ERP Sales and Inventory Management System

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Abstract— The aim of this project to developing an ERP Sales and Inventory Management System (SIMS) for a departmental store. This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sale details, generate sales and inventory reports periodically etc.This project is to categorize individual aspects for sales and inventory managements system, in this system we are solving various problem affecting to direct sales managed by RSM (Regional Sales Manager), ASM (Area Sales Manager) and SO (Sales Officer) who those are monitoring our team response in term of target on various industrial products

Index Terms— Regional Sales Manager, Area Sales Manager, Sales Officer, Distributor …

I. INTRODUCTION

This is a best solution to all type of Retail companies also top Level Multinational Companies who those are manufacturing fast moving products for customer's attracting towards the system of respective companies. All the multinational company cannot sell their product directly to the customer because they follow the following hierarchy like RSM, ASM, SO.

This project is developed for the best solution for RSM/ASM/SO to maintain details of every stock delivered by company to customers and also working phenomenon in terms of target given by company in respective areas to respective employees. Also reduce time for delivering regular reports in terms of Day-Target, Monthly-Target, and Yearly-Target oriented companies.

Because of this project the company can easily achieved their yearly target of our product. Also they can easily analyze the market status of their product and also they can easily find out in which region their product will be sold highly. Because of this information the company can be easily make changes of their product quality and quantity.

A. Problem in Existing System

Today some application like excel sheet are generally used by many of the RSM, ASM, SO and Distributor this system are quite tedious, time consuming and less efficient and less accurate as comparison with the computerized system. All work are done in excel sheet because of some times the output will not get properly and the main problem is calculation. Because of many distributors the particular information will be handle of each and every distributor were difficult to the SO. So this was quite tedious and time consuming.

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In previous software the higher authority person are enable to get detail their lower authorized person. Then because the company target will not achieved correctly.

Following are some disadvantage use of Excel sheet:
1) Time Consuming
2) Less accurate
3) Less efficient
4) Lot of Excel sheet work
5) Slow data processing
6) Not user friendly environment
7) Difficult to keep old record.

B.Scope of Purposed of the System

The purpose of this system is to provide user efficient working environment and more output can be generated through this .This system provide the user friendly interface resulting in knowing each and every usability feature of the system.

This system helps in tracking record so that past record can be verified them and one can make decision base on the past records. This system completes the work in a very less time consumption and high level efficiency.

This system is developed in such way that even new users can also operate the system easily. The calculation are made quickly and the record are directly saved into the database can be maintain for longer period of time. Each record can be retrieved and can be verified for future transaction.

Also this system provide high level of security of data leaking for only the admin people can access the database no changes can be made in it until the verified the user login id and password.

II. MODULES

In computerizing system, it is easy to document and secure data. Especially in terms of Sales and Inventory system, every day you are counting your products then reconcile it with your sale while when you use the computerized system you can save more time because it is automatically count and total the remaining item and the items that was already both and sold. An additional benefit using a computerized inventory system is the accuracy it ensures. By using a computerized inventory system, a business owner can ensures that all orders, reports and other documents relating to inventory are uniform in their presentation regardless of who has created them

In the market the all rsm, asm, so, and distributor are working on the excel sheet which is very tedious and time consuming and takes much time for give the output.

So we are Developing this software sale and inventory management. And this software is very secures and easily understandable for human. And one benefit is that this software is made in oracle means it's front end and back end are made in oracle technology so that customer does not

install other software rather than oracle for use this application.

Problems occurring while generating auditing report of distributors. Day-to-Day calculations reduce the visibility of product delivery affecting to minimize the business

Following are the modules use in this project:

A. Inventory Distributor

1) By using this software the distributor are easily maintain their stock properly. And distributor no needs to use document application because of this software.
2) Because of this software the distributor know their product sell properly on time or not and there is benefit or not.
3) Also the distributor can give the details product sell information to the sales officer And also he can order the product through the software.
4) Because of that software the distributor maintains their product quantity day by day and easily calculated their profit.

