

WEB-BASED RAW MATERIAL OR SUPPLIER SUPPLY REPORT SYSTEM SHOP VINNY KITCHEN MDO

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ABSTRACT

Kitchen Store Mdo means a figure engaged in the electrical component manufacturing industry, namely circuit breakers Breakers). Vinny's Kitchen Store Mdo depends on consumer orders, for the production process it takes 1 week. at Vinny's Kitchen Store Mdo has a number of dilemmas, namely, PPIC officers plan the procurement of raw materials based on intuition / estimates only as a result it is not uncommon for shortages and excesses of standard materials to occur, If the shortage results it can slow down the production process, and lead to inaccurate targets when sending to customers, and If excess will have an impact on high storage costs and the risk of loss and damage to standard materials. Based on the problem of the availability of standard material stocks and problems related to updating warehouse inventory data and data consistency, it can be solved using the MRP (Material Requirements Plan) method in the form of web-based computer software. the hope of using this application is that there will be an increase in effectiveness and efficiency, as well as timeliness in delivery to consumers can be fulfilled which will lead to an increase in Character profits.

Keyword : Inventory controls , Material Requirements Planning (MRP)

1. INTRODUCTION

In this modern era, people really need technology that can make it easy activity in life daily. Because with use technology, activities will be easier to do, and save energy and time. In a figure or place of business, there are several goods transactions such as goods to be purchased to be stored in the warehouse and goods to be stored used. All of which require filing reports to find out how much goods Which enter And item has used. With making report computerized will be more effective and efficient when compared to digital

manuals with use document paper Because will more eat time, power, and cost.

System inventory goods is something system Which organize series procedure And method Which designed For produce, spread, And obtain information all something about recording goods at warehouse Which enter And go out. System Which characteristic manuals or direct recording takes a long time and also the process is slow. Especially considering that humans perform that function, with many functions what is done, the possibility of making a mistake is great, it

will result bad And raises ineffectiveness in implementation function. A number of errors in manual data processing and must be checked again as well review the incoming data. This causes a decline in terms processing data And gift information, so that can resulted decline in performance which results in no accuracy of data and information. Therefore it is necessary to build a Material Supply Report System raw or Suppliers based web. Thereby need exists making system inventory as means For recording data.

Expected can make it easy recording data as well more efficient in recording.

2. RESEARCH METHODS

2.1 WATERFALL MODELS

according _ (Pressman , 2010) Model *waterfalls* is model classic which are systematic sequentially in build software . Following This There is two description from *waterfalls* model. computer understandable machine direct on when line code run.

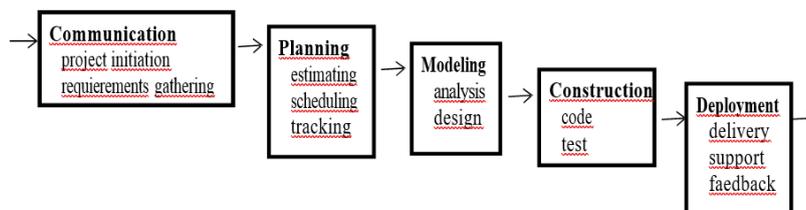


Figure 1. Waterfall method

The research method in this study includes several stages and steps used to complete this research. Adopting the waterfall from the author Dennis (2005), starting from the Requirements gathering , Analysis , Design, Implementation And research report.

1. Requirements gathering

in this term research is conducted to produce more detailed information that will be applied in systems and software. What information will be processed in making systems and applications, as

well as the functions needed . To find out which system currently exists, interviews or questions and answers are conducted with related parties . Besides that, identification was also carried out to find out the production planning process that was running as well as existing conflicts and also collected data from observations to design and manufacture production planning software to then carry out the next stage .

2. Analysis

Analysis done with perform an analysis

of the system will be built. This case do for determine factor weighting Which will applied in process planning production, right access from every users , as well as channel from a system.

3. Design

at this stage the research needs analysis becomes a suitable system design using the needs of production planning software with the MRP method. The design is done by data design and interface design . Production planning software for this design term uses UML (Unified Modeling Language). The design term aims to present it in the form of a " blueprint " and is applied to making the appearance of production planning software.

4. Implementation

Implementation bring all thing together. This is the place where system built. construction involve No only build system, but Also test it For verify that the system works. The planning more Good can push toward system with less bugs .

5. Report Research result

This stage is the final stage study, done drafting onall results activity study

3. RESULTS AND DISCUSSION

a. System Moment This (As-Is system)

on the current standard Materials Planning System or Alaihi Salmis system was generated by conducting interviews with MPO Department Managers , PPIC Supervisors, PPIC Staff. Apart from going through the interview method, the author also made personal observations of the standard Material Planning System at the Vinny Kitchen Store Mdo still uses Microsoft Excel. This is done to see how the data is stored and what deficiencies occur in processing this data.

b. Problems Moment This

Derived from the standard Material Planning System dispute that already existed, several problems were found, namely:

- The order input process is still manual.
- The process of calculating and planning standard materials is still manual.

c. Analysis Need

The results of the analysis phase are described in the *use form case diagrams* . *Use case diagram* describe functionality Which expected from A system. a h use case represent A interaction between actor with system.

