"We haven't even skimmed the surface of what Demand Planner has to offer."
—Tim Fields, Global Planning Manager, **Medtronic Sofamor Danek**

Demand Planning at Medtronic Sofamor Danek

Because of the complexities of its product offerings, Medtronic Sofamor Danek knew that demand planning was critical to its success. In order to improve its demand planning process, Medtronic Sofamor Danek embarked on a value chain management initiative using i2 solutions, and increased forecast accuracy, improved decision-making, and decreased product shortages.

Medtronic Sofamor Danek's value chain is particularly complex because it produces both implants and the associated surgical instruments. Because of the complexities of the implants and the instruments, the company must forecast more than 5,000 SKUs, produced at facilities in France and the United States.

Planners at Medtronic Sofamor Danek were attempting to forecast demand for the company's products using only an Access™ database and Excel™ spreadsheets — a process that proved to be too time-consuming.

Demand planning is critical for companies such as Medtronic Sofamor Danek, whose business is done mostly through kits sent to surgeons. A kit containing both implants and instruments is sent overnight to a surgeon, who uses the items needed during cranial or spinal surgery. The doctor sends the kit back to Medtronic Sofamor Danek, and is billed only for the materials used. The kit is then replenished and sent to another surgeon.

Additionally, the company has direct sales and other products consigned to distributorships. Medtronic Sofamor Danek also sells many products internationally.

"We were trying to figure out a way to pull all these sources of demand together into one global picture," said Tim Fields, the company's Global Planning Manager.

"We needed a solution that would segregate the data into different geographies and various product dimensions to see where our demand was coming from, and therefore manage it better."

Why i2?
After considering systems offered by several software providers, Medtronic Sofamor Danek chose i2 Demand Planner™ from the i2 Supply Chain Management™ (SCM) suite of solutions.

"Demand Planner is the most powerful tool on the market," Fields said. "We like Demand Planner's ability to present data in a graphical format and its ability to set hierarchical levels with each geography and product dimension."

Challenges
–Pull all sources of demand
 together into one global picture
–Replace time-consuming
 manual forecasting with
 automated forecasting process
–Manage demand better by
 segregating geographies and
 various product dimensions

Solutions
–Generate monthly error report to
 improve global forecast accuracy
–Apply user-defined statistical
 techniques to refine accuracy
 of plans
–Set hierarchical levels with each
 geography and product dimension

Results
–Reduced forecasting time
 from weeks to minutes
–Increased forecast accuracy
 10%–15% for core products
–Decreased product shortages
 from 15% to 3%

Sofamor Danek is part of **Medtronic, Inc.,** the world's leading medical technology company. Based in Memphis, Tenn., Medtronic's products and services are used in treating more than 2.5 million people each year in more than 120 countries.

"We're definitely satisfied with our results and with i2 solutions," Fields said. "We feel they have added a lot of value."

With i2 solutions for value chain management, pharmaceuticals companies can collaborate on demand, gain forecast consensus, optimize the manufacturing supply chain, and minimize transportation costs while improving on-time delivery performance and predictability.

i2's Contribution

Demand Planner unites multiple functional perspectives from Medtronic Sofamor Danek's distribution system, then applies user-defined statistical techniques to quickly refine the plan's accuracy, increasing profitability and service levels. Using Demand Planner's sales analyzer function, planners are able to generate a monthly error report to determine which products were not shipping on time. From that data, planners can make the necessary forecast adjustments to improve global forecast accuracy.

"We haven't even skimmed the surface of what Demand Planner has to offer," Fields said.

Medtronic Sofamor Danek's Results

Because Demand Planner processes data in hours or minutes, not the days or weeks Medtronic Sofamor Danek was accustomed to, planners have more time to analyze the data they are receiving. This has helped the company rethink its entire forecasting process. Instead of relying on instinct, planners can now make more logical decisions about how to put demand pieces together, rather than how to forecast each piece of the demand differently.

i2 solutions have increased forecast accuracy by 10 percent to 15 percent for the company's core products and by at least 5 percent across its entire product line. Product shortages have decreased dramatically, from 15 percent to 3 percent. The data that Demand Planner is capturing is also helping Medtronic Sofamor Danek to make key decisions about new products.

"We've been able to use Demand Planner to take historical sales patterns from similar products that will be cannibalized or replaced by this new product that is coming out," Fields said. "The data gives us a good idea of what demand will be for the new items. At the same time, Demand Planner is helping us to manage phasing out product. We're definitely satisfied with our results and with i2 solutions. We feel they have added a lot of value."

One i2 Place
11701 Luna Road
Dallas, Texas 75234, USA
Phone 1.877.661.4896
Email info@i2.com
Web **www.i2.com**