MANAGEMENT INFORMATION SYSTEMS INVENTORY OF RAW MATERIALS ON PT. PERUSAHAAN LOGAM BIMA

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ABSTRACT

PT. Perusahaan Logam Bima is one of the business entity that is engaged in the manufacture of metal-based products manufacturing. PT. Perusahaan Logam Bima has problems that often occur during the shortages of supplies of raw materials due to the ordering of delay or excess and lack of precision in planning and control of the raw materials as well as oversight concerning the availability of the raw materials that are in the warehouse. This can cause terhambatnya the production process due to the arrival of the raw materials were late an average of a week, the onset of swelling costs, and or high levels of inventory, as well as his lack of supervision against existing raw materials inventory in the warehouse, the impact on the problem of delays in the production process and do not satisfy the consumer or customer orders so that the company suffered a loss because there is no income from the sale of the product.

To resolve these problems then built information system inventory management of raw materials is fast, precise and accurate. Planning to do forecasting by using Single moving average forecasting methods are expected to assist in the planning and control of raw material peresediaan in PT. Persuahaan Logam Bima in order fulfillment inventory of raw materials can run optimally, efektf and efficiently.

Based on the results of the testing and interview has been done can be inferred inventory management information system has been built very helpful head of production in the control of raw materials in order not to delay in production, occurs in addition help planning section in planning for supplies of raw materials to meet the needs of production and assist in conducting the warehouse section of the recording or monitoring of supplies of raw materials.

Key Word : Management information systems, single moving average, raw materials.

1. INTRODUCTION

Inventory is the stock of an item or resource used in an enterprise organization [1]. PT. Bima Metals Company is one of the enterprises engaged in the manufacture of products made from metal manufacturing. Forms of production. Goods - goods manufactured goods, household items such as pots, pans and teapots. One strategy planning in the manufacturing industry is planning and control needs and providing material - material required in the production process. it relates to when a material is needed, how much, how much inventory there, when to do the booking, when the material must come, and how much safety stock material should be maintained. Where planning and control is intended that material is always available when needed and in accordance with the required amount so that the production process is not delayed and customer orders can be completed on time.

Manufacturing companies are required to always produce products that can satisfy consumers in a manner that maximum product quality and completion of customer orders at the right time. This can be achieved by running a production system that is effective and efficient. Therefore we need a good production planning strategy. Based on interviews with the head of production, planning and warehouse obtained the information that there is a problem that often occurs during this time is in short supply of raw materials due to late bookings or excess and a lack of rigor in the planning and control of raw materials as well as monitoring of the availability of raw materials in the warehouse , This can lead to delays in the production process due to the arrival of the raw material of late an average week, the occurrence of cost overruns or high levels of inventory, as well as his lack of supervision of the supply of raw materials, warehouse, these problems have an impact on the inhibition of the production process and unfulfilled customer orders or customers so that the company suffered losses because there is no income from the sale of products.

Based on the problems described earlier, the purpose of this study is to establish a management information system inventories of raw materials on the PT. Metal Bima.

Based on the problems described earlier goals to be achieved are as follows:

1. Can help head of production in the control of raw materials in order to avoid delays in production.

2. Can help the planning department in the planning of raw material inventory to fit the needs of production.

3. It can help the warehouse in conducting recording or monitoring inventories of raw materials.

2. CONTENTS OF RESEARCH

2.1 Basis Theory

2.1.1 Management Information System

The management information system is a system of organized rangkauan of a number of parts / components that together function or moving produce information for use in the management of the company. Management information system is defined as a set of well-structured procedures, which at run time to produce information to support decision making and control in organizations. While the control is to measure the activity of deviations from the planned performance. So it can be concluded that the management information system primarily directed to support decision making and control. [3]. The stages in information systems manaemen using PDCA cycle crate in figure 1.

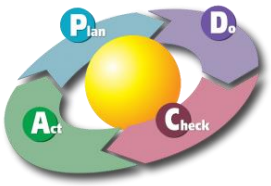


Figure 1. PDCA Cycle

2.1.2 Inventory Management

Inventory management is part of the Financial Management that the activities assigned to oversee the company's assets, before making a decision on the inventory of course this part must understand the concept of supply. In Inventory Management, 2 (two) things to note are:

General inventory decisions are decisions that the main task in the determination of inventory both quantitatively and qualitatively.

