

Planning in practice

Here are some practical examples of forecasting and inventory planning in manufacturing environments and developments in products servicing this area, beginning with a Distribution Requirements Planning (DRP) installation at a major world-wide automotive spares company with operations in 23 countries.

Toolsgroup's DPM (Distribution Planning Model) was chosen for strategic and operational planning for the European operation of this automotive spares company. Demand Forecasting, Inventory Planning and Management, Stock Control and DRP for 11 national distribution centres across Europe in a two tier network are now being carried out on the DPM planning platform from one central location in the UK.

The whole project was designed to support the planned increase in the stocked range and deliver high levels of competition in the European markets (in terms of presence, range and availability). Furthermore, the business called for simultaneous reductions in global inventories. The new scenario called for a rationalisation of the European DRP, forecasting and inventory planning processes and specific tools to enable the change.

Implementation of DPM was instrumental in the move from monthly to weekly replenishment buckets and inventory review. This resulted in a substantial decrease in resources dedicated to forecasting, stock management and control despite the more frequent planning cycle.

The single DPM planning environment is interfaced with several different national legacy ERP systems. The database is updated weekly with stock and replenishment data and new replenishment plans are run with the same frequency.

Top management meets once a month to evaluate service and inventory policies and forecasts. Market information from the regional operations is fed to the planning tool to incorporate changes in sales forecasts (contracts, customers, etc.). The activity is



supported by 12-month forecasts exported from DPM, allowing the management team to evaluate possible market and supply scenarios. Product and commercial strategy (range, service levels) can be transferred to the logistics centre and loaded into DPM.

Stock control and network balancing are performed on a weekly basis by loading up to date central and regional inventory numbers into DPM. Replenishment proposals (quantities, suppliers, destinations and delivery dates) are then calculated for all distribution centres, downloaded from DPM and electronically loaded into the purchasing system.

Requirements at regional distribution centres are consolidated into shipping schedules for central warehousing. Medium-term (18-week) requirement forecasts are communicated to corporate and third-party manufacturers to drive both master production and weekly delivery schedules.

The demand and forecasts of the business's large customers can be singled out on the DPM model. Every month, these customers send the



planning team weekly forecasts for the next 12 months. These forecasts are supplied at different levels of aggregation (detailed for the faster movers, aggregate for the slower). The forecasts are input to the DPM model, at the same aggregation levels, as overrides of the statistical forecasts. Large deviations are highlighted on the screens and can be discussed with the customers.

DPM was first installed late 1997. By 1999, four countries were being managed centrally. A project is now underway to incorporate all European operations into a central integrated distribution model by the end of 2002.

Due to different product coding on the legacy national ERP systems, European planning operations have been managed so far by using separate DPM models (one for each country). The new target is the implementation of a single global European model, hosted on a server and accessible to multiple remote users (planners, forecasters). The target model will include up to 40 warehouses and 70 Sales Areas.

This model will provide an integrated planning environment for the entire European distribution network, giving visibility on needs and flows across the network and enabling not only a more rational forecasting and inventory planning process but also strategic production/purchasing requirements planning and a more balanced and timely replenishment process.