THE MAKING OF INFORMATION SYSTEM OF MINERAL WATER SOFTRIDE DISTRIBUTION IN THE PT. RIADE BY USING SUPPLY CHAIN METHOD

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ABSTRACT

PT. Riade Sumber Energi is a company producing mineral water for adult such as cup, bottles, gallon. The products produced PT. Riade Sumber Energi marketed in te eastern Bandung. This company orders the main material to a supplier to fulfill the production necessity asked by agen. The supplier sometimes needs up to three weeks for shipping the order. Therefore, it can make the warehouse out of stock. Moreover, sometimes, agen orders more quantity that makes the company flustered for preparing stock.

Based on the issue above, PT. Riade Sumber Energi has decided to make information system of pruduct distribution by using supply chain management method. The aim of this method is to make the company easier in deciding the main material that should be prepared to fulfill necessity of stock. Thus, the production planning and process can be run well and it can avoid the stock which is running out. The prediction method used is single exponential smoothing. Then, the calculation in deciding product stock is using safety stock.

By seeing the result of the research, it can be concluded that this system has helped PT. Riade Sumber Energiin deciding number of main material ordered, controlling product data and main material, obtaining product shipping information and carrying out agreement of product order and main material preparation.

Key words : supply chain management, monitoring, safety stock,

1. INTRODUCTION

PT. Riade Sumber Energi is a company that produces mineral water so kind of cup , bottles and gallon . Products produced by PT . Riade Energy Sources marketed East Bandung area . The company has a series of work from receiving product orders from agencies , ordering raw materials to suppliers , receiving raw materials from suppliers , to process raw materials into finished goods . Of the finished product and the packaging is then carried out directly distributed to agents who have ordered the product . Delivery orders to suppliers by fax or call to the courier company's suppliers and sometimes go directly to the supplier .

PT. Riade Sumber Energi distribute product to buyer who performs reserving products. The distribution of products conducted in accordance with the schedule has been agreed between companies and buyer. Company to order the raw material supplier to meet the needs of production which was asked by buyer , where reservations raw materials supplier was being done to having a pause a long waiting time can be up to three weeks between reservations until raw materials warehouse received a company so often occur delays in stock shortages received the raw materials and products , because the number of the raw materials that ordered cannot it is estimated that for sure when there are scarce products or out of stock. A deficiency or out of stock the product of this arises because the production process carried out to meet the buyer cannot be estimated with reservations must be because of buyer sometimes order the product of more than usually or vice versa , so the company experienced difficulty in terms of determining the amount of raw materials to be prepared to meet the needs of the supply of products.

Problems in the delays in receiving these raw materials can cause production planning and production process does not run smoothly .If the production process does not run , then the process is hampered the distribution of the product and clothing needs (clothes) requested by customers not met. These problems can be overcome with to use a supply chain management , where PT. Riade Sumber Energi can cooperate with business partners because of their functions supply chain management itself is to integrate business processes starting from a purveyor of raw materials which are those supplier to the user buyer until the end of which is in the form of products. The goal is to make the management products and raw materials, the flow of information from one of the order of, the buyer acceptance to buy raw materials the delivery of raw materials and to synchronize the buyer will create consistency.

Based on the discussion problem at the moment in where PT. Riade Sumber Energi, it is required a information system development distribution of a product pt .Known to all the gumilang lestari with the

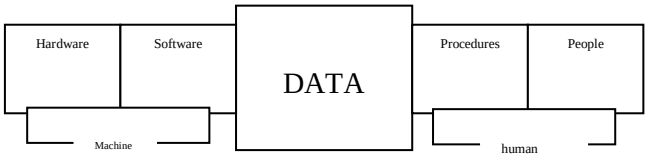
approach a method of supply chain management. The aim to be achieved from system that built this is:
1. Facilitate the head of the warehouse and head of the factory in terms of determining the amount of raw materials that should be available in warehouse , to meet the supply of finished products inventory so that production planning and production process runs smoothly .
2. Avoid the deficiency or lacuna inventories of raw materials and finished products warehouse , so that the process of distributing the finished product is going to run smoothly.

2. CONTENT OF RESEARCH

2.1 information systems

Been a set of procedures information system on when implemented organization that will provide information for the decision makers and to control organization. Information systems is a system in that unite in an organization needs transaction processing , support the operation , and activities are managerial the strategies from an organization of and provide certain foreign parties with reports that are needed [2]. Information system consisting of 5 components , fifth of the components were can be classified as follows [2].

a. Hadware and software that serves as a machine.
b. people and procedures that is man and the procedures for the use of a machine.
c. data is bridges between human and machine to make the process of occurring a data processing.