1. Quantitative Kepututsan aims to determine:
a. What items will be in stock?
b. How many items to be processed and how many items to be ordered?
c. When is the manufacture of goods will be done and when to book?
d. When to reorder (Re Order Point)?
e. What methods are used to determine the amount of supplies?
2. The decision is a qualitative technical decisions relating to bookings which lead to the descriptive data analysis.
a. The type of goods that are still available in the company?
b. Companies or individuals who become a supplier of goods ordered company?
c. Inventory quality control system used by the company?

The understanding of Inventory Management itself is inventory management involves the control of the assets are used in the production procces or produced to be sold in the normal cource of the firms operations. Which means that the inventory management includes the control of assets and manufactured for sale in the normal scale of operations.

The purpose
Inventory Management is holding the supplies needed for continuous operation at minimum cost.

2.1.3 Single Moving Average

Single Moving Average forecast method is that averaging multiple demand today to produce a short-term forecast. The formula for calculating the Moving Average forecast method as follows:

$$MAn = \frac{\Sigma \text{ (permintaan dalam n periode terdahulu)}}{n}$$

Man = Moving Average
n = number of periods in the Moving Average

2.2 Problem Analysis

In interviews with the head of production, planning and warehouse on Metal Company Milky stated that at present the company has a problem that is often in short supply of raw materials due to late bookings or excess and a lack of rigor in the planning and control of raw materials as well as monitoring of the availability of raw materials in the warehouse. This can lead to delays in the production process due to the arrival of the raw material of late an average week, the occurrence of cost overruns or high levels of inventory, as well as his lack of supervision of the supply of raw materials, warehouse, these problems have an impact on the inhibition of the production process and unfulfilled customer orders or customers so that the company suffered losses because there is no income from the sale of products.

Based on these problems, the need for a system capable of planning and inventory control of raw materials to help the head of production, planning and warehouse in planning, control and monitor the inventory of raw materials.

2.3 Stages SIM

Analysis of management information system that is used for raw material inventory in the system that will be built using the PDCA model (Plan, Do, Check, Act). The PDCA model it can be seen in Table 2.1 below

	Plan	Do	Check	Act
Kegiatan	1. Menentukan Jenis produk dan berapa jumlahnya	2. Pemilihan metode peramalan	3. Menentukan metode yang cocok	4. Hasil peramalan
	1. pengandalian Bahanbaku	2. Pengendalian Bahanbaku dengan safety stock	3. Membandingkan Stok, Kebutuhan dan Perencanaan.	4. Evaluasi hasil perbandingan pada tahap monitoring.
	1. Pengadaan Bahanbaku	2. Menentukan Jenis bahanbaku dan jumlahnya	3. menentukan kebutuhan bahanbaku	4. lakukan pengadaan

.

2.3.1 Analysis Product Needs Determination

Determination of needs analysis illustrates the stage - the stage will be conducted to determine the needs of the product

A. Planning Determination of Product Type

Planning determination of the product is a stage to establish which products to its inventory of raw materials susceptible to voids or shortages of raw materials and the amount of data bedasarkan pengadaanannya sale of these products.

Based on the sales data of products most purchased by consumers in the period January through December 2014 were aluminum pans Multipurpose product.

Therefore the aluminum pot versatile product that will do its raw material procurement, dikarena right has the most demand so vulnerable to running out of raw material inventory.

B. Implementation of the Product Requirements

After determining the product the most demanding customers, the next step is to do forecasting to estimate how many products Multipurpose aluminum pans that will be produced for the month of January 2015.

The next stage is to set the amount of the raw material needs by forecasting the aluminum pans Multipurpose products. The process of forecasting is done consists of the following stages:

1. Preparing aluminum pot product sales data that will be used as input data and determining the data pattern.
2. Calculate the value of the product inventory data forecast on mentarh by comparing the forecasting methods Simple Moving Average and the Single Exponential Smoothing.
3. Finding the value of MAD (Mean Absolute Deviation), MSE (Mean Square Error) and MAPE (Mean Absolute Percentage Error) of each forecasting method to determine the value of forecast error (forecasting error) each - each.
4. Comparing the value of forecasting error of MAD, MSE and MAPE at each forecasting method.
5. Choose the correct forecasting method by looking at the value of forecasting error tekecil MAD, MSE and MAPE resulting from any method of forecasting.
6. The results of forecasting with forecast error value of MAD, MSE and MAPE smallest suitable for use.

