IBM

Arcadia extranet links clothing retailer's fragmented supply chain.

Overview

■ **Challenge**
Reduce clothing retailer's costs of communicating with trading partners while minimizing communication errors; strengthen partner relationships

■ **Solution**
Worldwide extranet for supply chain management

■ **Why IBM?**
IBM commitment to identifying and delivering business benefits; Arcadia's long-standing relationship with IBM and wish to leverage existing IBM infrastructure

■ **Key Business Benefits**
100% payback in first year; reduction in time to process goods; faster time to market; more accurate communications with reduced supplier error; improved work and resource scheduling; staff availability for more strategic tasks; increased stock visibility

■ **Business Partner**
Triangle Group plc

The Arcadia Group sells its 6 brands — including Burton Menswear, Topshop and Dorothy Perkins — through more than 2,000 retail outlets, a home shopping channel and its e-commerce Web site, Zoom. Another of its brands, Evans, is the UK's market leader in plus-size womenswear.

Whoever coined the phrase "fashionably late" must not have known much about the fashion industry. For Arcadia Group plc, the United Kingdom's second largest clothing retailer, annual sales of more than £1.8 billion (US$2.7 billion) depend on the company's ability to get its apparel into more than 1,500 outlets while it is still fashionable. If pastel frocks aren't snapped up in the spring, they're discounted at season's end, paring already-slim retail margins.

"Our old way of communicating with our worldwide trading partners by fax and phone took too much time, cost too much and was so potentially error-prone that we couldn't run our business efficiently."

— Gareth Hill, IS Director, Arcadia Group plc

Key Components

Software

- IBM Lotus® Domino™
- IBM Lotus Notes®
- IBM DB2® Universal Database™ for iSeries™
- IBM Net.Data®

Servers

- IBM @server iSeries

Services

- IBM Global Services

To assure that the proper goods arrive at the proper time and place, Arcadia communicates with hundreds of suppliers, many in Southeast Asia. These communications must not only be timely but also error-free. However, efforts to optimize inventory and maintain relationships with far-flung suppliers had the company sending more than one million faxes and countless e-mails each year. What's more, flawed faxes necessitated frequent follow-up phone calls across time zones. Compromised communications played havoc with production and delivery schedules. "Our old way of communicating with our worldwide trading partners by fax and phone took too much time, cost too much and was so potentially error-prone that we couldn't run our business efficiently," says Gareth Hill, IS director, Arcadia Group.

Arcadia had no doubt it needed to share information electronically with trading partners. Because many were too small to afford an electronic data interchange system, an extranet was the answer. With no packaged solutions available, Arcadia turned to IBM for help. Arcadia had a longstanding relationship with IBM—with IBM point-of-sale devices in its stores, IBM DB2 Universal Database in its data warehouse and IBM @server iSeries (formerly AS/400®) and IBM Lotus Notes e-mail enterprisewide. Says Hill, "IBM is a strong e-business solutions provider with experience in the retail and supply chain management (SCM) space. It gave us a vision of how Arcadia could apply e-business initiatives to drive efficiencies within the supply chain."

Five applications with a common thread: rapid payback

With assistance from IBM Global Services, Arcadia used IBM Net.Data, IBM Lotus Domino and Lotus Notes to create a password-protected extranet that runs on a redundant pair of iSeries servers and offers the following five Web applications:

- *Purchase Orders—posts online orders for merchandise, letting suppliers view them as soon as they are approved to reduce lead time*
- *Freight Forwarders Forecasting—allows shipping agents to book online transport of goods by sea*
- *Permission To Ship—speeds suppliers' requests to ship goods to Arcadia's buying and merchandising teams, which respond online*

"The tight integration of Arcadia's extranet with our backend system is dramatically improving the flow of information throughout our supply chain."