A. Usecase Diagram

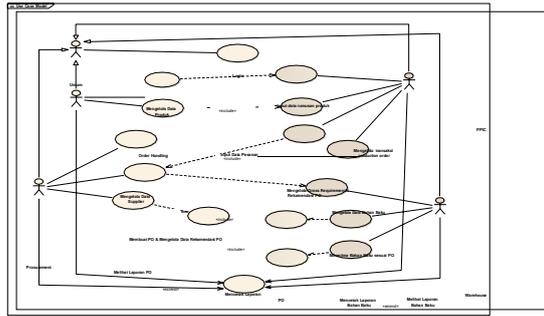


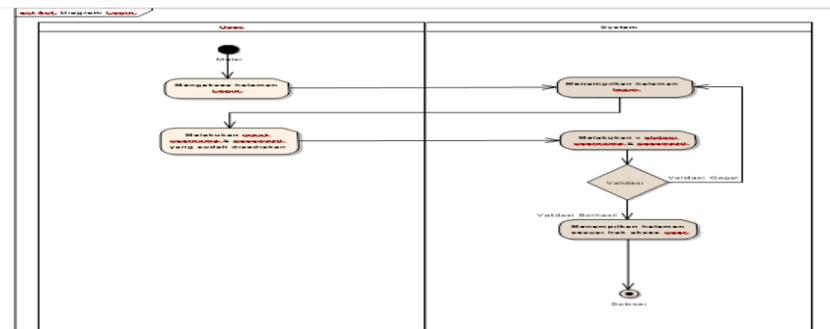
Figure 2 Use case Login Diagram

use case diagram describes the access rights that each actor can exercise . there are five actors active in the system, namely general, order handling , procurement , PPIC and warehouse . actors orderhandling can manage product data, input order data as well as input product formulation data and manage production order transactions. While the warehouse can get raw materials according to the PO, print standard material reports and print standard material receipt indication reports. Procurement is in charge of managing supplier data , forming POs and managing PO recommendation data as

well as viewing and printing PO reports.

B. Activity Diagram

Activity diagram used For describe channel from activity for each use case Which Already made. Picture 3 can show activity Diagram For Login . When user go to page login so system will displays page login And user enter username And password Which Already provided. If username and passwords entered correctly then the system will process And input to page main in accordance right access from each - respectively user .

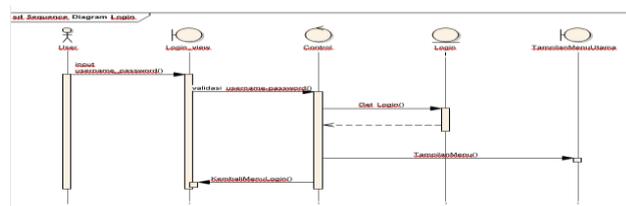


Picture 3. Activity Diagram Login

C. Sequences Diagram

Sequences diagram Which defined in

lower This is system run scenario . Results sequencesdiagram can seen on picture 4.



Picture 4 Sequences Diagram

In the picture above it is shown How scenario the way system log in . Started from *user* Which enter *username* And *password* , Then system will validate whether *the username* And *password* Which entered Correct or Wrong, If Wrong so system will return ask for *user* to insert *username* and *passwords* appropriate. If is correct, then the system will process and enter to appearance menu main.

Application started with *interfaces* page *login* like Which shown in figure 5. To enter to page next, *user* requested For enter *username* And *password* correct. If *username* And *password* entered incorrectly so system No will enter to page next.

a. Page System Login

Page This function as page For *login* , useful Forprocess enter to in admin room and cashier for make transactions.

D. Design Users Interfaces



Picture 4 Users Interfaces Login

b. Page System Dashboards

Dashboard page is the main page for cashier and user admin Where There is a number of menu that is

Dashboard, Re -stock, Cashier, Products, suppliers , Report Finance And Arrangement.

