



# SUPPLY CHAIN PIONEERS



## SIEMENS HEALTHINEERS BOOSTS FORECAST ACCURACY WHILE PLOTTING AN UPGRADE TO DEMAND SOLUTIONS DSX

Formerly known as Siemens Healthcare, Siemens Healthineers brings a pioneering spirit and engineering expertise to the healthcare industry. The company seeks to help healthcare providers around the world stand up to new challenges by providing them with industry-leading medical imaging and laboratory diagnostics products. Siemens Healthineers also plans to develop new offerings in the management, consulting, and digital services realms, and to offer technologies in the fast-growing therapeutic and molecular diagnostics market.

When Siemens was first acquiring what is now its In Vitro Diagnostics division, the division needed to migrate off of a homegrown supply chain planning solution on a tight timeframe. The U.S. region's Planning team contacted their peers in Massachusetts who had been using Demand Solutions Forecast Management for more than a decade. Based on positive feedback from these colleagues, the biological division selected Demand Solutions DS1 and went live within six months. Not only did the division meet its migration deadline, but the new solution offered capabilities that had been lacking in the homegrown solution.

"The forecasting algorithms in Demand Solutions made an immediate difference for us by capturing historical trends and projecting product line growth," recalls Joanna George, Senior Manager of Global Demand Planning and Global Processing, Siemens Healthineers. "Whereas our previous system offered a limited selection, Demand Solutions enabled us to choose between 26 algorithms to select the formula with the least deviation of error. That was a huge factor in our decision to select Demand Solutions—along with the fact that the system interfaced well with our new order management software."

Another key consideration for Siemens Healthineers was the ability to use Demand Solutions alongside its SAP ERP system. Because the company was using SAP worldwide, it wanted to be able to roll out the same forecast management system globally in the Demand Planning organization. Siemens Healthineers was able to implement Demand Solutions Forecast Management and Replenishment Planning first for its U.S. Demand Planning sites before rolling it out to sites in the United Kingdom, Germany, Ireland, and Belgium.

### REQUIREMENTS PLANNING SUPPORTS A COMPLEX DEMAND MODEL

With Demand Solutions DS1, Siemens Healthineers gained the replenishment planning functionality it needed to manage a complex dependent demand model. Siemens Healthineers replenishes its primary U.S. distribution center (DC) from its U.S.-based internal and external suppliers, and then replenishes the other DCs. The company uses the same distribution logic for its European DC: if the supplier is based outside the U.S., then the primary DC will be Europe, and it will replenish the rest of the DCs. This means Siemens must balance its products carefully between the two DCs on two continents with two demand streams. Meanwhile, Siemens' DCs in various countries must replenish their products from one of the main DCs, based on their geographical location.

"Demand Solutions Requirements Planning gives our planners the global supply and demand visibility to avoid interruptions at either of our main DCs," says Joanna. "Using our defined planning parameters, our planners can easily determine when to transfer products between the primary and secondary DCs to ensure excellent service to our facilities around the world."

## FORECAST ACCURACY EXCEEDS TARGETS AT GLOBAL DISTRIBUTION CENTERS

To ensure that each of its global planning teams would only see the SKUs for which they are responsible, Siemens Healthineers implemented nine instances of Demand Solutions DS1 worldwide. The company's main goal was to improve forecast accuracy across multiple product lines. When Siemens Healthineers first went live, its forecast accuracy hovered around 80 percent. The company now achieves 85 to 87 percent forecast accuracy across all product lines and locations.



“Our goal with Demand Solutions was to improve our forecast accuracy on reagent and consumable planning,” Joanna says. “We aimed to meet or exceed 85 percent forecast accuracy. We’re consistently at or above that figure throughout our global demand planning organization. We appreciate that Demand Solutions provides such a wide variety of forecasting algorithms to fit just about any situation in our global operations.”

Demand Solutions has also helped Siemens Healthineers streamline its day-to-day operations, resulting in better customer service. “Our vision is to have an ideal customer experience, where an order is a ‘touchless’ order that requires no human intervention from the time it comes in to the time it ships out of a distribution center—on time and exactly as required by the customer,” Joanna explains. “Any supply chain interruption inevitably requires different teams to intervene and modify an order. With the supply chain visibility we’ve gained through Demand Solutions, we’ve been able to minimize the number of orders we have to touch.”

