IBM

TALPX constructs efficient, cost-saving lumber e-marketplaces.

Overview

■ **Challenge**
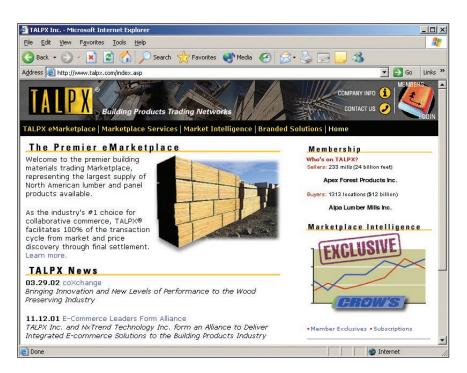Re-engineer online marketplace to create private trading exchange for lumber and building product companies

■ **Solution: Integrating Stage**
Robust, scalable Java™ 2 Platform, Enterprise Edition (J2EE) technology-compliant marketplace solution using IBM WebSphere® Application Server

■ **Why IBM**
TALPX was impressed with the robust development environment of WebSphere Application Server, its ease of integration with the WebSphere software platform and IBM's reputation as a software and hardware vendor

■ **Key Business Benefits**
For TALPX: Membership representing 40% of North American lumber supply—a buyer base accounting for over $12 billion in purchasing power; 50% shorter development cycle; projected 90% savings in administrative costs
For customers: Speedy access to new and existing supply chain partners resulting in reduced administrative costs and improved margins

TALPX not only offers electronic buying and selling of lumber through its online marketplace, it also tailors e-business solutions for members.

Like Paul Bunyan and his trusty ox Babe, Chicago, Illinois-based marketplace developer TALPX Inc. has an important role to play in increasing supply chain efficiencies in the North American wood products industry.

With its 50 employees, TALPX has brought electronic purchasing and selling to the softwood lumber and panel industry. Before TALPX, wood and building product companies conducted their trading activities through faxes and paper-based spreadsheets.

"To build the functionality for an unlimited number of private marketplaces, we would have had to reprogram our marketplace from scratch. We needed a J2EE technology-compliant platform to create a foundation for a truly extensible solution."

—David van Tonder, CTO, TALPX Inc.

@business

Key Components

Software

- IBM WebSphere Application Server, Enterprise Edition, Version 3.5
- IBM VisualAge® for Java
- IBM WebSphere MQ

Servers

- IBM Netfinity® 7000

Services

- IBM e-business Hosting™

"The WebSphere solution fits right into an environment in which integration is a key concern. Thanks to WebSphere MQ, we have a ready-made solution."

–David van Tonder

Since the process of purchasing was cumbersome, buyers and sellers often did business with a limited number of partners, restricting their scope of market participation. Using spreadsheets also made it difficult to measure personnel and partner performance. And the paper-based administrative systems elevated the cost of doing business.

TALPX originally went to market with an online exchange created on a Microsoft IIS platform, but the Microsoft platform failed to support site enhancements. "The next step in our evolution was to create private marketplaces that enabled spot traders to develop contract buying programs," says David van Tonder, CTO of TALPX. "To build the functionality for an unlimited number of private market-places, we would have had to reprogram our marketplace from scratch. We needed a J2EE technology-compliant platform to create a foundation for a truly extensible solution."

TALPX evaluated IBM WebSphere Application Server against BEA WebLogic Server and iPlanet Application Server (now Sun ONE Application Server). The company chose WebSphere Application Server because of its robust development environment, IBM VisualAge for Java. "The IBM application server and its development environment are very well integrated," says van Tonder. "It's easy to test Java applications built in VisualAge for Java and port them to WebSphere. And aside from having one of the most powerful development tools on the market, IBM also has the best reputation for quality software and hardware."

TALPX created an improved, standards-based trading exchange for the lumber and panel industry using WebSphere Application Server, Enterprise Edition, Version 3.5, VisualAge for Java and IBM Netfinity 7000 systems. TALPX chose IBM e-business Hosting to host the e-marketplace and help ensure its smooth operation and maximum availability. IBM WebSphere MQ supports open standards such as J2EE technology, and completes the overall solution by delivering an integration solution to the traders' systems.