Picture 1 five components of information systems

activities in the main activities in the classification of information systems is [2]:

a. Input
   Describing an activity to provide data to be processed.
b. process
   Describes how a data processed to produce a information worth added.
c. Output
   An activity to produce the report from the process of the above.
d. Storage
   An activity to maintain and store data.
e. Control
   A activity to ensure that the information system was done as expected.

The the information system can make the competitive advantage in the company. Increase profits today, however, is difficult to being estimated. The increase in profit are often happens suddenly, but there have been some years after the implementation of the new system. When two alternative system approaching in common comparison , the door open to consider factors stratei company. Terdapat faktor-faktor strategi perusahaan tersebut adalah sebagai berikut.

a. Consumer satisfaction (customer satisfaction).
b. Increase sales (increase of sales).
c. Commitment consumer and the vendor (customer and vendor commitments).
d. Concentration of product information (information product marketing).

Management Information Systems (MIS) is a collection of system management or systems which provide information aimed at supporting the Management of operations and decision-making in an organization that tend to be associated with information processing based on a component by considering what information, to whom and when to be served.

2.2 Supply Chain Management

Supply chain management is method or integrative approach to manage the flow of product the information and money in an integrated involving parties ranging from upstream to downstream.The essential principle in scm is transparency of information and collaboration between the internal function of the company and with parties diperusahaan along supply chain.Supply chain is the network of physical, namely companies involved in supplying raw materials, producing goods, and send it to the end users. The companies are usually including supplier , factory , distributor , retail companies supporters as well as logistics services company [7].

At a supply chain usually there are three kinds of a stream that must be managed. The first was the flow of goods that flows from upstream to downstream. As example is the raw material that dikirm to a factory. After a finished product manufactured, they are sent to the distributor, then to the retailer or retail, then to the end user. The second is the flow of money and the like which flows from upstream to downstream. The third was in the streams of information that could have occurred from upstream to downstream or the opposite. Information about the supply of products that still exist in each of the supermarket often required by the distributor and factories .Information about the availability of production capacity that is owned by the supplier also often required by the factory .Information about the status of shipping raw materials often required by a company that sent and will receive. The shipment to share information, so that it can monitor the interested parties for the plan to be completed.

The term supply chain management first advanced by oliver & amp; weber in the 1982.jadi scm not only oriented in the internal affairs of a company , but also external affairs related to a relationship with partner companies .Because of the firms are at a supply chain in essence want to satisfy consumers the same end , you have to work together to make products that are cheap , send it on time , and with the quality of being good .Idelnya , the relationship between party to a term supply chain held long-term panjang.hubungan allow all parties to create a trust and creating better efficiency .It creates efficiency because of long-term relationships means less ongkos-ongkos to get the company new partner[7].

2.2.1 Components *Supply Chain Management*

Supply chain management has three main components that supports the life of a of business process as follows:

1. Upstream Supply Chain

The companies manufacturing activity or relationship with the distribution channels may be expanded to several levels.The principal activity in upstream supply chain of the goods it is.

2. Internal Supply Chain

This is the process of internal supply chain to the warehouse delivery of goods .The main activity is in internal supply chain management of production , pabrikasi , and control of supplies.

3. Downstream Supply Chain

Downstream activities involved in these supply chain of the process to the consumers.Downstream on the supply chain of the goods it is, the barn, transportation.[7]

2.2.2 The scope of the area Supply Chain Management

Scm is important in principle and collaboration between the process of internal function well or with the company or out of corporate supply chain. Activities the main activity of who enters in the classification of scm is [7]:

1. Product development
2. Procurement , Purchasing , atau Supply
3. Planning & Control
4. Production
5. Distribution
6. Return

2.2.3 Management distribution and transportation

The function of distribution and transport is basically take the product of a location where the products produced up to where they will be used. The management of transportation and distribution includes both physical activity in plain view we can see , as store and send the product , and the function of non-fisik of the activity of the processing of information and services to customers. In principle, this function berrtujuan to create high services to customers can be seen from the service levels achieved, a delivery full of goods to the customer, sell and service purna satisfactory [7].