Based on the calculations have been done with the methods used in forecasting is Simple Moving Average (3bulanan), Simple Moving Average (5bulanan), Simple Moving Average (9bulanan), Single Exponential Smoothin ($\alpha = 0.1$) and the Single Exponential Smoothing ($\alpha = 0.4$), showed the value of error can be concluded that the results are more precise forecasting used is the Simple Moving Average 5 Monthly because it produces the smallest forecasting error value, ie MAD = 305.4571 and MSE = 99996.2 and MAPE = 1, 138 566 995. Where the smaller the value the more accurate forecasting errors then forecasting value.

C. Monitoring Product Needs Determination

After doing the calculations by the method of forecasting Simple Moving Average Monthly 5 has the smallest error value so as to estimate the amount of product needs Versatile aluminum pans can use these methods.

The next stage is to do forecasting with methods Simple Moving Average Monthly 5 as shown in Table 2.2 below:

Table 2.2 Results of Forecasting Needs Pots

Bulan	Permintaan	Peramalan
Jan-14	26521	-
Feb-14	26597	-
Mar-14	26956	-
Apr-14	27463	-
Mei-14	27153	-
Jun-14	26523	26938
Jul-14	27196	26938,4
Agu-14	27251	27058,2
Sep-14	26720	27117,2
Okt-14	27224	26968,6
Nov-14	26606	26982,8
Des-14	26756	26999,4
Jan-15		26911,4

D. Evaluation Product Needs Determination

The next stage is to evaluate the results of forecasting and planning processes that have to be got to do product inventory procurement bahanbaku namely pans Almununium Versatile with product number 26911.4 forecast results after rounding become 26 912 units.

2.3.2 Analysis of Raw Material Inventory Control

Analysis of inventory control bahanbaku describe the stage - the stage will be done to determine how many of procurement bahanbaku be stored in warehouse.

Planning Inventory Control Raw Materials

A. Planning Inventory Control Raw Material

Planning is the planning stages bahanbaku which must be controlled, how many bahanbaku safe limits that must be stored in warehouse for a period of one month to come, ie in January 2015.

Safety Stock or inventory befungsi safeguards to protect the error in predicting demand during lead time. Application of safety stock methods used for this study is calculating the minimum limit raw material inventories should be available in the next period.

B. Implementation of Raw Material Inventory Control

Mengendalian implementation stage in the supply of raw materials, the process will be conducted safety stock, in order to protect the error in predicting demand.

Table 2.3 Raw Material Needs Pots

No	Nama Material	Komposisi	Satuan	Kebutuhan
1	Alumunium	1	Kg	26912
2	Permukaan tut	1	Buah	26912
3	Etiket	1	Lbr	26912
4	Knop	1	Buah	26912
5	Tutup panci	1	Buah	26912
6	Paku keling	8	Buah	215296
7	Kuping Panci	2	Buah	53824
8	Body panci	1	Buah	26912
9	Caustic soda	0,75	Kg	20184
10	Bubuk phenoli	0,25	Kg	6728
11	Amplas	4	Lbr	107648
12	Plastik	1	Kg	26912
13	Kardus	1	Lbr	26912
14	Lakban	0,005	Roll	134,56

From table 2.3 calculation process safety stock for the next month are peiode 1 January 2015:
Safety Stock = Usage Average Period Previous x Lead Time .... (2.1)
Total sales forecasting in January 2015
= 26 912 units
Number of days in January 2015
= 30 days
Lead Time (timeout) procurement to supplier
= 5 days
Safety Stock = (26912/30) x 5
= 897 x 5
= 4485 units
Note: the results of safety stock has been rounding.

Based on the calculation of safety stock, then PT. Bima Metals Company shall provide a pot product safety stock in January as many as 4485 units.

Furthermore, to determine how many products procurement pot which will be stored in warehouse for peiode January 2015 is as follows:
Total Procurement = (Results Forecasting + safety stock) - Remaining Stock
Remaining stocks of raw materials = 2,500
Supplies Security (safety stock) = 4485 units
Which is known also in table 2.3 above:
Forecasting results in January 2015 = 26 912 units
thus:
Total Procurement = (Results Forecasting + Safety stock) - Remaining Stock
= (26912 + 4485) - 2500
= 31397 - 2500
= 28 897 units

C. Control of Raw Material Inventory Control

Phase supervision of raw material inventory is intended to help head of production monitoring and control of existing inventory of raw materials warehouse.

Based on the safety stock calculations that have been performed on the stage of raw material control, then the PT. Bima Metals Company must provide safety stock for raw materials unit 4485.

When the supply of raw materials is less than the amount of the safety stock is 4485 units, it will provide notice that the supply of raw materials have the stock status "Not Safe". These notifications are presented in the table bentul raw material inventory control. For example, product inventory in warehouse there are currently as many as 2500 units then supply monitoring can be presented as in table 2.4.

