

## Case Study

# NETWORK AUTOMATION EFFECTIVE TOOL FOR DSML A CASE STUDY

**Gaurav Ahuja\***

**D**ELHI Standard Motors Limited (DSML) is the manufacturer of automobiles in three different automobile sectors having variations like cars, buses and carriages. Each variety has same chassis number and three models but have four different colours where the popular is red. All the important operations like assembly and testing of the vehicles are done in Delhi and for rest of the tasks like body building vehicles are brought to Gurgaon where after the completion of its manufacturing it is given to warehouse depot for distribution in India. Its marketing division is also attached to it which looks after the production at Delhi and Gurgaon.

Sales team has simple methodology which includes the customer finalizing the vehicle of his choice at the dealers point and dealer registers the enquiry to the distribution center. Distributing process along with the marketing vertical update the delivery date to the dealer who accordingly update customer vehicle with standard accessories and take delivery time of four days. DSML has seven major distributors in India based in specific regions.

If the customer requires some specific colour and special accessories then delivery may differ from schedule time of four days according to plant operations. As colour gets repeated in paint shop after interval of two months so, vehicle delivery is promised in around three months from the date of registration in the case of specific color demand.

Each distributor stocks 150 vehicles mostly of red color and few other colors. Dealers are connected with distributor through telephone lines and postal system. All dealers connected through the desktop system having window's XP under client server technology where all the management done with the help of the server. The client system is responsible for registration of order and financing of vehicles.

Whereas distribution system worked as a sever having high tech configuration having XEON processor 3050, 2GB RAM, which helps to log the order in it with expected delivery date and give an output as distribution dealer number as an unique primary key. Same is provided to the warehouse for future delivery procedure. Server is installed at warehouse with other six desktops attached as transaction processing system for resolving any query and reporting. All seven dealers can interact with the warehouse through leased line. As on the basis of query and all the processing system can verify the order and status accordingly.

Server is also connected to manufacturing plant for scheduling processes. This transaction system is known to all concerns, which helps in updating the customer.

Warehouses as interacting with the workstations of distributors hence can easily know about the status of stocks at distributor end and their updates regarding booking and delivery dates. For the red

\* Lecturer and Controller of Examination, Delhi School of Professional Studies and Research (Approved by AICTE), Delhi, India.

*Gaurav Ahuja*

color standard model customer card is not made as it is easily available in stocks. So directly sold out from distributors' desk. Arrangement of manufacturing, stocking and replacement by DSML comes under the replenishment system. On the basis of previous experience DSML fixed a maximum stock level at each distributor according to the demand by customer so that distributor wise stock review done every quarter.

At any time when distributor/dealer stock held up to 1,000 plus vehicles, so the inventory value goes to Rs. 300 million and DSML management wants and expect it to come at level of Rs.80 million. It takes necessary sales promotion actions to liquidate the stocks, hence reduce the inventory.

At the time of study it was found that transportation from Gurgaon to other metro station takes two to three days to other station. So post dispatch inventory in pipe line is around 150 million the stocking and dispatch pattern principles are not questioned for the last two year.

So, According to the study it was found that Company is in better position in terms of its market share, brand image, quality but still as compared to competitors the financial balance sheet is not healthy as the cycle time of various processes is much more, which affects the direct cost to go higher and hence affect the balance sheet.

Hence as a strategic choice the processing time of each process and system is to be rescheduled. Then comes the need of technology up gradation scheme where by the running time of each critical process like painting and assembly will be brought down by almost 30 percent.

A network has to be set which connects almost 30 vendors of casting and forgings. Electrical goods category to the desktops at DSML and with have direct access to them which enables them to plan their operations. This network will also provide direct access to component warehouse database.

Network also updates the information about the inventory which is on the way and updates about it to the distributors and dealers which helps them to maintain the flow of it, through the integrated network system time line so the logistics is updated so that it should reach to the dealer in less duration of time. As vendor support system, the bills are paid on delivery of components.

The reconciliation of quantity sent and accepted and the amount paid is carried out at the end of the year for adjustment and settlement of business.

This whole function enhances the supply chain management which enhances the profitability of the company. DSML also feels the need of information system like decision Support system and Executive support system which improves the forecasting and planning of supply chain management.

## **Questions**

1. If the inventory is to brought down to Rs. 80 million, what action should the management take?
2. If the Dealer is the person interacting with the customer, what systems should be installed to judge the market trend enquiries, and the orders expected.
3. Suggest a forecasting model to forecast the sales purely based on the DSML's data and with computer's sales data.
4. Give a system design to integrate, forecasting production planning and control, central warehouse and dispatch system and the distributor's operations management system. Which goals should the systems achieve? Explain MIS support to achieve the goals.
5. In an integrated system which network and communication technology would you suggest?