So much can happen in between forecasting cycles—especially in a complex global business like Siemens Healthineers’. To keep an eye on what’s in the pipeline—and how it might affect the supply chain—Siemens Healthineers uses Demand Solutions Requirements Planning to monitor open orders and inventory.

“We review and update the forecast at the SKU level continuously but follow a monthly calendar,” explains Joanna. “For the rest of the month, Demand Solutions Requirements Planning is home base for our planners. They can see information on inventory right down to the lot number, or drill down to the SKU level to get detailed information and determine when to send product to our secondary distribution center. One Demand Solutions screen view contains just about all the information that any planner could possibly need to make sound business decisions.”

## REDUCING EXCESS AND OBSOLETE (E&O) WASTE BY 10-15%

Siemens Healthineers is also using this increased inventory visibility to reduce waste throughout its operations. The company’s inventory is largely biological, including products such as antibodies and plasma that have very strict expiration dates. Expired products must be discarded—which creates a drag on the bottom line.

“Demand Solutions Requirements Planning helps us minimize excess and obsolete inventory so that we’re not constantly throwing products away,” says Joanna. “This feature gives us a much better view of both of our distribution centers, so that we can balance our inventory in ways that ensure products are available at the right distribution center to support the customer’s requirements with the right dating. With the better control we’ve gained over inventory, we’ve reduced scrap in the diagnostic area by 10 to 15 percent.”

To ensure that these improvements are realized worldwide, Siemens Healthineers track key performance indicators (KPI) such as Excess and Obsolescence, Back Orders and Allocations,

OUR GOAL WITH DEMAND SOLUTIONS WAS TO IMPROVE OUR FORECAST ACCURACY ON REAGENT AND CONSUMABLE PLANNING. WE AIMED TO MEET OR EXCEED 85 PERCENT FORECAST ACCURACY. WE’RE CONSISTENTLY AT OR ABOVE THAT FIGURE THROUGHOUT OUR GLOBAL DEMAND PLANNING ORGANIZATION. WE APPRECIATE THAT DEMAND SOLUTIONS PROVIDES SUCH A WIDE VARIETY OF FORECASTING ALGORITHMS TO FIT JUST ABOUT ANY SITUATION IN OUR GLOBAL OPERATIONS.”

~ JOANNA GEORGE

SENIOR MANAGER OF GLOBAL DEMAND PLANNING AND GLOBAL PROCESSING  
SIEMENS HEALTHINEERS

Inventory, Forecast Accuracy, and End Customer Line Item Fill Rate. The company can easily measure their monthly KPI by extracting reports from Demand Solutions using the Report Share feature.

“With Report Share, we can look at historical trends, by customer or country, much more quickly than in our ERP system,” Joanna explains. “And once we create a custom report, we can simply refresh the data every time we want a new view with the latest results. Each refresh provides a snapshot in time. Our end-of-month report provides all the attributes at the SKU level, which is essential information at the item level. We can easily use 36 months of history and a 12-month rolling forecast to maintain and drive our business forward.”

### BRAZILIAN OPERATIONS BOOST ACCURACY OF REPLENISHMENT PLANNING BY 60%

After rolling out Demand Solutions worldwide, Siemens Healthineers have seen improvements throughout their global operations. Certain countries have shown significant operational improvement — and Brazil is one of those countries.

“We took a look at what was happening around the world and realized Brazil needed some stronger tools for making better planning decisions,” recalls Joanna. “So we thought, ‘Why not try to help them?’”

Siemens Healthineers headquarters staff partnered with their regional planning colleagues in Brazil to implement new business processes, set up manufacturing resource planning functionality in their ERP system, and roll out Demand Solutions Forecast Management. Over the next two years, the Brazilian team realized a 60 percent improvement