Table 2.4 Raw Material Inventory Monitoring

No	Nama Material	Komposisi	Satuan	Kebutuhan	Stok	Safety Stok	Perencanaan	Status Stok
1	Alumunium	1	Kg	26912	2500	4485	28897	Tidak Aman
2	Permukaan tutup panci	1	Buah	26912	2500	4485	28897	Tidak Aman
3	Etiket	1	Lbr	26912	2500	4485	28897	Tidak Aman
4	Knop	1	Buah	26912	2500	4485	28897	Tidak Aman
5	Tutup panci	1	Buah	26912	2500	4485	28897	Tidak Aman
6	Paku keling	8	Buah	215296	20000	35880	231176	Tidak Aman
7	Kuping Panci	2	Buah	53824	5000	8970	57794	Tidak Aman
8	Body panci	1	Buah	26912	2500	4485	28897	Tidak Aman
9	Caustic soda	0,75	Kg	20184	1875	3363,75	21672,75	Tidak Aman
10	Bubuk phenolic	0,25	Kg	6728	625	1121,25	7224,25	Tidak Aman
11	Amplas	4	Lbr	107648	10000	17940	115588	Tidak Aman
12	Plastik	1	Kg	26912	2500	4485	28897	Tidak Aman
13	Kardus	1	Lbr	26912	2500	4485	28897	Tidak Aman
14	Lakban	0,005	Roll	134,56	12,5	22,425	144,485	Tidak Aman

D. Evaluation of Raw Material Procurement

Evaluating the monitoring results listed in Table 2.4, note that the raw material has the stock status "Safe", so the company will procure as much as contained in the planning field as many as 28 897 units. The initial values that are presented in the planning column is obtained from the results of calculations have been performed on the stage of raw material control.

Each time the head of production adding raw materials inventory or stock, then the value contained in the planning table will wane. When the amount of raw material inventory or stock plus the number of columns in the column procurement planning safety stock is less than 2500 units, the company will perform forecasting back. Forecasting is done with the aim to make inventories of raw materials back in order to avoid shortages or void while doing distribution for the next period.

2.4 According to the table above in the column the stock is the number of inventories of raw materials that exist in warehouse-ready. For the column needs is the raw material required for production process that is required in the production process. where production planning will be done as many as 28 897 (Total Number Procurement).
Total Procurement = (Results Forecasting + safety stock) - Remaining Stock
= (26912 + 4485) - 2500
= 28 897 units

2.3.3 Analysis of Raw Material Procurement

Analysis manjemen determination describes the product stage - the stage will be taken in calculating the inventory bahanbaku which there should be at the company.

A. Planning Procurement of Raw Materials

After performing the step of determining which products should be estimated bahanbaku its inventory needs, the next stage of the procurement of supplies bahanbaku versatile aluminum pot maker. The goal is that there is no shortage or vacancy bahanbaku during the distribution.

B. Procurement of Raw Materials

Stages of the procurement of raw materials, namely stages of calculation to determine how much of procurement for major raw materials and raw

materials for the manufacture of products supporting Multipurpose aluminum pans.

From table 2.5 it can be seen how the amount of raw materials needed for the period in January 2015.

Table 2.5 Structure of Product Pots

No	Nama Material	Komposisi	Satuan
1	Alumunium	1	Kg
2	Permukaan tutup panci	1	Buah
3	Etiket	1	Lbr
4	Knop	1	Buah
5	Tutup panci	1	Buah
6	Paku keling	8	Buah
7	Kuping Panci	2	Buah
8	Body panci	1	Buah
9	Caustic soda	0,75	Kg
10	Bubuk phenolic	0,25	Kg
11	Amplas	4	Lbr
12	Plastik	1	Kg
13	Kardus	1	Lbr
14	Lakban	0,005	Roll

The following is the calculation of procurement needs to determine how many orders of raw materials to be ordered are as follows:

1. Calculation Booking Aluminum

The result of the calculation when booking alumuium 1 kg of raw material production planning results reduced the remaining stock of the existing warehouse.Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will book a raw material aluminum as much as 26 397 Kg.

2. Calculation Booking Surface Close Pots

Surface booking calculation results Close Pots 1 Fruit of the results when planning production of raw materials reduced the remaining stock of the existing warehouse.Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will order raw materials Surface Cover pans as much as 26 397 pieces.

