

Wacker improves customer service with integrated self-service portal.

Overview

■ Challenge

Streamline disparate manufacturing, order processing and logistics operations spread across 32 countries; provide customers direct online access to its client systems, such as product catalogs and order tracking

■ Solution

ERP system, which consolidated its entire manufacturing, logistics, distribution and finance processes; Web-based self-service portal, integrated with the ERP system, that enables customers to submit and track orders and access detailed product information online

■ Why IBM?

Commitment to open standards; quality of service and support

■ Key Business Benefits

Significant improvements in productivity and customer service; data consistency and integrity; rapid systems development; reduced systems maintenance



An enterprise resource planning (ERP) system based on IBM DB2® Universal Database™ is streamlining worldwide distribution of more than 500 products manufactured in Wacker Corporation's Menomonee Falls, Wisconsin production facility. The company also operates factories in Reichertshofen, Germany, and Manila, Philippines.

A few years back, Wacker Corporation—a leading manufacturer of light-weight construction equipment—decided to implement an enterprise resource planning (ERP) system for its multinational operations. Little did the company know that this was the first step towards a level of e-business systems integration unprecedented in its marketplace.

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—Johannes Schulze Vöhren, CIO and Vice President of Business Systems, Wacker Corporation

e-business—accelerating the pace of business and the pace of change

Key Components

Software

- IBM WebSphere® Application Server, Advanced Edition, Version 3.5
- IBM WebSphere Commerce Suite, Version 5.1
- IBM WebSphere Studio
- IBM DB2 Universal Database for AIX®
- IBM MQSeries®
- IBM VisualAge® for Java™
- IBM Tivoli® Maestro
- IBM Tivoli Storage Manager

Servers

- IBM RS/6000®
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For Wacker Corporation, the move to ERP stemmed from the need to streamline a legacy system that consisted of non-integrated sub systems for manufacturing, order processing and logistics. Johannes Schulze Vohren, CIO and vice president of business systems at Wacker Corporation, explains, “We have disparate systems across our worldwide operations. The implementation of the Baan ERP system in the U.S. and in Germany will allow us to streamline operations worldwide and achieve a very high degree of data integrity and accuracy across all operations. This will support a seamless flow of data and help us integrate business processes.”

Today, seven locations have been converted to a common ERP platform, based on Baan and IBM DB2 Universal Database for AIX. For the 700-plus employees who use it, the system is a godsend—managing the company’s entire manufacturing, logistics, distribution and finance processes, including invoicing and payments. Stringent checks built into the system help ensure data integrity, reducing errors and duplication of work. The stability of the DB2 database and the IBM RS/6000 servers on which it resides has minimized downtime, improving both productivity and customer service.

But the best is still to come. Committed to build on these productivity gains and further improve interactions with customers, Wacker is extending its ERP system to external users through a Web-based self-service portal. The Web portal will be tightly integrated with the backend ERP system to enable customers to submit orders, track equipment and parts and access detailed product information.

The portal is powered by a suite of IBM WebSphere e-business solutions that build on the existing foundation provided by DB2 Universal Database. “DB2 has been our standard enterprise data management system for many years, and its performance and stability are excellent,” says Schulze Vohren. “So our strategy for all new systems is to concentrate on software created around DB2. The seamless integration between the WebSphere product family and DB2 has made the development of this complex system much easier for us.”

“Our objective was to have everything database-driven. By consolidating all business information into DB2, we have adopted a single-source content management approach. This makes the entire system highly efficient and low maintenance.”

—Johannes Schulze Vohren

DB2 enables single-source content development and management

Wacker is developing the e-commerce portal in a classic three-tier architecture. At the backend, DB2 Universal Database manages all product specifications, including multimedia images, pricing, availability, orders and user profiles. The database feeds the ERP system as well as the front-end Web portal powered by IBM WebSphere Commerce V5.1.

“Our objective,” explains Schulze Vohren, “was to have everything database-driven. By consolidating all business information into DB2, we have adopted a single-source content management approach. This makes the entire system highly efficient and low maintenance, as the database becomes the tool for those who create the information as well as those who use it.”

IBM MQSeries messaging enables three-way communication among the backend database, the middle-tier ERP system and the front-end Web portal. IBM Tivoli Maestro is used for job scheduling and IBM Tivoli Storage Manager for backup.

Open standards support internal and external systems integration

Sophisticated online shopping screens, provided through more than 50 JavaServer Pages™ (JSP™), greatly simplify order placement for Wacker’s customers. For example, users can drill down for detailed product information, select spare parts from a magnified “explosion” drawing and drag them to their shopping cart. The JSPs were developed with IBM WebSphere Studio.

Once a customer places an order, the self-service portal provides an order tracking number. This is enabled through Java servlets—created with IBM VisualAge for Java—that interface with the Baan ERP system. IBM WebSphere Application Server provides a high-performance runtime engine for the Java servlets. The site then provides a link to the appropriate postal carrier, allowing the customer to use this number to track shipping status. “What we like best about IBM is its commitment to open standards, compared with other vendors such as Oracle, that lock you into their solutions. Open standards allow us to easily integrate third-party systems into our portal, making DB2, rather than Oracle, our database of choice,” says Schulze Vohren.

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Orders for this Wacker trench roller may be tracked online through a Web self-service portal integrated with the company’s ERP system.

Following a successful initial proof of concept, Wacker development teams are carrying out additional development of the e-commerce portal, assisted by IBM specialists as needed. "IBM's service and support are excellent—few others come up to its standards," notes Schulze Vohren.

Web portal opens up new possibilities

Looking to the future, Schulze Vohren sees unlimited possibilities in the ways the portal can be used. For one, he anticipates that the Web frontend could become the common interface for internal users as well as customers. Because the portal is designed for targeted content delivery, based on a tiered user-rights structure, it can be tailored for myriad types of users.

"We can define user access rights and provide content in any way our customers, partners or internal users desire," Schulze Vohren explains. "This flexibility will make the portal an integral part of Wacker's enterprise systems in the future."

For more information

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