

By **MONICA SHAW**, Editor

# Sold on next-day service at Sappi

**A software integration tool at Sappi Fine Paper North America proves a valuable customer service tool by supporting a 5 p.m. deadline for next-day deliveries, as well as an ERP system startup**

**T**hese days, information technology (IT) has become more than just a way to gain efficiencies through automating processes at Sappi Fine Paper North America (N.A.). For the Boston, Mass.-headquartered producer of coated fine papers, enterprise application integration (EAI) software has become a powerful marketing and customer service tool by integrating pieces of internal software and by supporting electronic communication with customers.

Like many producers in North America, Sappi has been faced with eroding prices and a commoditized landscape for its products. To differentiate itself with flexible customer service, the company decided in 2002 to extend its 2 p.m. cutoff for next-day delivery to 5 p.m. However, Sappi needed an IT infrastructure that could push customer orders to its back-end order management system and then into its warehouse and logistics system in real time.

"We were looking for an IT tool that could help us provide improved service and forge stronger relationships with customers," says Bob Wittstein, vice president of IT and chief information officer for Sappi Fine Paper N. A. "This tool had to be extremely reliable, since failure to make good on a new extended order time might erode established customer

relationships and result in revenue loss."

To accomplish the order extension, Sappi chose an EAI tool set from Sterling Commerce called the Gentran Integration Suite (GIS). Sappi had experience using the vendor's Gentran NT batch-based software, but the GIS offered new real-time and business process modeling functionality.

After the GIS was installed, Sappi quickly saw a variety of ways to leverage the new system. For one, Sappi corporate, headquartered in Johannesburg, South Africa, was embarking on a global installation of the SAP enterprise resource planning (ERP) system, and the GIS offered a way to smoothly wean off legacy systems onto SAP. Also, the software's ability to automate manual processes using XML and other technologies offered ways to streamline the supply chain from materials suppliers to customers.

## **Fast deployment for integration tool**

Sappi purchased the GIS in August 2002 and by November 15 the tool was integrated with 4warder, the new warehouse and logistics program. At that point, the company could fulfill its promise of an extended delivery time. Since 70% of Sappi's business is stock from warehouses, this impacted the majority

of customers, which are mostly merchants serving printers, publishers, and cataloguers.

According to Marjorie Boles, global systems integration manager for Sappi Fine Paper N.A., the GIS facilitated fast deployment.

"The GIS environment is similar to a software development environment in that it provides tools and standardized layouts for you to build the logic that supports your processes," explains Boles.

"The basic tool is a Java-based business process modeling language that is enhanced by services and adapters that help you connect and share data between both internal applications and customer or supplier applications."

After success with extended order times, it soon became evident that the GIS platform could play a significant role in Sappi's ERP system roll out to its four mills, one sheeting plant and four regional distribution centers. The company had a variety of legacy applications at these sites because Sappi had grown through acquisitions but wanted instead to provide one standard face to its customers. Also, Sappi wanted a phased roll out of SAP to these sites, which the new platform could support with its interface capabilities.

"The GIS became part of a larger strategy to integrate all of our old systems with our new ones so we could make a smooth transition off the legacy mainframe environment to SAP," explains Wittstein. "We didn't want to just cut the cord and go live with a big bang and risk adversely impacting customers."

The integration software supported the phased roll out with tools like an SAP application link enabling (ALE) adapter, message queuing (MQ), and Internet-based protocols for reaching external partners all built in as services and adapters. These technology tools were especially important to key aspects of the ERP system implementation, says Wittstein, a veteran of several SAP startups.

"SAP is not usually the problem in difficult startups, but rather the interfaces between systems, master data and data migration," Wittstein says. "The integration platform let us break down the ERP implementation into manageable steps while integrating many pieces of the new with the old."

