



The rumbling of hefty hydraulic excavators scooping up chunks of earth are sweet sounds to companies that make heavy equipment for the construction industry. However, for leading companies like Komatsu America International, a \$1 billion private subsidiary of its Japan based parent company, serving the construction industry is just one path toward a successful business. With competitors like Caterpillar and Mitsubishi, Komatsu America recognizes that diversifying its customer base is an important way to keep the heat on its competition. That's why the company is also building a strong presence in manufacturing heavy equipment for a diverse array of industries, ranging from logging to waste recycling to utilities.

Komatsu America heats up the competition with SAP® R/3 on IBM® DB2®



Komatsu America keeps tabs on its diverse business interests with an ERP solution based on IBM DB2 and SAP R/3.

Broad business interests like these must to be managed efficiently if a company is to continue thriving in the marketplace. Several years ago, Komatsu America recognized this need in its own organization and set out to streamline its business processes and enhance information sharing between corporate headquarters and manufacturing sites. Because the company's legacy system was not equipped for the job, the organization launched an exhaustive study for a new enterprise resource planning (ERP) solution. Its choice was an easy one: SAP R/3 from SAP AG running on IBM DB2 for AIX™.

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Dick Ford
Vice President, MIS, Komatsu America

Manufacturing Software Solutions

With full implementation of the R/3 and DB2 solution on the horizon, Komatsu America's selection is already proving to be a fruitful one, helping it maintain its competitive advantage. Explains Dick Ford, the company's vice president of management information systems, "SAP R/3 and IBM DB2 are improving our business processes and have helped us integrate our manufacturing, administrative and marketing operations. By consolidating data from different operations on to one DB2 repository, our managers can get accurate and quick answers to their business inquiries." For example, the R/3 profitability analysis modules provide the company's analysts with an instant picture of its financial position, helping them in long-term strategic planning.

R/3, DB2 construct big-picture view

Komatsu America has implemented six modules of R/3: sales and distribution, financial accounting, cost accounting, materials management, production planning and personnel administration. The database, which resides on an IBM RS/6000®

R/3 on RS/6000 and DB2



Komatsu America plans to deploy a data warehouse based on IBM DB2 to further enhance its business analyses.

server, has swelled to 150 gigabytes, and that number is increasing. "We're pleased with the scalability of R/3 and DB2," says Ford. Currently, 450 users access the system, including 140 concurrent users. With many business functions now centralized, employee efficiency and productivity have improved dramatically. For example, multiple customer databases have been pared down to one, and the organization is moving toward having a single vendor database, which will be accessible to all divisions and enable the company to streamline its supply chain. Ford explains, "Our R/3-based ERP solution is allowing each operation to be run separately, based on their individual requirements, while simultaneously enabling corporate managers to have access to centralized data. This capability equips us to make quicker, better informed long-term business decisions."

In addition to streamlining business processes, the R/3 and DB2 solution is transforming the company from a made-to-order operation to a made-to-stock operation. Explains Ford, "Because we're able to manage our inventories and lead time better, we can streamline the manufacturing process. The lowered operating costs are reflected in the company's improved bottom line."

IBM DB2 creates worry-free environment

At Komatsu America, the R/3 application and DB2 reside on a four-node RS/6000 server. One node hosts the database, two nodes function as

application servers and the fourth node provides redundancy. The company's manufacturing site in Quebec, Canada is already connected to the R/3 system, and the Chattanooga, Tennessee facility is the next on schedule for implementation. This summer, the company plans to deploy R/3 version 3.1 and migrate its database to IBM DB2 Universal Database™ for AIX. Leonard Jesse, the company's database services and SAP basis manager, explains that because DB2 Universal Database allows business-to-business connectivity through the Web, the company is able to strengthen its relationships with other businesses in its supply chain. Jesse also indicates that Komatsu America has set a short-term goal of Web implementation throughout its dealer base.

Jesse notes, "The success of R/3 can also be credited to the underlying DB2 database." Adds Ford, "Not only is SAP a leader in ERP solutions, but the fact that it supports IBM DB2 makes the solution even more appealing. We wanted to leverage our existing investment and expertise in DB2, which has long been the database for our manufacturing, distribution and administrative information systems."

The inherent reliability of DB2, with its unparalleled performance, has made it a low-maintenance solution for Komatsu America — the IT staff spends less than 10 percent of its time managing it, which frees up valuable hours to work on implementing new modules of R/3. In fact, even under the legacy system, DB2 maintainence only required less than five percent of the staff's time. "The database is so robust that it's the last thing we worry about, and that's a testament to DB2," says Ford.

More financial forecasting enhancements on the horizon

Down the road, the company has plans for implementing a data warehouse to enhance its business analysis capabilities further. According to Jesse, with the infrastructure comprised of IBM DB2 and IBM RS/6000 already in place, this will require minimal effort. The company has selected BusinessObjects from IBM Business Partner Business Objects as the analytical reporting and query tool that will enable Komatsu America employees

and customers to access the data warehouse. As Komatsu America continues to strengthen its competitive advantage by bolstering its business and financial analysis capabilities, the organization expects that its DB2 environment will continue to grow with the organization. Says Ford, "We can count on the scalability and flexibility of IBM DB2 to accommodate our business growth. If, in the future, we need to change platforms, we'll be able to do so seamlessly, without having to change our data structures."

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