

Case Study: Capacity Modeling of a Manufacturing Network

The Ask:

Following a major acquisition which more than doubled the client's product portfolio, the client wished to consolidate its legacy network capacity planning models. The client desired a standardized model for the new business which could be used to profile internal and external capacity utilization over various forecast planning horizons.

There were three main requirements for this new model:

1. Create a demand repository where all long-range forecast and near-term horizon S&OP demand would reside and could be compared for all the products in the expanded portfolio.
2. Create a capacity utilization repository, populated by demand data and network work center data, which could then produce capacity graphical representations of the network, the individual sites and by product family.
3. Allow for ease of access of both the demand and utilization output files to be available for use by the wider organization.

The Approach:

- Primecore developed a deep understanding of the existing demand models across the enterprise to appreciate the extent of the data configurations which needed to be standardized e.g. Units of Measure (UoM), dose presentations, sizes, strengths, marketed countries and regions.
- Primecore connected internally within the client organization with each of the demand data system owners to gain in-depth knowledge of the system functionality which could help identify opportunities to extract demand data in an efficient and standardized format.
- Primecore worked with the existing Network Capacity team to understand the work center capacity characteristics for all internal dedicated and multi-product work centers and for all external work centers.

Outcomes:

With Primecore's expertise in manufacturing and operations planning, the new model was successfully developed that met all the criteria. The client experienced the efficiency they desired in viewing and analyzing their supply chain data. Also, the demand and utilization output files became available to the wider enterprise to support demand and capacity analysis without having to access the detailed working files.

A lesson from this case was that time can be well spent by companies in the phase immediately post-acquisition to develop standard nomenclature for product names, countries, regions and units of measure in order to facilitate data coordination. Until the network data is all speaking the same language, it will be difficult to identify opportunities to improve the business.