Activities distribution and transportation could be undertaken by manufacturing companies with forming part the distribution of its own transportation or handed over to a third party. In their effort to to meet goals above , anyone who executes (internal company or partner a third party) , management distribution and transportation in general given a number of basic function of consisting of:

1. Perform segmentation and determine the target service level.
2. Determine the mode of transport to be used.
3. consolidation and delivery information.
4. Perform scheduling and delivery route determination.
5. Provide value-added services.
6. Storing supplies.
7. Handle return.[7]

In general there are three strategies distribution of a product from the factory to the customer. Each of these strategies had the advantages and disadvantages.The third strategy is as follows:

1. *Direct Shipment*
   n this model, straight from the factory shipments to the customer, with or without a supporting facilities.These strategies typically suitable used to stuff that ' s short and stuff that easily damaged in the process of unloading and loading.
2. through the warehouse delivery
   On this model , goods not be sent directly to customers but passes through one or more facilities warehouse or a buffer .Totally backward with direct shipment model above , warehousing model fit for products that uncertainty / supply-nya demand high as well as products that has endurance relative long .
3. *Cross-Docking*
   In this model , the product will flow through cross-dock facilities which is located between a factory and customers .In this place , vehicles and the sender will meet and occurring transfer the burden of (of course also possible the occurrence of consolidation involving many factories and customers).[7]

2.3 Forecasting

solve the problems to come can not be ascertained , people always trying to get it done with a model those that in accordance with actual behavior data , so does in forecasting do. forecasting Demand for products and services the next time and its parts is of major importance in planning and monitoring production. A forecasting many have the meaning , then forecasting the need to be planned and is

scheduled that would be needed a time period of at least in the period of time needed to make a kebijaksanan and set some things that affect the wisdom. Forecasting needed besides to predict what will happen dimasa to come also the decision makers need to make planning. Peramalan sangat beragam dalam horizon waktu peramalan, faktor yang menentukan hasil sebenarnya, tipe pola dan berbagai aspek lainnya. Untuk menghadapi penggunaan yang luas seperti itu, beberapa teknik telah dikembangkan. Salah satu teknik dalam peramalan yaitu Metode Smoothing[4].

Having a peramalan peramalan steps in the process.There were six steps in the process, peramalan and that is [8]:

1. Determine the purpose of divination .How divination will be used and when will that be needed divination ?This stage will give an indication of the level of the details of what is needed in divination , the number of resources (employees , time , computer , and the cost of) that can be justified , as well as level of accuracy required.
2. Determining the time.Divination have to indicate of time, given that the accuracy of dip when a span of increasing.
3. choose forecasting technique.
4. Obtain , clean , and analyze the proper data .Obtained data covering the business can be significant .After obtaining data it may be cleared in order to remove foreign object obviously not true and data analysis before.
5. make divination.
   Monitor divination.Divination should be tracked to determine whether divination done by means of who satisfies.If it is not satisfactory check back a method of divination, assuming, the validity of the data, and others.Later change it in accordance with the need and prepare the revision of divination.

JForecasting enis can be divided based on a period of time , scope and methods in use [3].

a. based on the time frame , Forecasting distinguished into the short term and longer term.
b. according to the lingkupnya forecasting differentiated into forecasting micro and macro economic indicators.
c. forecasting based on the method used , forecasting distinguished become a method of qualitative and quantitative.

A qualitative is based on our intuition and the one who conducts forecasting than pemanipulasian (penganalisisan) processing and historical data available.Techniques in a qualitative made up of delphi, a curve, this scenario, of writing market research was, a focus group, and many others [3].

A method of quantitative pemanipulasian based on historical data that is available in an adequate manner and tapa intuition and this subjective assessment of people doing forecasting , this method was commonly based on close analysis of statistic . Forecasting quantitative be able to apply if the condition of the following three have been met , namely [3]:

a. information about the state of in the past are available
b. Information that can be dikuantitatifkan in the form of numeric data (numbers), and
c. can be assumed that some aspect of a pattern in the past will continue to the time would be dating (called the assumption of continuity).