## **Streamlining the supply chain**

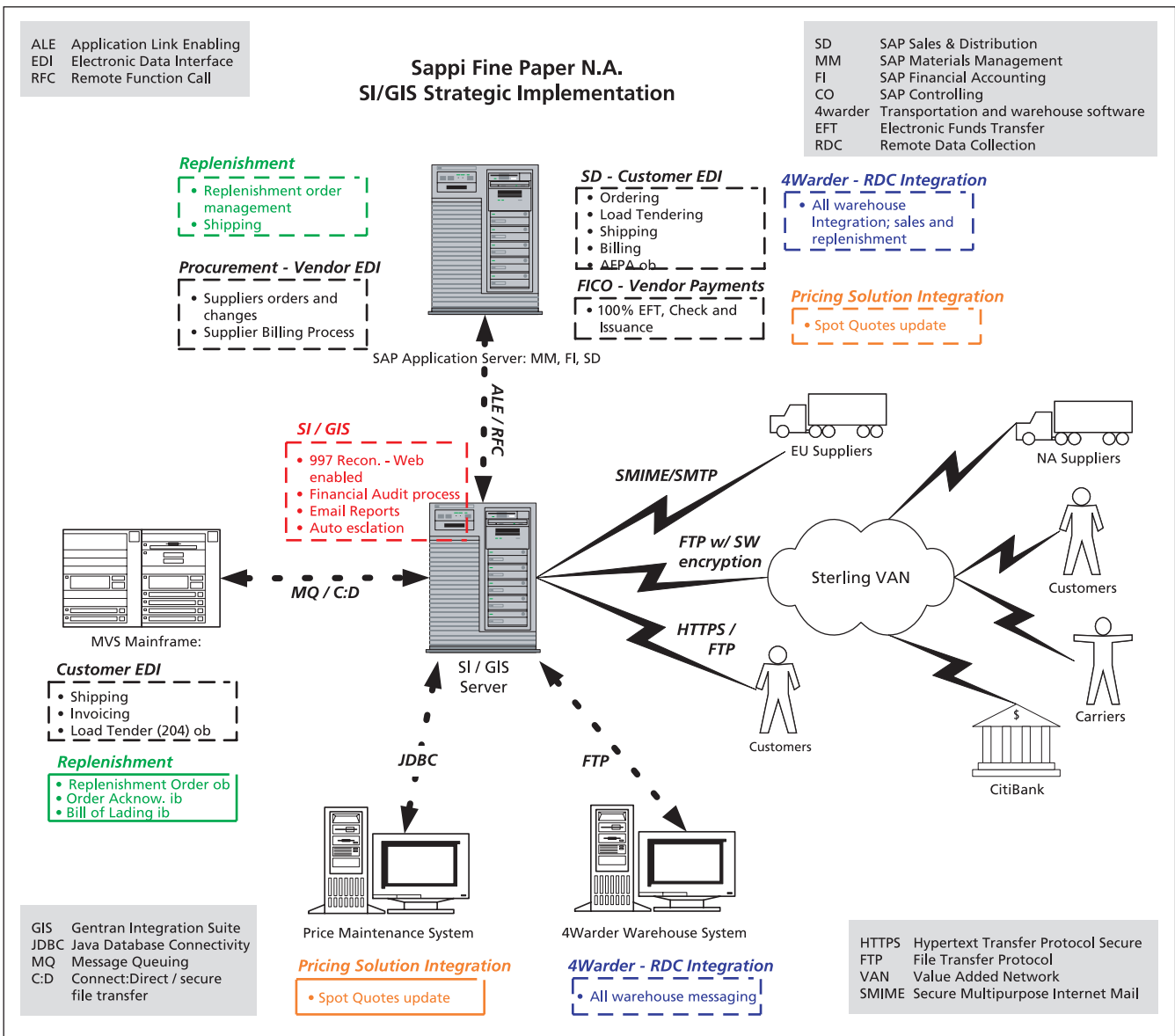
After GIS startup in November 2002, Sappi soon saw ways to further exploit the tool's capabilities. By engaging its business units to explore how and where existing processes

**Customer service representative Kathie Gagnon takes last minute order on SAP, which is integrated to warehouse software with the GIS.**



**FIGURE 1.**

**The GIS platform is the hub for Sappi's internal IT architecture and external communications with customers and suppliers.**



fell short, Sappi could use the GIS as foundation integration technology for enabling a range of initiatives, some for streamlining operations, others for making it easier to conduct business between trading partners.

As previously described, the ERP system

roll out was one huge initiative where the GIS played a pivotal role. Sappi's ERP system footprint includes the following SAP modules: PM for Plant Maintenance, PP for Production Planning, APO and DP / SNP for optimized planning, BW for executive deci-

sion making, FI for financial accounting, including accounts payable/receivable; CO (Controlling) for internal cost management; SD (sales and distribution) for ordering, load tendering, shipping, and billing; and MM (materials management) for purchasing,

invoicing, and inventory control. With support from the GIS, the ERP system was deployed to (in this order) the Skowhegan, Maine, Cloquet, Minn., and Muskegon, Mich., mills; all regional distribution centers; and the Allentown, Penn., sheeting facility from January 2004 to the last startup this month at the Westbrook, Maine, mill.

