

Major Demand & Operational Capacity

A major Australian company found it had poor delivery performance and decided to undergo business process re-engineering so as to better meet the demand and use its operational resources effectively.

This project consisted of three key parts; the Sales Forecasting and Operations Planning process, Demand Analysis and Capacity Analysis.

SF&OP

A sales forecasting and operations planning business process (SF&OP) was developed to involve all disciplines and deliver the management team one set of numbers to drive business decision making.

Demand Analysis

Using various analytical tools such as SMT's Instoc, strategies were developed to manage demand and capacity to achieve desired service levels. The safety stock buffer was used to smooth out market variability and was set to deliver 97% product availability. The buffer is to be modified as circumstances change due to variability in demand and capacity.

The demand analysis led products to be separated into two groups; those that were forecast by history and those by sales and marketing

The items that were forecast by history accounted for 50% of SKU's and 80% of volume, they were characterised by low variability but were also only one percent of the problems.

The second group; forecast by sales and market, included items of highly variable demand and tended to be either new products or 'dying' products.

A database was subsequently established to support the transfer of the forecasting process into the sales and marketing organisation. This was to be generated monthly and reviewed weekly.

Capacity Analysis

A six week capacity planning process was developed with operational personnel. This involved analysing machine capacities by identifying planned downtime, which may consist of maintenance, product trials, cleaning and training time, and also by looking at the set operating times by shift.

Capacity was then matched with demand to create one set of numbers. Conflicts were then identified and dealt with.

To support the new processes new performance measures were created. These were created by the management team and were supported by new data capture systems.

Policies and procedures were documented so as to ensure the sustainability of the process.

The Bottom Line

The process was owned by the organisation and continued to grow without the consultants support. The process became central to business decision making and was used to drive systems development.

Throughput improved; monthly volume delivered against orders consistently increased since the program launch, there was a 9% increase which was equivalent to around \$8 million revenue per year.

There has been improved product availability as the safety stock remained at a more appropriate level and have protected against market variability.