SMART DECISION MANAGER FOR AGRICULTURE AND DEPLOYMENT

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Abstract— SDM is a Desktop product which is designed to solve three major problems pertaining to trading in Rice Industries [Buying of Paddy, Processing and Selling of Rice].Rice Industries (Rice Mills) mode of operation.
Trading in Rice Industries includes three major processes.
i)Buying of paddy (Variations includes different locations, different quantity, different quality, different vendors)
ii)Processing the raw paddy to appropriate 'Rice type' (Variation includes 'Raw Rice', 'Steam Rice', 'Boiled Rice', 'Broken Rice' based on the type and quality of paddy).
iii)Selling of different Rice and its by-products (Variations includes different clients, different locations, and different price range).
Keywords— *Processing,Rice;Buying Rice,Selling Rice*

I.INTRODUCTION

This project mainly deals with automating the tasks of maintaining and transacting the goods, purchasing of goods (paddy and rice). In the Factory Management System inventory management is the key process. This process includes the activities such as maintenance of order details, stock details, maintenance of billing details and items etc. It is a tedious job to maintain all these details manually. Hence we opted to automate the process.

The computerization of this system would avoid the wrong interpretation and bad calculation of data. The system help the user to see any documents, source code, tasks, activities, team information with details at the click of a button. The record data is maintained and backed up such a way that data is not loss. The speed of the system could also increase.

SDM is an internetworking product which is designed to solve three major problems pertaining to trading in Rice Industries [Buying of Paddy, Processing and Selling of Rice].Rice Industries (Rice Mills) mode of operation:
Trading in Rice Industries includes three major processes.
• Buying of paddy (Variations includes different locations, different quantity, different quality, different vendors)
• Processing the raw paddy to appropriate 'Rice type' (Variation includes 'Raw Rice', 'Steam Rice', 'Boiled Rice', 'Broken Rice' based on the type and quality of paddy.)
• Selling of different Rice and its bi-products (Variations includes different clients, different locations, and different price range).

II.SYSTEM STUDY AND ANALYSIS

A. EXISTING SYSTEM:
Existing system is manual where the distributor purchases the paddy by approaching farmer. Here distributor has to bind to the farmer conditions in buying the paddy. Demand for the particular type

of paddy or rice is predicted based on the experience, there is no automation which predicts the future in buying paddy or selling rice. While buying the paddy there are many issues such as which type of paddy to buy, from which location, how much to buy, when to buy which type of the paddy, like wise in selling the rice also we get these kind of issues. In the existing system everything is manual, no automation. So we need an automated system which does all these things.Currently distributors makes use of software for maintain stock details, billing details etc., even though this is automation, this system allows the distributor to store the data in the server, when even the distributor want those information, system will displays all those information. But there is not prediction of future like the things discussed above. This system does not extract any useful information which is the major drawback.Limitations of the existing system are:
• Time Consuming
• Manual Process
• Business may not get best profit
• Lack of user satisfaction
• Lack of knowledge discovery
• Increases the business investments

B. PROPOSED SYSTEM:

To develop a system that would accomplish the following:
1. Optimal Solution for buying paddy from vendors or informers.
2. Optimal Solution to sale different types of rice to clients.
3. Generated the quick reports.
4. Accurate and efficient calculation.
5. Huge data is maintained securely.
6. Flexibility of transactions is achieved in time

III.LITERATURE SURVEY

Supply chain management is the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole.Supply chain management must address the following problems:
• **Distribution Network Configuration**: number, location and network missions of suppliers, production facilities, distribution centers, warehouses, cross-docks and customers.
• **Distribution Strategy**: questions of operating control (centralized, decentralized or shared); delivery scheme, e.g., direct shipment, pool point shipping, cross docking, DSD (direct store delivery), closed loop shipping; mode of transportation, e.g., motor carrier,including truckload, LTL, parcel; railcel; railroad; intermodal transport, including TOFC (trailer on flatcar) and COFC (container on flatcar); ocean freight; airfreight;replenishment strategy (e.g., pull, push or hybrid); and transportation control (e.g.,owner-operated, private carrier, common carrier, contract carrier, or 3PL).
• **Trade-Offs in Logistical Activities**: The above activities must be well coordinated in order to achieve the lowest total logistics cost. Trade-offs may increase the total cost if only one of the activities is optimized. For example, full truckload (FTL) rates are more economical on a cost per pallet basis than less than truckload (LTL) shipments. If, however, a full truckload of a product is ordered to reduce transportation costs, there will be an increase in inventory holding costs which may increase total logistics costs. It is therefore imperative to take a systems approach when planning logistical activities. These
trade-offs are key to developing the most efficient and effective Logistics and SCM strategy.