3. Calculation Booking Etiquette

The result of the calculation when booking Etiquette 1 sheet of raw material production planning results reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will order raw materials as much as 26 397 Label Sheets.

4. Calculation Booking Knop

The result of the calculation when booking Knop 1 Piece of planning results to production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will order raw materials as much as 26 397 Fruit Knop.

5. Calculation Booking Close Pots

The results of calculation of booking Close Pots 1 Fruit of the results when planning production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will order raw materials as much as 26 397 Fruit Pots Close.

6. Calculation Riveters

The result of the calculation of bookings Riveters 8 Fruits of the results when planning production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= 231176-20000
= 211 176 pieces

So the company will order raw materials as much as 211 176 Fruit Rivets.

7. Calculation Ear Pots

The calculation result Ear reservations Fruit Pots 2 when the results of the planning of production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (57794 - 5000)
= 52 794

So the company will order raw materials as much as 52 794 Fruit Pots ears.

8. Calculation of Body Pots

The calculation result Pots 1 Piece Body bookings while on the result of planning the production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (28897 - 2500)
= 26 397

So the company will book a pot of raw materials as much as 26 397 Fruit Body.

9. Calculation of Caustic Soda

Caustic Soda booking calculation results when 0.75 Kg of raw material production planning results reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (21672.75 to 1875)
= 19797.75

So the company will book a raw material Cover pans as much as 19797.75 Kg.

10. Calculation of phenolic powder

Phenolic powder reservations calculation results when 0.25 Kg of raw material production planning results reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)
= (7224.25-625)
= 6599.25

So the company will book a total phenolic powder raw materials 6599.25 Kg.

11. Calculation Sandpaper

The result of the calculation when booking Sandpaper 4 Sheets of planning results to production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)

= (115588-10000)

= 105 588

So the company will order as many as 105 588 raw materials Sandpaper Sheets.

12. Calculation Plasktik

The result of the calculation when booking Plastics 1 Kg of raw material production planning results reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)

= (28897- 2500)

= 26 397

So the company will order raw materials as much as 26 397 Fruit Pots Close.

13. Calculation Cartons

The result of the calculation when booking Cardboard 1 Sheet of planning results to production of raw materials reduced the remaining stock of the existing warehouse. Here are the results of the calculation:

Booking = (Planning - Remaining Stock)

= (28897 - 2500)

= 26 397

So the company will book a pot of raw materials as much as 26 397 Cover Sheet.

14. Calculation of Duct Tape

Results 0.005 153.725 to 12.5

The result of the calculation when booking Roll 0,005 Cartons of raw material production planning results reduced the remaining stock of the existing warehouse.Here are the results of the calculation:

Booking = (Planning - Remaining Stock)

= (144.485 to 12.5)

= 131.985

So the company will order raw materials as much as 131.985 Roll Roll.

Note: The result of each calculation rounding upwards.

C. Raw Material Procurement Oversight

The following is a calculation of the overall results obtained from the calculation for each bahanbaku. The results of the calculations presented in tabular form bahanbaku monitoring that can be seen in Table 2.6 below.

Table 2.6 Monitoring Raw Materials

No	Nama Material	Kebutuhanan	Perencanaan	Stok	Pemesanan	Satuan
1	Alumunium	26912	28897	2500	26397	Kg
2	Permukaan tutup panci	26912	28897	2500	26397	Buah
3	Etiket	26912	28897	2500	26397	Lbr
4	Knop	26912	28897	2500	26397	Buah
5	Tutup panci	26912	28897	2500	26397	Buah
6	Paku keling	215296	231176	20000	211176	Buah
7	Kuping Panci	53824	57794	5000	52794	Buah
8	Body panci	26912	28897	2500	26397	Buah
9	Caustic soda	20184	21672,75	1875	19797,75	Kg
10	Bubuk phenolic	6728	7224,25	625	6599,25	Kg
11	Amplas	107648	115588	10000	105588	Lbr
12	Plastik	26912	28897	2500	26397	Kg
13	Kardus	26912	28897	2500	26397	Lbr
14	Lakban	134,56	144,485	12,5	131,985	Roll

D. Evaluation of Raw Material Procurement

From the results obtained supervision required amount of raw materials listed in Table 2.6 are the raw material needs to be provided for the period of January, 2015.

2.4. Entity Relationship Diagram

For images ERD system to be built can be seen in Figure 3.