2.3.1 Single Exponential Smoothing

This historical values in smoothing in a random rata-ratakan forecast seems to make smooth functioning properly of tertentu.kasus yanng simplest of single exponential smoothing be developed from the equation (2.7) or in a special than a variation on similarities tersebutyaitu as follows [4] :

$$F_{t+1}=F_t+\left(\frac{X_t}{N}\frac{X_{t-N}}{N}\right) \qquad (2.7)$$

Suppose a long observation X _ (t-N) is not available so it should be replaced with a value approach (approximations). One possible replacement is the value of the previous period forecast F_t. by performing this substitution the equation (2.7) into equation (2.8) so that it can be written as (2.9) [4].

$$F_{t+1} = F_t + \left(\frac{X_t}{N}\frac{F_t}{N}\right) \qquad (2.8)$$

$$F_{t+1} = \left(\frac{1}{N}\right)X_t + \left(1\,\frac{1}{N}\right)F_t \qquad (2.9)$$

From equation (2.3) can be seen that the forecasted value at time t + 1 depending on the observation time t value weighting, i.e. 1/0\nand on a weighting value of forecast time t is 1-1/N value between 0 and 1. By replacing the 1/N = a. Equation (2.9) into equation (2.10) [4].

$$F_{t+1} = aX_t + (1-a)F_t \qquad (2.10)$$

Specification:
F (t + 1) = Results forecast for period t + 1
α = smoothing constant
X_t = actual demand data for the period t
F_t = Forecast in period t

In the method of exponential smoothing value% u03B1 be determined freely, meaning that there is not a way that's sure to get the optimal value for% u03B1. The selection of the value of% u03B1 done by trial and error. Size% u03B1 is between 0 to 9 [4].

2.3.2 Mean Squared Error (MSE)

Forecast error used in the calculation of to to test the results of forecasting is the mean absolute error (mse). MSE is the average of forecasting dikuadratkan error. The value of mse able to be searched by the use of the equation (2.5).

$$MSE = \frac{\sum(X_t - F_t)^2}{n}$$ .....(2.19)

Specification:
X_t = actual data in period t
F_t = forecast data calculated from the model used in period t
n = Lots of data from the forecast

2.4 Safety Stock

Due to time tenggang, requires an inventory of goods to suggest to come to call the police. Or serves to protect the security of supply keeping the possibility of a shortage of goods , for example because the use of larger than previously thought ata delays in the reception of goods in a message. Supplies with the term security called also supplies a buffer or iron supply will. Safety stock the goal is to determine how much stock in the need for a grace period to meet the demand[8]. Part supplies security and the level of service can be seen in figure 2.8 in the diagram the normal distribution.

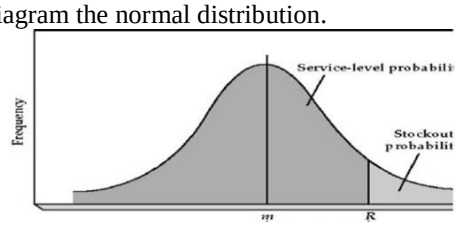


Figure 2 preparation of safeguards

Calculation of safety stock can be seen from the equation (2.6):

Safety Stock = (The amount of spending /31 day x L).....(2.20)

description:
L= Lead Time

2.5 analysis of a problem

An analysis of the problem is the procedures that would be described in data processing systems for information on the supply chain management at PT. Seantero Gumilang Lestari. Analysis of a problem of a system that is currently running this point is :

1. Reserving the raw material supplier be done to memeliki pauses time wait that long enough to cause to shed the raw material often occur a shortage of raw material or raw materials too late , so that planning the production and production process does not run smoothly.
2. .The difficulty of the company in terms of determining the amount of raw materials to be prepared to meet the needs of the supply of products that the process is hampered the distribution of products and clothing needs (clothing) buyer who were not met.

2.6 Analysis Single Exponential Smoothing

The first thing done untung counting a method of divination single exponential smoothing namely determine the value of the constant alpha = 0.1 and predict a booking for a period of second. The values of the variables taken from the actual data reservations on one type of product a kind of sweater 3.5 table , then those values are to a formula (distribusikan 2.10 calculations as he will get this under:

Calculation forecasting an example for 0 1:
Reservations based on the type one of the product of a kind of sweater 3.5 on the table , take the forecasting a booking for september.
known that;:
Reserving the product a kind of type one of sweaters in march (xt) = 5.860 and the outcome of forecasting march (ft) = 5.860 , because march can be calculated has not been so the results obtained from the calculations are reserving the product march .So that was obtained as an example the calculations are in the following:

F_{April} = (0.1 * 5.860) + (1 – 0.1)* 5.860
= (586)+(5.274)
= 5.860

Accounting for june and months later be conducted by way of of the same suit by calculation reserving april