With the reusable components developed with VisualAge for Java, TALPX has been able to reduce its development time by 50 percent for private markets. While this benefit is welcome, according to Steve Tonissen, TALPX's president of enterprise solutions, TALPX is even more focused on the cost savings and process improvements it can extend to its trading exchange members. "Our success is based on our ability to deliver successful trading tools to our members," says Tonissen. "And WebSphere software is enabling us to succeed."

Dramatic improvements in efficiency

Before TALPX injected e-business efficiency into the lumber industry, deals took place at a sluggish pace. A lumber company with supply requirements for 200 houses would go through a list of lumber and panel suppliers, create requests for all of the products required, fax or call them in to all of the various manufacturers and intermediaries, wait for responses, phone the responding companies to negotiate a deal and, hours or days later, make a decision.

With the new TALPX marketplace, buyers electronically select sellers from a drop-down list. Responses can be instantaneous, so price comparisons can be available immediately. Sellers realize efficiencies by being able to create posted offers and respond to requests and bids of customers on a timelier and more cost-advantageous basis. Targeted or directed offers are sent with the same speed and efficiency. Automated workflow prevents purchase order and approval process delays. And the system tracks the sale through the payment of the invoice, greatly accelerating the transaction cycle.

Its new marketplace has helped TALPX become the largest softwood lumber and panel exchange in North America. Its membership represents 40 percent of the North American lumber supply—a buyer base accounting for over $12 billion in purchasing power.

Says Tonissen, "Our participants benefit from improved values and cash flow and lower administrative costs. We have conducted studies showing that by using TALPX a company may reduce administrative costs by up to 90 percent, improve relative value by 2 percent or more, and virtually eliminate common clerical and pricing errors. TALPX can also save traders up to four hours of time per week, enabling them to do higher-value work, such as strengthening partner relationships, experimenting with new programs and analyzing trading information."

"With our WebSphere software platform, we can enable our members to select suitable trading partners and enhance their ability to get the best value. That's a huge step forward compared to where this industry was just a few years ago."

—Steve Tonissen, President of Enterprise Solutions, TALPX Inc.

Members of the TALPX exchange have access to up-to-date lumber prices to sharpen their trades.

J2EE technology-compliant architecture delivers optimum performance

To create a marketplace system with outstanding performance and maximum extensibility, TALPX used WebSphere Application Server to manage Java objects. These objects include servlets, which authenticate users and groups; Enterprise JavaBeans (EJB), which execute business logic; and JavaServer Pages (JSP), which take XML from the EJB components and reformat it for front-end Web pages using extensible stylesheet language transformations (XSLT).

By leveraging WebSphere MQ, TALPX integrates with traders' backend fulfillment and financial systems so that traders can receive automatic updates of all transactions. This eliminates the need for duplicate data entry and accelerates fulfillment. TALPX integrates these marketplaces individually, using its own mapping and integration layer, which identifies the requirements of the backend, formats XML accordingly and sends it to a WebSphere MQ queue through Java Messaging Service (JMS). WebSphere MQ provides assured messaging to the traders' backend systems.

Says van Tonder, "The WebSphere solution fits right into an environment in which integration is a key concern. Thanks to WebSphere MQ, we have a ready-made solution."

From public to private marketplaces

With its new platform based on WebSphere Application Server, TALPX can efficiently create any number of private marketplaces that enable traders to conduct collaborative commerce with their partners. These fully electronic marketplaces function as extremely efficient e-procurement solutions for buyers as well as selling mechanisms for suppliers.

"Our services require a minimum of upfront investment," says Tonissen. "This is astonishing to our participants considering that we custom-design marketplaces based on their specific needs. Participants have told me that the return on investment they've received from TALPX is an unparalleled three months or less. With our WebSphere software platform we can enable our members to select suitable trading partners and enhance their ability to get the best value. That's a huge step forward compared to where this industry was just a few years ago."

For more information

Please contact your IBM marketing representative or IBM Business Partner.

Visit us at: **ibm.com**/e-business

For more information about TALPX, visit: *www.talpx.com*

IBM®