B. Target Module

1) RSM (Regional Sales Officer)
1) In this software there is separate module for RSM which is only used the RSM.BY using this software RSM can easily access or keep a watch where the sales officer stands.
2) With the help of that software the RSM can see the actual company target will be achieved properly or not.
3) Also he can see the all working details of ASM and got details of SO.
4) This software is very useful for RSM for marinating the details of their product which will be properly sold in market or not.
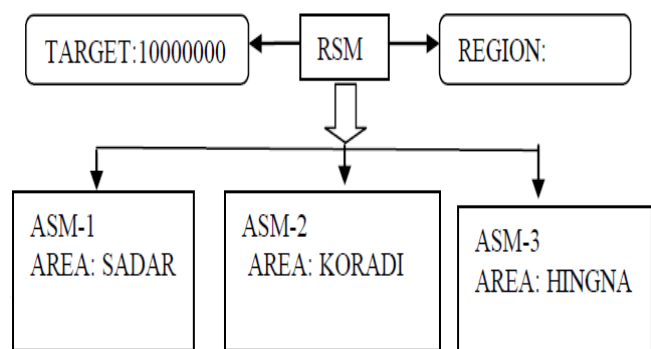5) The RSM divide all the company target equally to area sales manager which is work under that particular rsm.

Fig-1. Block diagram of RSM to ASM

2) ASM (Area Sales Manager)
1) In this project the ASM also has a separate module which will maintain the all information about the sales officer and their product.
2) With the help of this software the ASM can easily maintain the all sales officer details properly.
3) Also he can give the all product sell detail information to the RSM Actually what is the current status of their product in the market?
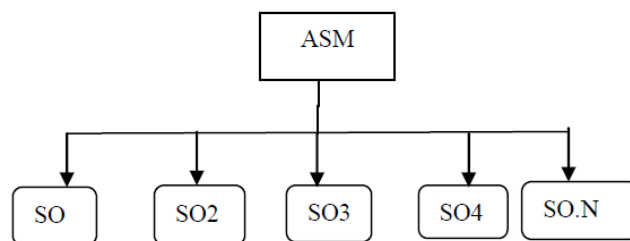4) Also he can maintain the record for which the monthly target will achieved by sales officer perfectly or not.

Fig-2: Block diagram of ASM to SO.

3) SO (sales officer)
1) Also the SO has a separate module which will maintain the all information about the distributor and their product
2) This software is very useful for sales officer because with the help of this software he can control over the entire distributor and their product selling information.
3) If any one distributor are selling the company product highly and earn profit. Then the next time the sales officer gives the much quantity of that product to that distributor.
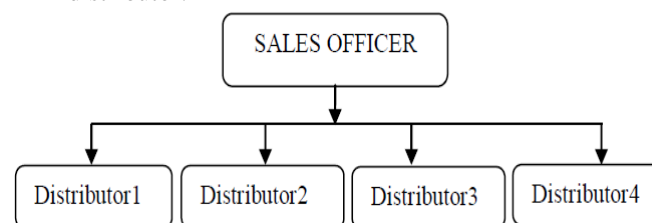

Fig: Block diagram of SO to Distributor

4) Distributor
1) Login to the system/change his password after logging in etc
2) Check the status of the inventory
3) See the reports from sales people about items that are not available and need to be kept in the inventory
4) validate the inventory against the sales done in the previous day (whether the items that are sold and the change in the inventory for the corresponding items match etc.)

C. Functional components of the project

Following is a list of functionalities of this system. More appropriate functionalities that can be added to this list.

There are registered people in the system (RSM, ASM, SO, Distributor, inventory managers).

1) Regional sales officer should be able to:-
1) The main task of regional sales officer is that to distribute the company target properly to all area sales managers.
2) Get the selling detail of their product properly from area sales manager.
3) Inform the detail of product selling to the general manager.
4) In this project the RSM has a separate module which is only use by RSM.By using this software he can easily get the detail of their company product and easily check whether their company target will achieved properly or not.
5) In this software RSM has authority to see the all

working detail of ASM and SO which work under that particular RSM.

6) In this software the RSM provide the separate user id and password. Then because the only authorized employee can handle that module.

2) The area sales manager should be able to:-

1) Login to the system/change his password after logging in etc

2) Check the details of SO. And give the product selling details from them.

3) If any sales officer not properly working means he cannot sell company product as per their given target then area sales manager will be replace that sales officer.