– Gareth Hill

- *Onboard Advice—provides realtime confirmation when goods are shipped from overseas, increasing stock visibility within the supply chain*
- *Processing—provides realtime stock preparation details (repacking, ticketing, sorting, pressing), eliminating faxes, reducing phone calls and automatically updating delivery dates and number of units processed.*

iSeries messaging provides the integration between the extranet and Arcadia's backend integrated SCM system, which resides on another pair of iSeries servers. This integration makes the SCM system accessible to Arcadia's more than 700 suppliers, as well as its Hong Kong buying agency, freight forwarders, processing companies, clearing agents, franchisees and concessionaires worldwide. By extending stock visibility to all these trading partners, the industry-unique extranet has increased speed-to-market while cutting communications costs and reducing human error. Says Hill, "The tight integration of our extranet with our backend system is dramatically improving the flow of information throughout our supply chain."

Developed and deployed sequentially, all 5 applications achieved 100 percent payback within a year, with 2 achieving full payback in only 7 months. Together, they delivered significant cost savings the first year, while reducing the time required to process goods.

Tailoring a framework

To help define its extranet strategy, Arcadia turned to IBM Global Services, which also prioritized its extranet initiatives; created an implementation road-map; provided mentoring and best practices in the use of HTML, Java™ technology and Net.Data; and tuned its servers to optimize response time.

During the development phase, IBM Global Services designed the architecture and wrote Net.Data macros for the Freight Forwarders Forecasting, Onboard Advice and Processing applications. Says Hill, "After IBM Global Services shared its expertise on Net.Data, we started producing our own Net.Data macros, which let us write code a lot more quickly than we could before."

"By eliminating so many faxes, e-mails, phone calls, spreadsheets and other forms, the Onboard Advice system that IBM Global Services created for us to confirm shipment of goods delivers about a 50 percent time savings."

– Andy Polley, Clearing Agent, Unique Logistics International

Lotus Domino records and monitors every transaction and displays purchase information to suppliers through Arcadia's extranet system. Lotus Notes notifies suppliers automatically using e-mail when inventory levels reach target levels.

Arcadia also worked with Triangle Group plc, an IBM Business Partner based in Warrington, England, that specializes in Web applications. Triangle developed the Domino agent that mediates between Arcadia's Domino Web server and the Net.Data macros. It also provided the Web software for sign-on, security and publication of static content.

Speeding communication, eliminating errors

Use of Arcadia's extranet is easy and requires only a computer with Internet access. When users log on, a Domino Web page offers links to authorized applications. Suppliers, for example, are authorized to use the Purchase Order application to retrieve new orders. When a supplier submits a request through the Web browser, a Domino agent calls a Net.Data macro, which translates the HTML request into an SQL query to the integrated SCM system's DB2 database. Once DB2 returns the purchase order information, Net.Data formats it in HTML, and Domino serves it up as a Web page.

Likewise, suppliers can use the Permission To Ship application to enter shipping details, verify them against purchase order information in Arcadia's supply chain system, receive shipping permission and even select shipping companies. Performing these tasks online has shortened lead times for Far East orders by up to two weeks.

Similarly, Arcadia's other extranet applications are improving trading partner communications, cutting costs, shortening time to market and the time goods remain in the supply chain, as well as lightening administrative loads. "By eliminating so many faxes, e-mails, phone calls, spreadsheets and other forms, the Onboard Advice system that IBM Global Services created for us to confirm shipment of goods delivers about a 50 percent time savings," says Andy Polley, a clearing agent for Unique Logistics International, one of Arcadia's partners. Extranet use has also helped eliminate unnecessary processes and, by reducing error, given greater confidence to hundreds of Arcadia employees and trading partners worldwide.

Looking to the future

Wanting to further leverage its extranet, Arcadia is extending its Permission To Ship application to include air and land as well as sea shipments. The company is also using IBM VisualAge® for Java (now called IBM WebSphere® Studio Application Developer) to move beyond supply chain management and develop a fabric-testing application running on IBM WebSphere Application Server, Advanced Edition. "We're looking to Java technology and WebSphere software for the scalability we need," says Hill. "We'll be able to write components and use them to greatly shorten the time to develop new applications, providing even greater efficiencies, cost savings and return on investment."

For more information
Please contact your
IBM marketing representative or
IBM Business Partner.

Visit us at:
ibm.com/e-business

For more information about
Arcadia and Triangle Group, visit:
www.arcadiagroup.co.uk
www.triangle-group.com