2.7 Analysis *Mean Squared Error* (MSE)

After the calculation of% u03B1 = 0.1 to 0.9 done the next step can specify which forecasting results can be used is to calculate the value of the smallest error from forecast because the smaller the error value is then no more misses forecasting calculations. Calculation of the value of the error using the MSE (Mean Squared Error) with the formula (2.19) which has been described in Chapter 2. The example for the calculation of mse α 0.1 is as berikutadapun example for the calculation of mse α 0.1 is as follows:

$MSE = (X_{April} - F_{April})^2$
$= (6.048 – 5.860)^2$
$= (188)^2$
= 35.344

MSE results for the month of April is 35.344, that is obtained from the results of the April data reduced 6048 5.860 forecasting results April and obtained the results after the 188 188, squared end result 35.344.

Doing the same calculation as above examples up to 6th period. After counting up to the MSE-6, total the next step the MSE from 2nd to 6th period divided by the number of periods. The obtained results are as below:

$$MSE = \frac{(\sum |F_t - Y|^2)}{n}$$

$$= \frac{1.699.927,15}{6}$$
$$= 283,321.19$$

The result of a summation the period to 1 a period of about until the 6th namely 1.699.927,15 then in for 6 namely a whole the period, then obtained the results of 283.321,19.283.321,19 is the result of the overall error of 6 the period to alpha = 0.1.

2.8 Analysis *Safety Stock*

After doing forecasting, PT. Riade Sumber Energiperform inventory monitoring aims to monitor and control the existing inventory in warehouse PT. Seantero Gumilang Lestari. For monitoring inventory control by looking at the history data of inventory every month. Monitoring functions in order to avoid the occurrence of the vacancy and the shortage of existing products in warehouse PT. Seantero Gumilang Lestari. Monitoring inventory control requires an indicator to determine what products are safe limits should be available in the warehouse PT. Riade Sumber Energiusing safety stock.

Here's an example of the calculation method of Safety Stock:

Noted that:
Total bookings in August = 6474
The number of days in August = 31 days
Lead time on procurement to suppliers = 10 days completion:
Safety Stock = (6474/31) x (10)
= 2,088 pieces

Based on the safety stock calculation above, the PT. Riade Sumber Energi should provide as much safety stock of 2,088 pieces, so that when the stock product types sweater less than the amount of safety stock is 2,088 pieces, the system will provide notification that there is a product that has a type of sweater stock unsafe. Monitoring inventory sweater type products will be presented in tabular form. For example monitoring presentation will use the product types where the sweater Safety stock value for the product type sweater is 2,088 pieces, while for example the remaining stock of product types sweater is 1700 pieces.

If the remaining stock has a status of unsafe products, the company did pengaadaan the number of procurement as follows:

Total procurement = (forecasting booking + safety stock) - remaining stock
= (6.039 + 2.088) – 1.700
= 7.750 – 1.700
= 6.427 pieces

So PT. Riade Sumber Energishould do a raw material procurement to products of type 003 kinds of sweaters supplier to many as 6427 pieces to meet the needs of the type of product sweater 003. PT. Riade Sumber EnergiSustainable generally procures raw materials kinds of fabrics with Kilogram unit or rollers and for raw materials kinds of accessories tailored to the amount of product needed. In the calculation of the raw material types of fabric, PT. Riade Sumber Energihave calculations for a single product type 003 kinds of sweaters need 3 yards of fabric. Each one has a fabric roller length of 30 meters and each one has a weight of 25 kg roller. So if the amount of raw material procurement to products of type 003 kinds of sweaters as 6427, PT. Riade Sumber Energirequire raw materials along 2,142 meters of fabric, which means as much as 71 rollers weighing 1,785 kg.

After the company saw the number of inventories of raw materials for products of type 003 kinds of sweaters warehouse so the company booked a raw material supplier to the number of sample was calculated as follows:

Noted that:
Total procurement of raw materials cloth= 1.785 Kg
Remaining stock fabric = 150 Kg
Settlement : 1.785 – 150 = 1.635 Kg

From the above calculation, the company booked a raw material supplier to the fabric for the type of product types sweater with number 1635 003 Kg. As for raw materials such as labels and accessories hantag remain firm order with number 6427 fruit as raw material remaining stock of accessories have been empty as presented in Table 3.7.