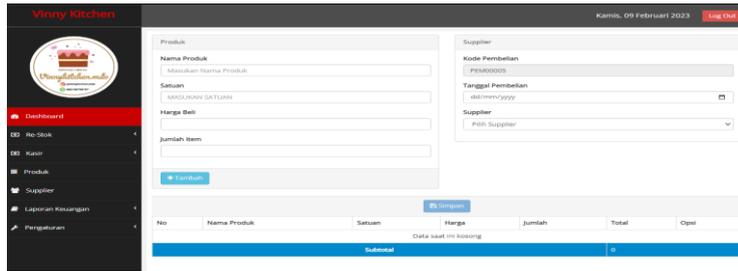


Picture 5 Page System Dashboards

c. Page System Re -stock Product

Re -stock page is a page for recording purchase reportsmaterial

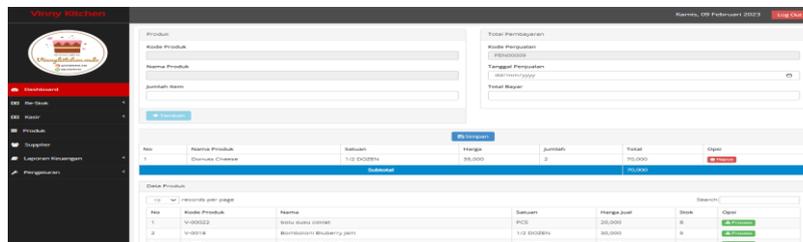
raw for the manufacture of products in the store vinny kitchen .



Picture 6 Page System Re -stock

d. Page System Transaction Cashier
 Page transaction cashier is page For cashier And customers For do transaction sale product vinny kitchen . System will calculate the

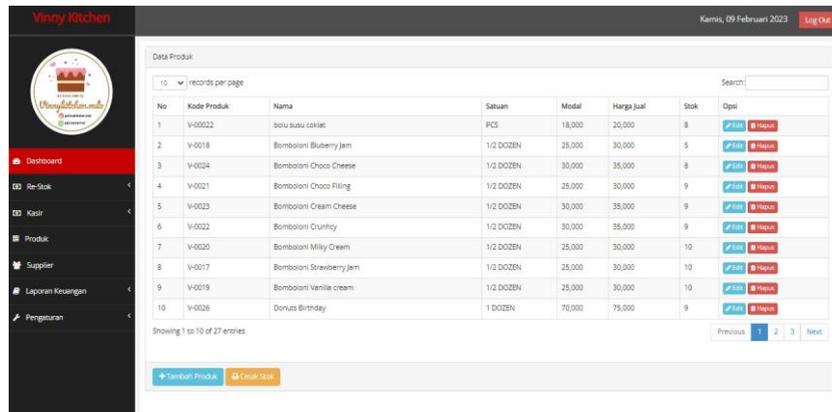
total payment to be paid by the customer then if process Already finished will appear note sale product Which bought customer .



Picture 7 Page Transaction Cashier

e. Page System Data Product
 The product data page is a page for admins change, add or delete

product Which available in vinny kitchen .



Picture 8 Page Data Product

f. Page System Financial statements
 The financial report system page is a page for the admin to check monthly sales report so the owner

can find out turnover and profitsale at the vinny's shop kitchen monthly .

No	Kode Penjualan	Tanggal Penjualan	Produk	Satuan	Jumlah	Harga	Total
1	PEN00001	15-11-2022	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
2	PEN00001	15-11-2022	Donuts Bimbelly	1 DOZEN	1	Rp. 75,000	Rp. 75,000
3	PEN00002	22-11-2022	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
4	PEN00002	22-11-2022	Bomboni Choco Cheese	1/2 DOZEN	1	Rp. 35,000	Rp. 35,000
5	PEN00003	06-12-2022	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
6	PEN00003	06-12-2022	Bomboni Choco Fling	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
7	PEN00004	06-12-2022	Bomboni Cream Cheese	1/2 DOZEN	1	Rp. 35,000	Rp. 35,000
8	PEN00004	06-12-2022	Bomboni Clumpy	1/2 DOZEN	1	Rp. 35,000	Rp. 35,000
9	PEN00005	29-12-2022	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
10	PEN00006	29-12-2022	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
11	PEN00007	05-01-2023	Bomboni Bubyery Jam	1/2 DOZEN	1	Rp. 30,000	Rp. 30,000
12	PEN00007	05-01-2023	Bomboni Choco Cheese	1/2 DOZEN	1	Rp. 35,000	Rp. 35,000
TOTAL							Rp. 428,000

Picture 9 Page Report Turnover Sale

4. CONCLUSION AND SUGGESTION

A. CONCLUSION

Based on research results And discussion, so can obtained conclusion as following :

1. With exists method MRP This hence the material requirements raw can well managed, as it can be know what raw materials are must quick made n order, what is the amount of raw materials what to order and when when ordering raw materials must done.
2. With exists application This expected can help staff PPIC in do control availability of raw materials, as well as can help staff warehouse in updating data raw material.

B. SUGGESTION

Based on conclusion And analysis Which has done, so there are suggestions as follows :

1. For study furthermore can interrogated with function other finances like report results sale product And report mark purchaseraw

material

2. Recommended in determine need will material raw use forecasting can use a number of method so that can compareprocess in determination need material raw can goes well.

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