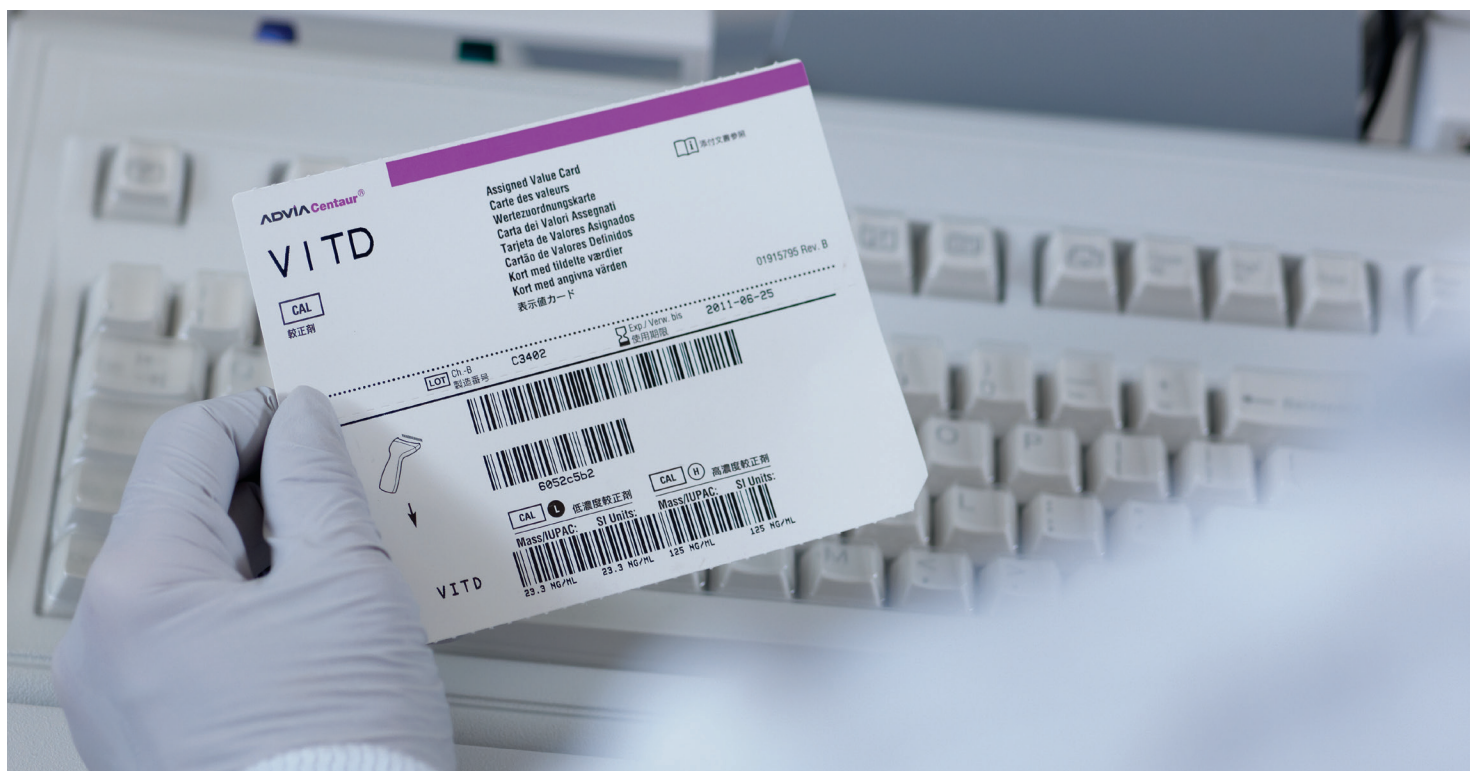
“BY GIVING OUR SUPPLY CHAIN LEADERS AND PLANNING PEERS IN BRAZIL THE TOOLS TO DRIVE THEIR S&OP PROCESS, WE’VE TAKEN A HUGE STEP TOWARDS GREATER PROFITABILITY FOR SIEMENS HEALTHINEERS OVERALL. VIRTUALLY EVERY SUPPLY CHAIN METRIC THAT’S IMPORTANT TO US HAS IMPROVED IN OUR BRAZILIAN OPERATIONS SINCE WE IMPLEMENTED NEW PROCESSES AND SUPPORTED THEM WITH THE FORECAST MANAGEMENT MODULE OF DEMAND SOLUTIONS.”

~ JOANNA GEORGE

SENIOR MANAGER OF GLOBAL DEMAND PLANNING AND GLOBAL PROCESSING  
SIEMENS HEALTHINEERS

in the accuracy of its replenishment planning forecasts, a 20 percent improvement in overall forecast accuracy, a 57 percent reduction in back orders, an enhanced line item fill rate, and reduction in scrap.

