: functional configuration, customization and script development if needed.

E. Validate

Conduct internal testing based on the customer's business processes and testing conducted directly by the customer (User Acceptance Test).

F. Deploy

The implementation team prepares to go live by uploading master data along with transaction cutovers and balances, while the core team continues special product training to end users. Data reconciliation is carried out by users and the project team to go live following the predetermined checklist (Prabu, 2020).

G. Optimize

System optimization process and transition to the NetSuite Support team.

IV. RESEARCH RESULTS

A. Ongoing Business Process

In the Make to Stock (MTS) process, customers directly visit 12 shops of bakeries scattered in the Surabaya area. Then each transaction is recorded using the POS system. So that the sales report refers to the export results from the POS system. Then, the source of determining the stock is the forecasting result of each sales history.

After the stock is available, the next process is to carry out the sales process. Entities involved in the Make to Stock (MTS) sales process are Outlets, Customers, Store Admin Staff, and Income & Accounting Staff. The process can be seen in Figure 1.
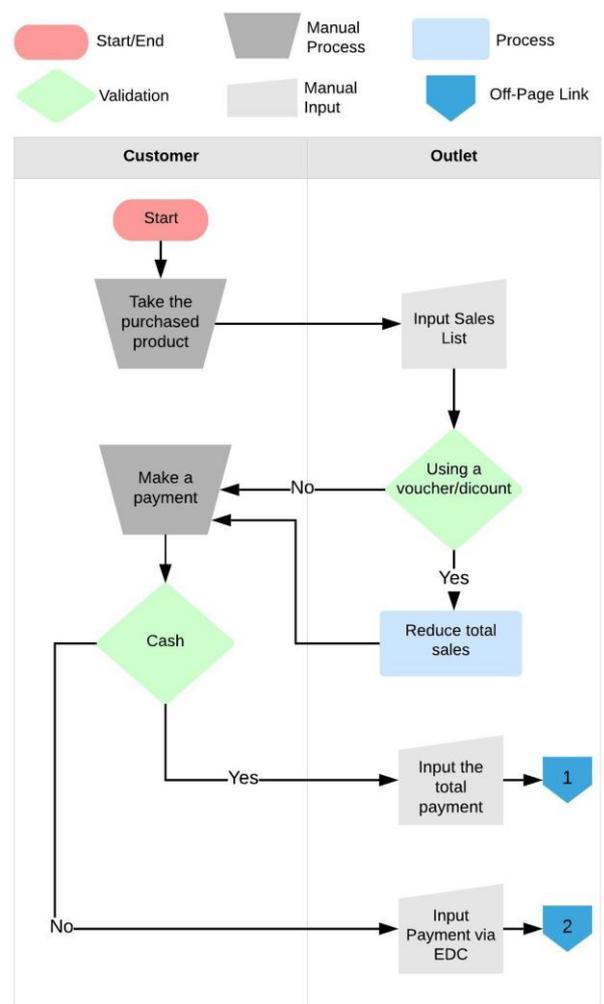

Fig. 1. The sales process Make to Stock (MTS).

The sales process starts with the customer who comes to each shop, the customer selects the product you want to buy. After that, the customer goes to the cashier or the outlet to process the payment. The outlet section inputs a list of products purchased by customers, if the customer uses a voucher or there is a discount on the product purchased, the POS system automatically reduces the value of the total purchase.

Once the total payment is known, customers can make payments in cash or using a Debit / Credit card. If you pay cash, the outlet will input the POS system according to the nominal money given by the customer. Meanwhile, for payments using a Debit / Credit card, the outlet section directly uses the EDC machine according to the customer's Debit / Credit card without having to manually input it into the POS system.

The next process is to consolidate and prepare sales reports and financial reports. The flow of the process can be seen in Figure 2.
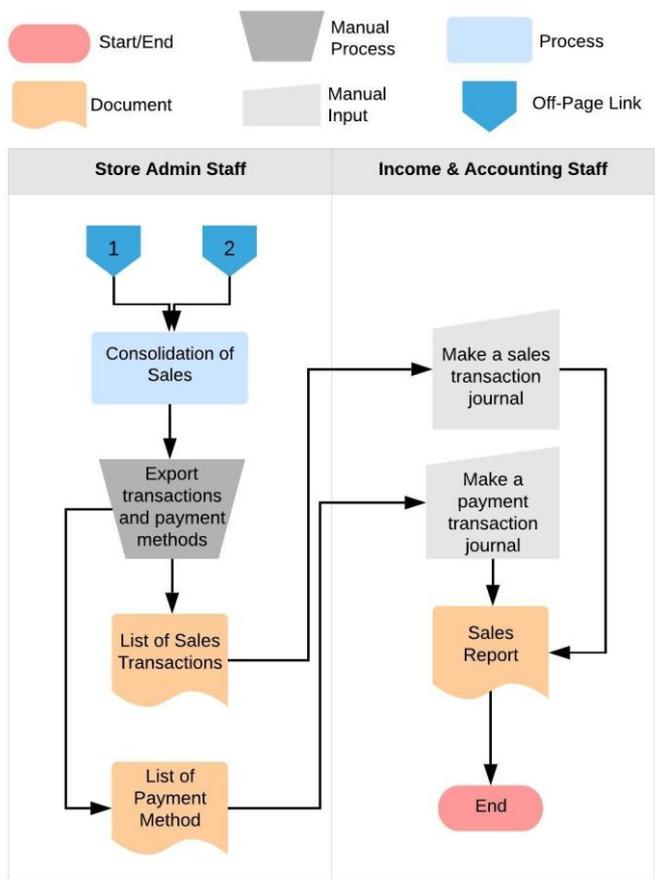
Fig. 2. The sales process Make to Stock (MTS) - continued.