PT. Riade Sumber Energientire procure raw materials to the two types of suppliers are suppliers of raw materials and suppliers of raw materials fabric accessories. Supplier of raw materials eg accessories such as buttons, threads, labels, zipper etc. Every raw material suppliers ordered to be adapted to the type of product. For example, product type sweater with type 003 which means companies need raw material fabric types Crossdye Suedine colored black mountain and raw materials accessories for the product type 003 kinds of sweaters.

2.9 Analysis distribution

In the supply chain are the distribution activities / delivery. The scope of activities include monitoring the status of delivery, delivery scheduling and capacity of vehicles that will be used in pendistribuisan. Monitoring is done so that the distribution of these products to the end user at the right time and place and know the delivery status. Schedule of product distribution to the buyer is done on a schedule that have been agreed between PT. Riade Sumber Energiwith buyers. Vehicles used in the distribution of 003 types of products, namely sweaters truck and container, product type 003 sweaters to be distributed packaged in a bag and box. The capacity of the truck for the distribution of 003 types of products sweater up to 8 sacks, 1 sack inside can accommodate a maximum of 350 pieces of sweater product type 003. As for the container in the

distribution of 003 types of products sweater maximum of 90 boxes, in one box can accommodate a maximum of 56 pieces of sweater product type 003

Action or evaluation of monitoring the status of the distribution is by using a system that will be built. In any system there is a menu that includes the delivery of information delivery date, delivery destination, the number and types of products are sent, who sent it and transport or vehicle that is in use. Monitoring the status of the delivery is done in order to PT. Riade Sumber Energi across Bieber knows the buyer make status changes acceptance of the products distributed by PT. Riade Sumber Energi, there are two product delivery status is still in transit or have been accepted. After the buyer change the shipping status of PT. Riade Sumber Energican know the product has been received.

2.10 *Entity Relationship Diagram* (ERD)

Database analysis is an analysis of related data collection and stored in a particular storage medium without repetition (redundancy). There are data that will be used in the manufacturing process with the information system software approach to supply chain management. The data obtained will be used to design a data base along with the attributes of each entity and the relationships between these entities. In designing the database, the data model to be used is an Entity Relationship Diagram (ERD).

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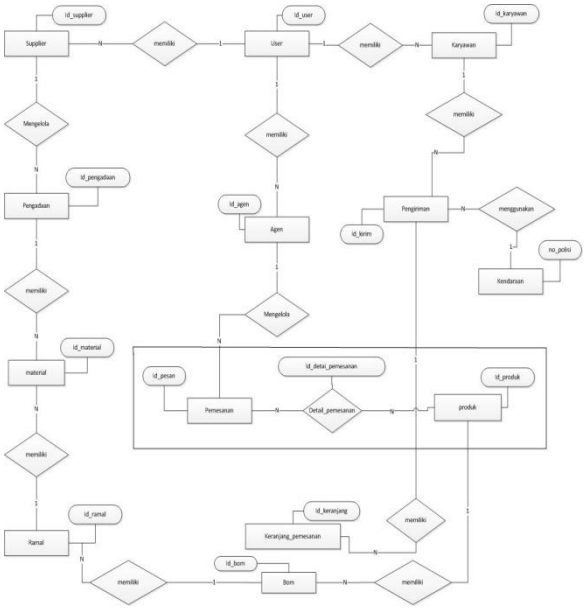


Figure 3 Entity Relationship Diagram

2.11 Diagram Konteks

The system essentially is linked to a number of entities, both the relationship with entities outside the system as well as linkages with the entities in the system. The relationship between entitias with the system described by the diagram Context. The context diagram on Product Distribution Information System in PT. Seantero Gumilang Lestari

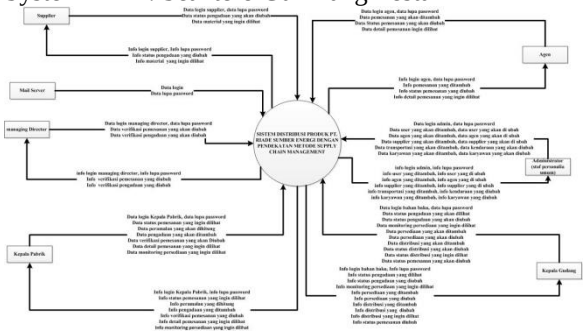


Figure 4 Diagram Context

2.12 DFD Level 1

DFD Level 1 The following explains that the system users can access the information by selecting a menu system that is available to the system as HR GA, buyers, suppliers, follow-up, Materials & invetory and managing director. At each user has a menu system which varies according to each user's access rights.

