

BY DAVID BAUM

PHOTOGRAPH BY DON SELLARS

Texas Instruments Improves SAP Reporting with WebFOCUS

In an effort to derive maximum value from their enterprise resource planning (ERP) investments, many companies deploy business intelligence software to improve reporting capabilities and gain insight into back-office operations. Such was the case for Texas Instruments (TI), the world leader in digital signal processing and analog technologies. IT pros at the firm spent the latter part of the 1990s revamping the order-to-bill process for the semiconductor division by deploying R/3 software from SAP. Once the basic functionality was in place, they turned their attention to end-user reporting.

"We wanted to provide an easy and accessible way to access sales and revenue information using a Web browser," explains Susan Hubbard, manager of the Worldwide Sales and Marketing Operations Reporting Team at Texas Instruments. An IT professional by trade, Hubbard's role within the marketing organization is primarily concerned with reporting. "We provide our sales force with information from a variety of systems," she says. "They look to us for expertise in data access and reporting technologies."

Moving into the New Millennium

Headquartered in Dallas, Texas, TI has manufacturing and sales operations in more than 25 countries. With annual revenues of nearly \$12 billion, the company

SNAPSHOT

Organization: Texas Instruments is the world leader in digital signal processing and analog technologies—the semiconductor engines of the Internet age. The company has operations in more than 25 countries, employs 38,500 people, and has annual revenues of nearly \$12 billion.

Challenge: To provide the sales force and management team with secure access to sales information from anywhere in the world.

Strategy: Create a Web-based reporting system that leverages the Internet and TI's worldwide corporate intranet to convey information through a browser-based interface.

Results: More than 1,200 people across the world use the system, easily tracking orders and gathering sales and marketing metrics to support day-to-day business decisions.

Information Builders Solution: WebFOCUS, Information Builders Consulting



Markets

GLOBAL SOLUTION

TI's Susan Hubbard boasts that WebFOCUS enabled them to cost-effectively provide reports to a dispersed audience, and helped the sales force access data that drives business decisions and supports daily activities.

employs 38,500 people worldwide. In addition to digital signal processing technologies, TI specializes in sensors and controls along with educational and productivity solutions.

Until 1999, TI depended on a mainframe-based order processing system that was created and maintained by in-house developers. Sales people could access this system directly to review orders and revenue. But with the onset of SAP, Hubbard and her team were faced with a new challenge—to provide business reporting for the organization in a Web environment.

“We needed a cost-effective way to access sales and related information for reporting on day-to-day sales activities,” says Hubbard. “In addition, a solution was needed that did not require the sales force to have SAP client on their laptops.”

Selecting Modern Reporting Tools

Hubbard and her team investigated many software vendors that specialize in tools for Web-based reporting. The list of tools included WebFOCUS, Webintelligence from Business Objects, Crystal Reports, and Oracle Reporting Tools. They wanted to find a complete, browser-based solution for accessing and analyzing data from multiple sources including SAP. In the end, WebFOCUS from Information Builders best met the requirements for the Worldwide Sales and Marketing Organization.

“We chose WebFOCUS for two reasons,” Hubbard sums up. “Our mainframe reporting was done in Information Builders’ FOCUS, which meant we could reuse our report procedures. Also, WebFOCUS was more flexible than the other tools we looked at. For example, WebFOCUS allows us to easily access information from many different data sources and generate output in many different formats—whether it’s to a file, a printer, by email, a Word document, or a spreadsheet. Our salespeople love this.”

Additionally, while other tools required developers to build a special “universe” for each data type, WebFOCUS

reads dozens of databases and file formats directly—including flat files, Oracle databases, and SQL databases. It also can dynamically join additional files to meet new reporting needs. “With WebFOCUS, we don’t have to spend time manipulating the back-end data sources,” says Hubbard. “We can quickly create tables for reporting.”

Getting up to Speed with Web-Based Reporting

As the SAP implementation was nearing completion, Hubbard and her team installed WebFOCUS on a Dell Xeon server running Microsoft Windows NT. Another Xeon processor was deployed as a database server. Then, with help from Information Builders Consulting, it took



the team just six months to develop a robust management-reporting tool. “Information Builders is a good company to work with,” Hubbard says. “We get great service from the support team. It has been a positive experience.”

Developers began by extracting summary data from SAP data extracts and loading it into data marts in Microsoft

SQL Server. Then they used WebFOCUS and Java Script to build a self-service reporting application called the Worldwide Sales and Marketing Management Reporting Team (WSMMART). Two in-house developers and one Information Builders consultant did the job, creating an intuitive user interface that features drop-down menus and selection boxes to enter queries and create reports.

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Operations Reporting, Texas Instruments

“The direction from our management dictated the architecture for the new reporting system,” says Hubbard. “They wanted it to be simple, so users could just click a couple times and get the answers they need. They didn’t want our salespeople spending a lot of time building reports.”

Despite its simplicity, WSMMART lets users specify parameters, query data through various filters, and generate reports in several different formats. “We created these capabilities very readily with WebFOCUS,” says Hubbard. “My team has a lot of experience with FOCUS so there wasn’t a big learning curve.”

Pleasing a Worldwide User Base

Sales and Marketing launched the WebFOCUS application concurrent with the implementation of SAP Sales and Distribution Modules. To coordinate the worldwide soft-

ware deployment, they appointed regional champions in the U.S., Europe, Asia, and Japan. Each champion received formal training from Information Builders and was prepped to instruct others in the use of the new reporting environment. It was an effective plan that encouraged widespread use of the new system.

“WebFOCUS is very easy to use,” says Hubbard. “The salespeople commonly drill down from one level to another to obtain report detail. They especially like being able to download data into Excel spreadsheets to crunch numbers about sales, customers products—all the things that are important to them.”

WSMMART contains worldwide sales related data and information on TI products and customers that is readily available and easy to access, which makes it a very appealing tool for the business users. It was originally developed for the sales and marketing team, but because of its appeal, other organizations within TI began requesting access. Today, more than 1,200 users throughout the world rely on the new reporting system, from entry-level salespeople to senior officers of the corporation. WebFOCUS generates sales metrics by region, customer, product group and many other variables, along with specific information about products. Additionally, TI uses WebFOCUS ReportCaster to schedule and push reports to selected users, such as quarterly and annual sales summaries.

“Everything resides on our server in Dallas, yet users have browser-access from anywhere in the world,” says Hubbard. “That’s the beauty of this type of architecture.”

To maintain tight security, TI uses the secure sockets layer (SSL) protocol to encrypt report requests and responses. Users must be authorized to access the corporate intranet, and an additional layer of password security protects the WebFOCUS site.

Looking to the Future with Wireless Reporting

TI is continually enhancing the WSMMART application in its quest to equip employees with the information they need to be productive. “We would love to set up a wireless reporting infrastructure so we could send reports to personal digital assistants (PDAs) and other hand-held devices,” says Hubbard. “Eighty percent of our sales team use PDAs and we would like to give them access to the information they need while they are away from their office. From what we have seen from Information Builders, it will be easy to add these capabilities with WebFOCUS.”

For now, Hubbard and her team are satisfied with the results, but continue to make improvements to meet new challenges. “The new reporting system has enabled us to cost effectively provide reports to a dispersed audience, boosting our productivity,” she concludes. “Our WebFOCUS implementation also enabled us to meet budget guidelines by reducing the amount of required training and hardware cost. The sales force was able to quickly come up to speed and access data needed to drive business decisions and support daily activities.”

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