Expect more great news out of Brazil. Local executives now use Demand Solutions to drive the sales and operations planning (S&OP) process, rather than leaving it to the sales team. “Sales teams are often very optimistic in their projections, which can be dangerous when inventory costs millions of dollars,” Joanna explains. “By giving our supply chain leaders



and planning peers in Brazil the tools to drive their S&OP process, we've taken a huge step towards greater profitability for Siemens Healthineers overall. Virtually every supply chain metric that's important to us has improved in our Brazilian operations since we implemented new processes and supported them with the Forecast Management module of Demand Solutions."

### UPGRADE TO DSX MEANS EASIER NAVIGATION AND A SINGLE, GLOBAL DATABASE

How does Siemens Healthineers maintain a centralized view of its global operations while running nine different instances of Demand Solutions? Users from different regions have found ways to log onto other instances of the software when they want to view information in regional databases. And the company's data analysts work hard to keep each installation updated with flat files. But when Demand Solutions announced the release of Demand Solutions DSX—an integrated platform that runs on a single database—Siemens Healthineers immediately recognized an opportunity to unite its global operations on a single solution with one centralized database.

"Demand Solutions DSX will enable us to maintain one instance of Demand Solutions worldwide," says Joanna. "Rather than storing information in separate regional databases, we can

simply control access through user permissions. The new platform will also make life much easier for our IT staff because it will interface with our ERP system to eliminate the need for flat file updates."

One of the main drivers for Siemens Healthineers' upgrade was the company's desire to move off of its aging AS400 servers, which were nearing the end of their support lifecycle. Wanting to avoid potential security issues, the company began looking for supply chain planning software that would run on newer server technology.

"Frankly, our upper management has been really happy with our forecast accuracy on Demand Solutions DS1," Joanna remarks. "But as long as we had decided to make another capital investment in planning software, we decided to do our due diligence and find the best solution money could buy."

Siemens Healthineers evaluated four different supply chain planning solutions over the course of 18 months. Demand Solutions DSX stood out for several reasons.

"We appreciated the fact that with Demand Solutions DSX, there's an unlimited number of fields for all the planning attributes and parameters in the software," says Joanna. "There are also no limits on data views. Of all the software we





looked at, DSX was by far the easiest to navigate—written by and for people who really understand planning.”

Given the global nature of Siemens Healthineers’ business, the multilanguage capabilities of Demand Solutions DSX also appealed to Joanna and her team. “Demand Solutions DSX is available in 11 languages, which is impressive,” says Joanna. “That was an additional selling point for us as we looked for a solution that would help unite our global operations.”

### RESPONSIVE, INNOVATIVE VENDOR DELIVERS VALUE FOR THE MONEY

Siemens Healthineers’ planners look forward to being able to build workspaces with multiple custom tabs that make it easy for each planner to find the information that’s most relevant to them. They’ll rely on QuikView to deliver robust reports right in the solution. But in addition to these off-the-shelf features, Siemens was impressed by Demand Solutions’ willingness to innovate based on customer input.

“We called the Demand Solutions headquarters in St. Louis and told them that of all the software we’ve reviewed, nobody offers product expiration planning,” Joanna explains. “They invited us to meet with two of their top executives and talk about our needs. Based on our input, their developers went off and added this feature to the product. That would probably never happen with a larger vendor, but it’s just one

of the advantages of working with Demand Solutions.”

What’s another advantage? The value that Joanna and her team believe they’re getting for their investment.

“If you go with a larger software vendor, they’re going to bring in a major consulting firm to do the implementation, and that runs up the price,” remarks Joanna. “But Demand Solutions has its own consultants who know the software inside and out. There are no surprises or hidden fees. Everything we agreed to with their executives was what was delivered in the end. When you factor in the overall implementation time and cost, Demand Solutions ended up being a much more affordable option for us. I can confirm that Demand Solutions stands behind their motto with amazing local support: ‘Global Solutions Delivered Locally.’

“There’s more to our upgrade story than simply reducing nine databases to one,” Joanna concludes. “Our next chapter is to implement the integrated platform of DSX, where we will be able to create a new forecast in this interactive environment and the changes will be applied instantaneously in the system. DSX can only lead to continuous improvements on our business planning processes throughout our global supply chain organization. The new software will greatly assist with managing our expiration date planning to drive reductions on our E&O exposure.”