Another area where Sappi was able to quickly utilize the GIS was for electronic order processing. Instead of restricting customers to use only batch-based electronic data interface (EDI) through a third-party network, the integration tool supported use of XML and HTP. By June 2003, Sappi had moved all b2b processing to the GIS. Since then, electronic orders flowing from customer systems to Sappi's order entry system have grown from just 5% to 34%, says Boles.

"Customers that have invested in Web-based XML technology can take advantage of its benefits, but the integration platform also supports customers that would rather stay with traditional EDI," Boles explains. "The power of this tool set is that it realizes not all businesses are created equal, so it doesn't pigeonhole you into one direction for solving order fulfillment."

Of the customers using XML, Boles reports that all use the papiNet standard at this point, although the GIS can support a variety of XML types. "People seem pretty convinced that papiNet is here for the long haul, which you can't say for all of XML standards out there now," she notes.

The integration platform also allowed Sappi to build in logic that can analyze everything from the health of the interfaced system environment to electronic orders. For example, when an electronic order is received, the system can tell what type of order it is — a replenishment order that needs to be fulfilled out of a warehouse, a making order, or a confirming order for review — and take action accordingly. This type of functionality, says Wittstein, allows Sappi to cut cost from supply chain process-

es by automating what were once very manual, labor-intensive processes.

As Figure 1 shows, the GIS platform is the hub for Sappi's internal IT architecture and external communications with customers and suppliers.

"Users of this integration platform run from one end of our value chain to the other," describes Boles. "Not only have we integrated with customers, we have also integrated with suppliers that provide raw materials for our manufacturing operations. We can provide shipping notification to printing and publishing customers, and we have 100% automation of our accounts payable, paying our vendors electronically. It is amazing how many business processes this tool touches."

The success of the GIS, however, is not completely attributable to the platform's functionality, says Wittstein. Sappi's plans to align its technology goals with its business goals were critical.

"Integration is increasingly thought of as a core competency rather than a technical afterthought," Wittstein explains. "Our internal groups make a concerted effort to learn the business to understand how and where the integration tool can be applied. Instead of being called at the last minute to execute an already-scripted solution, the integration group is brought in for early planning."

#### **Valuable dialogue and accolades**

What do Sappi's customers think of the service-oriented upgrades? "We want more!" according to Boles, who says things are "never status quo" with Sappi's customer base.

"The GIS makes it easy to do business with us, and this sparks a dialogue with our business partners where we can ask what will bring value to their processes and then provide it, whether it is something they aren't getting today or whether they need it more quickly or in a different format," explains Boles. "This improved understanding of our partners is very valuable."

Another big benefit for customers is that the logic built into the GIS makes for a reliable environment.

"It's not acceptable to automate something quickly without providing dependability in that processing; one of the things that really excels with this tool set as compared with the traditional EDI environment we had previously is that it has the intelligence to know whether something needs attention," explains Boles. "We don't have to dedicate resources to manually monitor the environment. With logic, we've created an environment that keeps us informed with a page or an email, depending on the severity."

Now that Sappi has conquered order entry with real-time integration within its four walls, Boles says one of the next tasks is to extend real-time ordering and other functionality to more of its customers by having their systems directly communicate with its own. Customers are also asking for functionality to check real-time stock availability, which Sappi is actively researching.

Currently, Sappi is providing electronic billing and advance shipment notices for some customers, with plans to extend this to more in the future.

Sappi is also examining electronic integration with the carrier community to provide "track and trace" functionality so it can obtain delivery status and proof of delivery to proactively inform customers. "They don't have to call to find out where their paper is; we can tell them if there is a delay, otherwise it will be there," Boles explains.

The GIS has been such a success that Sappi Fine Paper North America is serving as an example for the company's European b2b initiatives, mainly in the pulp supplier arena.

Sappi was also recently awarded a 2005 CIO 100 Award from *CIO* magazine for the IT initiative to extend the daily deadline. Wittstein was especially pleased that Sappi was recognized in a field of strong competitors such as Marriot, Lands' End, and Staples. **P&P**