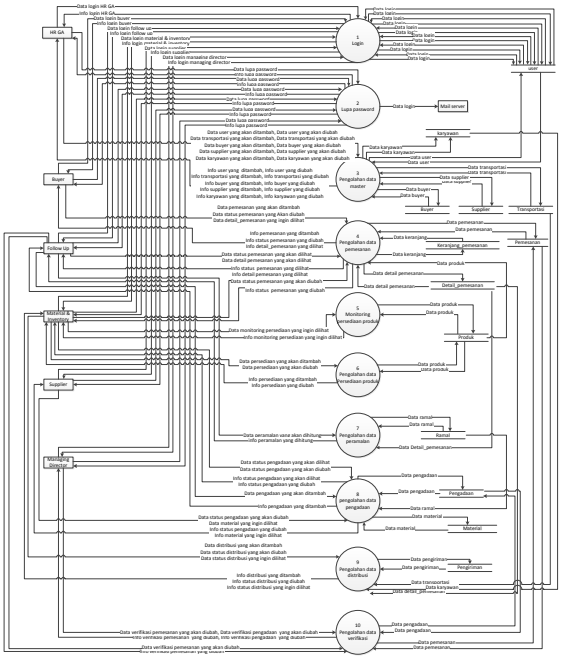


Figure 5 DFD Level 1

2.13 Table Relationships

Describing connectedness table in the system in detail and clearly, then use the relation table. Table relationships are described in Figure 3.6.

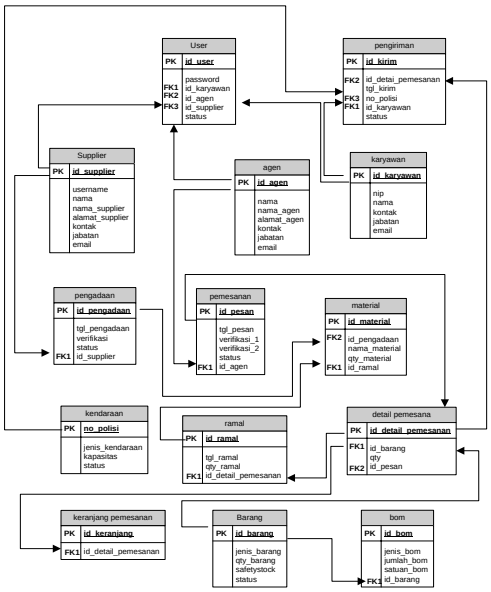


Figure 6 Table Relationships

2.14 Testing Systems

Testing of the system is the most important thing that aims to discover errors or deficiencies in the information system under test. Testing intends to find out who made the information system has met the performance in accordance with the purpose of designing.

Tests were used to test the new system is a black box testing methods. Black box testing focuses on testing the functional requirements of information systems. Plan testing to be performed is to test the system built by Black Box and beta. Testing porduk distribution information systems development in the PT. Throughout Gumilang Lestari using test data based on the data provided from some of the data that has been given.

2.14.1 Black Box Testing

that the process is correct. Filtering error process in the form of landing page views is sufficient maximum message. Functionally, the system is able to produce the expected output.

2.14.2 Beta Testing

Following the interviews to the PT. Riade Sumber Energi, the customer and the supplier, it can be concluded that the application of this product information distribution system is in conformity with the objectives, namely:

1. System Information Product Distribution PT. Riade Sumber Energithis can run in accordance with its purpose, which is to help the customers, the suppliers and the PT. Riade Sumber Energiin performing their respective duties.
2. The system is fairly easy to use.
3. The system has a user interface that is quite understandable.
4. The use of language in this system is quite understandable and quite easy to use.

3. CLOSING

3.1 Conclusion

The conclusion that can be drawn from all the processes that have been made in developing the information system are as follows :

1. Method of Supply Chain Management and Chief facilitate Head Factory Warehouse determine the amount of procurement of raw materials to be available in warehouse .
2. Method of Supply Chain Management and Chief facilitate Head Factory Warehouse inventory management of raw materials and finished products warehouse , and , organizing the distribution of finished products in the message agent .

3.2 Suggestions

Based on the conclusions outlined expected mineral water distribution information system in PT . Riade This energy source can be developed further with the help of mineral water distribution processing . This will assist in the distribution in PT . Riade Energy Sources.

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