Fig. 3. Design of Make to Stock (MTS) sales solutions.

The consolidation process is carried out automatically by the system, so the Store Admin Staff is responsible for downloading the results of the consolidation. The results of the consolidation are divided into 2 types of files, namely, Sales Transaction files and Payment Method files. The Sales Transaction File contains a list of products sold along with the number of products, total discounts, shipping costs (if available), and total sales of each item. Meanwhile, the Payment Method file contains the consolidated results according to the way the customer made the payment, so that the total of the payment is broken down into the type of payment.

Sales Transaction Files and Payment Method Files are separated into several files according to their respective locations. So that from 12 outlets, 24 files are formed. The downloaded consolidation file will be sent to the Income & Accounting Staff section. The next process is to record the journal into Microsoft Excel based on the results of the consolidation. The results of the journal recording are sales reports and financial reports that are created manually by the Income & Accounting Staff section.

B. Design Solutions According to Requirements

Based on the results of the ongoing business process and the results of the needs analysis, a proposed solution is presented in the form of a design in the form of a flowchart. As in Figure 3.
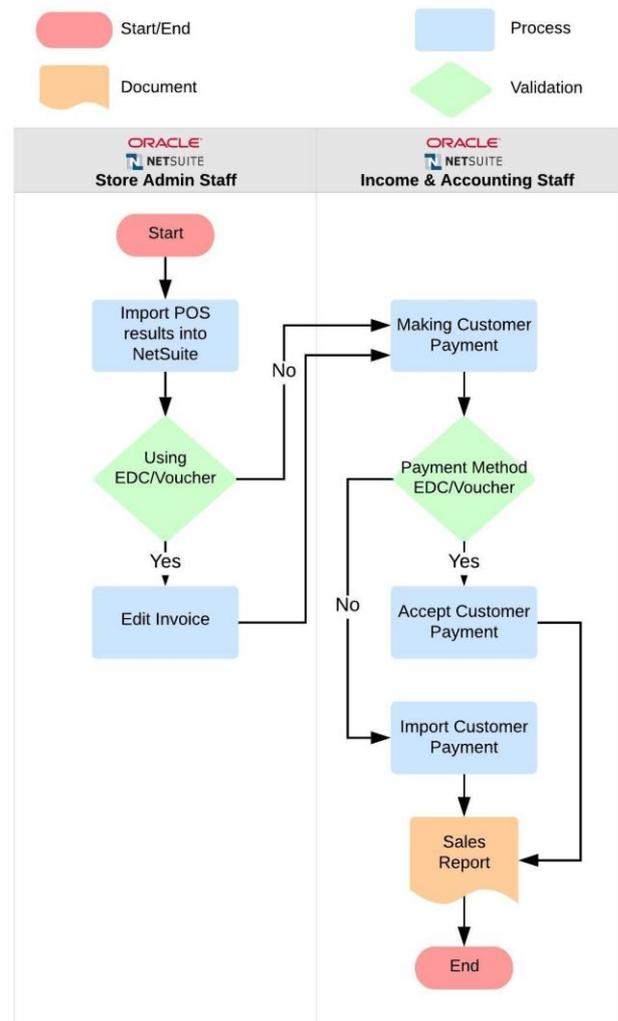
Based on Figure 3, the entities that directly interact into the NetSuite system are the Store Admin Staff and Income & Accounting Staff. After consolidating the results of sales transactions and media payments, the Store Admin Staff will import the sales transaction files into the NetSuite system. After the import process is carried out, if the transaction contains EDC Receivables and Voucher Receivables, then edit the invoice according to the Invoice Number that has been imported into the ERP system. Furthermore, the Customer Payment process is carried out to record the payment process from the customer. There are 2 conditions, if the payment is made in cash, the paid media list will be imported into the NetSuite system according to the date of the sale transaction. Meanwhile, if the payment uses EDC or vouchers, the recording process for the payment media is carried out by mass input, which means that the payment media input can be done simultaneously with the condition that the accounts receivable when making the invoice are the same as other transactions. After every sales transaction is recorded into NetSuite, the system automatically journals, resulting in accurate, precise, and real time sales reports without manual processing by the user.

V. CONCLUSION AND RECOMMENDATIONS

The development of an ERP system using Oracle NetSuite specifically for the Order to Cash module is carried out based on an analysis of ongoing business processes and a proposed solution design in a bakery company using the NetSuite One method. The NetSuite One method is used because it allows you to adjust to problems that occur in the sales process and based on the needs of customers who expect a cloud-based ERP system. So there is no need for a lot of experts in the IT field. In addition, by using cloud-based ERP, the system can be accessed by customers anywhere and anytime and can reduce manual processing by users because every recorded transaction automatically makes journaling to form a real team sales report.

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