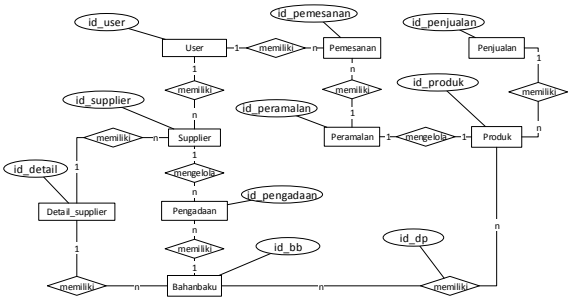


Figure 3 Entity Relationship Diagram

2.5. Diagram Context

Modelling the flow of data on the system to be built can be seen in Figure 4.

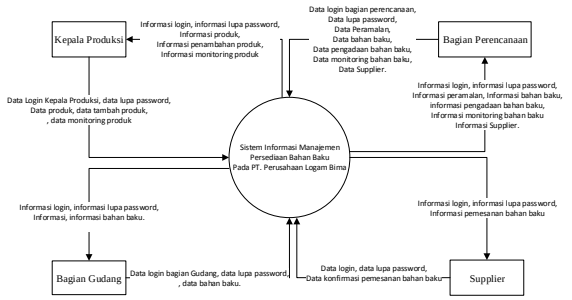


Figure 4. Diagram Context

2.6 Interface Design

The design of the interface is a description of the interface layout system to be created. With the interface design is expected to both application developers and users can unify their views on the display layout application is made. The design of the interface is made to describe more details about the design of the display and navigation menus contained therein.

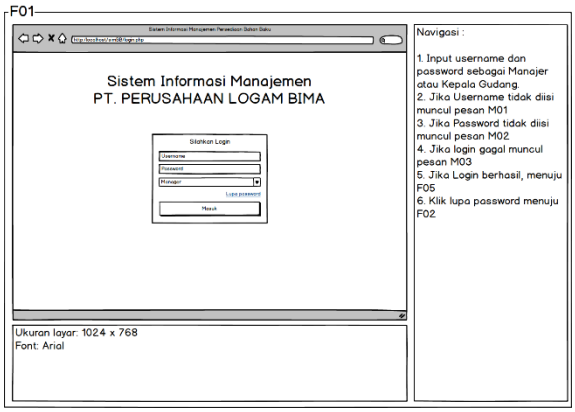


Figure 5 Design Interface

2.7 Implementation and Testing

2.7.1. Relation scheme

Relation schema describes a relationship between tables that already exist in normal circumstances. Design table relationships in building a software application can be seen in Figure 2.

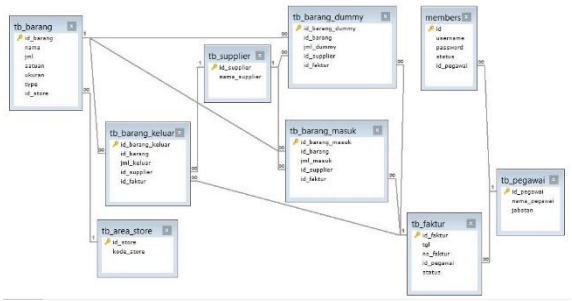


Figure 2 Relation Scheme

2.7.2 Black-Box Testing

Scenario testing Black-Box system Raw Materials Inventory Information System in PT Metals Bima comprised of users, namely the Head of Production, warehouse Section, Planning Division, Supplier.

Based on the results of blackbox testing has been done it can be concluded that the Raw Material Inventory Information System In PT Metals Milky functionally entire process on has been running as expected.

2.7.3 Beta Testing

Beta testing is testing conducted directly on PT. Metal Bima to know the quality of Information Systems Inventories Raw materials that have been built, whether it has been as expected or is not appropriate. Tests conducted by an interview to Mr. Sonny as Head of Production at PT Metals Bima.

2.7.4 Conclusion Beta Testing

Based on the beta testing that has been described previously, it can be concluded that :
1. Raw material inventory information system makes it easier for the head of the warehouse in monitoring the condition of the goods.
2. The system is able to forecast, although it is not appropriate but not too far.

3. CLOSING

3.1. Conclusion

Based on test results and interviews can be concluded Management Information System Inventory that has been built very helpful head of production in the control of raw materials in order to avoid delays in production, in addition to help the planning department in planning the supply of raw materials to fit the needs of production and help the warehouse in conducting recording or monitoring inventories of raw materials.

3.2. Suggestions

Based on the conclusions that have been described previously, things are expected in the future is Opera-Systems Raw Material Inventory Management at PT. Perusahaan Logam Bima can be developed more widely. Especially at the level of the user is not regular and limited functions of the system that has been built.

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