• **Information**: Integration of processes through the supply chain to share valuable information, including demand signals, forecasts, inventory, transportation, potential collaboration, etc.
• **Inventory Management**: Quantity and location of inventory, including raw materials,work-in-process (WIP) and finished goods.
• **Cash-Flow**: Arranging the payment terms and methodologies for exchanging funds across entities within the supply chain.Supply chain execution means managing and coordinating the movement of materials, information and funds across the supply chain. The flow is bi-directional.
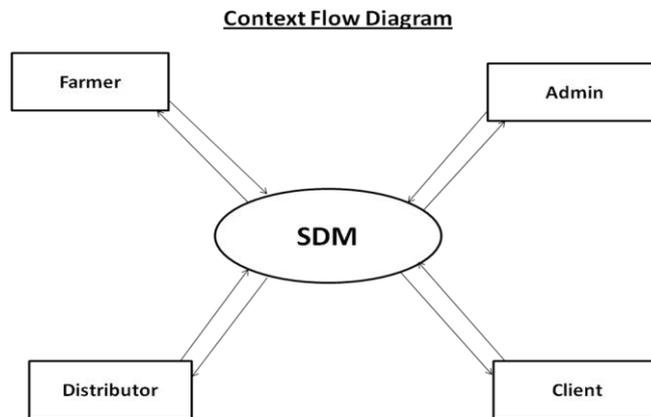
IV. SYSTEM DESIGN

A.CONTEXT FLOW DIAGRAM:
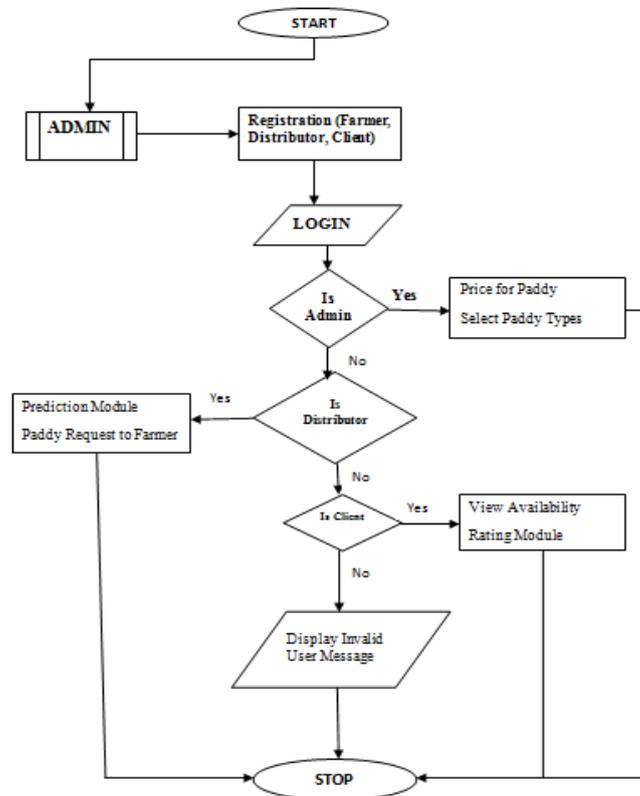

Fig.4.1

B.HIGH-LEVEL DESIGN:

Fig.4.2 DESIGN MODEL

From the above fig 4.2 it is clear that Admin has the authority to direct login to SDM. He does the registration of Farmers, provides an interface for registration of distributors and clients. When the farmer, distributor or client enters his unique id at login and if he is a valid user then he can proceed further. Otherwise, he will get an invalid message.

If the registration by Admin. Same is applied for Distributor and Client.

If login fails by any reason is done by the Farmer then he can look for his benefits facilitated invalid message is generated.

After looking and(or) editing in SDM the actors come out of it.

VI.CONCLUSION

The proposed system is an automated system which helps the farmers, distributors of the products such as paddy, rice. It is future prediction system which helps the distributor in knowing what to purchase, when to purchase, where to purchase and demand for the items using quality, clients rating and sales data.

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