4) By using this software area sales manager should be able to check how many items have been returned so far in the day

5) Also he Check for any exception reports from the sales officer and correct it by contacting the inventory manager

6) generate sales-trend graphs for each of the item (like how is product selling in the last one month)

3) A sales officer should be able to:-

1) Login to the system through the initial screen of the system

2) Change the password after logging into the system

3) Enter the items ordered by a distributor and produce a ordered report for the same (the ordered report will have a unique sale id, date, time, item/quantity/price details etc)

4) Cancel the produced ordered report, in case of error in entering the details, and produce a new one

5) Inform the inventory manager about the items that are not available, so that they can be stocked

4) The inventory manager should be able to:-

1) Login to the system/change his password after logging in etc

2) Check the status of the inventory

3) See the reports from sales officer people about items that are not available and need to be kept in the inventory

4) validate the inventory against the sales done in the previous day (whether the items that are sold and the change in the inventory for the corresponding items match etc)

5) Generate inventory reports of the items category-wise, price-wise etc

6) Generate inventory-trends (like how is coffee powder stock changing over the month)

III. TARGET MANAGEMENT AND CALCULATION

Following are the terms considering while maintaining total cost and stock calculations as

A) Stock Maintenance:

Stock Maintenance is basically a strong module distributed towards all parties comes under the term of ERP-SIM; we can make calculation of stock deals with a logistic system, distributor stock maintenance, SO, ASM and RSM stock calculations in respect to target control and monitoring for every month.

B) Target Achievement:

Target achievement is the main task in this project. Whatever yearly or monthly target will decide by company for particular product will achieve properly or not is the main aim of this project.

The SO gives the all product selling details to the ASM and ASM gives the all selling details to the RSM in this way they will check properly their company target will achieved properly or not.

If they find that target wills not achieved properly then they can take the action imedialty about that product.

Then because of loss of product will be reduce and the company can find the new way to sell that product.

Basic Calculations are added in this system as follows;
Example;

➢ Distributor Order – 10000 Quantities – distributor generates this order through a Sales Officer and Sales Office passes it to Area Sales Manager and then Area Sales Manager will passes it to Regional Sales Manager and then it's finally up to a company by some channel distribution processes.

➢ As a process monitoring system by ERP-SIM we generate order data into respective tables and maintain all the information related to Ordering process as Order Details, Product Details, Quantity Details and Cost Details for respective channels of ERP-SIM.

➢ Once Order managed by company, it should be added to respective chain of system like SO, ASM, RSM as a target completion status.

➢ Once Order generated and process completed, then we are waiting to deliver this order as physical product to distributor then second calculation can be done for distributor.

➢ After generate the order from distributor the sales officer first check the product will be available in their stock or not.

➢ After checking the product in inventory then sales officer generate the payment invoice of that product and send that payment invoice to the distributor.

➢ Then distributor payment the order and give the payment receipt of that order from the sales officer.

➢ After received the payment sales officer send the poduct.when distributor received that product he send the product received acknowledgement to the sales officer.
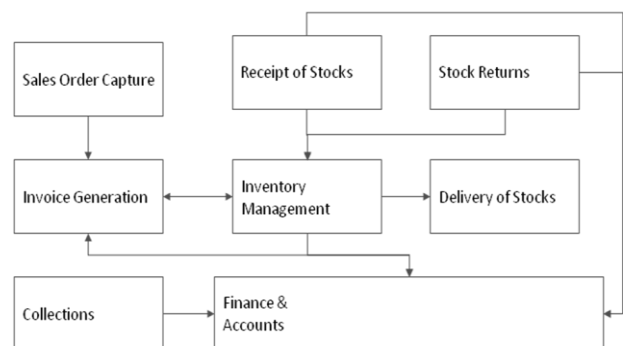

Fig-4.Order Description

IV. CONCLUSION

While developing the system lots of effort has been made to create this software, making use of available tools,

techniques and resources that would generate a proper System.

While making the system; an eye has been kept on making it as user friendly, effective and as flexible as possible.

This software helps to reduce the workload of RSM, ASM, SO and Distributor for managing their day to day activity which result in better sales and inventory management.

V. FUTURE WORKS

In our project we are implementing software to maintaining to all sales and inventory records now, in our project in future we are providing current status of market and maintaining the information about all products of the respected company. This software also provides all information regarding to profit and loss to the higher authority person. In future we are providing the tool that the retailer can directly order the product through the software .It will also help to analyze the requirement of the product in the market.

In future we are adding one new model in our software i.e. general manager. Which maintain the all record of the rsm, asm, so and distributor. Means we are directly connected to the company. In future we are declaring this software for global use.

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