The Wal-Mart Story
Using Internet Technology to Support Everyday Low Prices and Increased Customer Satisfaction

Web-based applications on a Cisco network help Wal-Mart satisfy its customers and increase its competitive edge

For Sam Walton, low prices and satisfied customers were the guiding principles to retailing success. His emphasis on quality products at "everyday low prices," coupled with friendly service, propelled Wal-Mart to its current position as the world's largest retailer. Today, the company uses those same principles to test the value of each innovation it considers. "Will it help us lower prices," executives ask. "How will it improve the customer's experience?" So the selection of a communications infrastructure from Cisco was part of a Wal-Mart plan to make things better for customers. "At Wal-Mart, we don't implement technology for its own sake," says David Flanagin, Director of Network Engineering. "It has to have a payback that helps the customer." The Wal-Mart network, connecting more than 2,400 stores and 100 distribution centers worldwide, helps Wal-Mart maintain low prices and inventory on the shelves. Just as important, the network helps 950,000 Wal-Mart associates work more efficiently to keep their customers satisfied.

Internet Solutions for Supply Chain Management

How can retailers and their suppliers collaborate to increase sales and lower prices?

Successful inventory management, an important part of maintaining low prices at Wal-Mart, requires up-to-date information about sales as well as good communication with suppliers. This scenario is critical when there are thousands of stores, tens of thousands of suppliers, and hundreds of thousands of products. Wal-Mart turned to technology in the early 1980s, first for collecting and analyzing sales data and then for transmitting orders to suppliers with electronic data interchange (EDI). By the 1990s, Wal-Mart was collaborating electronically with thousands of its suppliers, using EDI initially and then developing its own applications, collectively known as Retail Linkâ. Suppliers used modems to dial into the Wal-Mart database for up-to-date, store-by-store information on sales and inventory for their products. This information, and the various applications of Retail Linkâ, allowed Wal-Mart suppliers to work with the company's buyers to manage inventory in the stores-forecasting, planning, producing, and shipping products as needed. The result was faster replenishment, a product mix tuned to the needs of local customers, and lower inventory costs for Wal-Mart. With Internet technology and the Cisco network, Wal-Mart has elevated Retail Linkâ to a new level of efficiency and usefulness. "We transformed it from a traditional dial-in network to an Internet application," says Flanagin. "Now it's easier for our vendors to use, because they just need a Web browser. More of our international suppliers can get access, because it's on the Internet. And it's easier and less expensive for us to maintain." In the past, says Flanagin, it seemed that Wal-Mart was in the software business, sending Retail Linkâ software to its vendors, making sure that they had the proper versions, and maintaining its bank of modems in working order. "Now that Retail Linkâ is an Internet application, we don't need the modems, we can update the software on the Web, and vendors are able to use their own browsers," he says. Another advantage is that data transmission is no longer limited to the speed of dialup modems. "If vendors have a high-speed connection to the Internet, they can get our data at those speeds." Because vendors are all accessing the same database, Wal-Mart uses password protection to designate what they can see. In fact, says Flanagin, users in different locations within a vendor company get different passwords, depending on their need to know. How does Internet-based Retail Linkâ tie into low pricing? "With Retail Linkâ, vendors see how their products are selling, use it to do what-if scenarios, and then work with us on sell-

through and pricing," he says. "This is a very rich and functional tool." Automated replenishment and the smooth functioning of the Wal-Mart supply chain depend on reliable connectivity between the stores, the centralized database, and the distribution centers, according to Flanagin. "Speed is important, and so is the optimum functioning of our logistics system," he says. "With the Cisco network, we have dramatically increased speed and also substantially cut outages. Every time we do that, it makes the supply chain more efficient."

How can your network help improve collaboration with suppliers? What can you do to improve efficiency in your supply chain?

Intranet Solutions for Increasing Efficiency While Saving Money

How can retailers empower employees and improve productivity?

To complement the supplier focus of Retail Linkâ, Wal-Mart supports Pipeline, its company-wide intranet. Pipeline delivers information, including company news of the day, policies, and procedures, to more than 950,000 associates. Because the Wal-Mart philosophy emphasizes the key role of associates, sharing information and ideas is vital. A complete internal telephone directory, organized by name, location, and function, is one of the key applications available via Pipeline. "There are no unpublished numbers at Wal-Mart," says Flanagin. "Mr. Sam, our founder, believed that the associates in the store know more about their own corner of the business than anyone else does. When those associates have important information to relay, they need to know where to send it." In addition to serving as an information resource, the online directory is easier to keep current than its printed predecessor. "The directory is linked to our HR records," says Flanagin. " So when an associate moves, the directory is updated automatically." Wal-Mart also subscribes to online information services. "Using Pipeline to get outside numbers is more efficient," he says, "and it eliminates the cost of calls to Information as well as the need to distribute telephone books at all our locations." But how do associates, many of whom have neither desks nor offices, get access to Pipeline? "We have computers in the stores that they can log into," says Flanagin, pointing out that ease of use is especially important for people who do not work with computers every day. "They can look at their benefits information, sign up for insurance, check out company policies, even look at the news-all with easy-to-use browser-based applications."

How can your company use intranet-based applications to improve employee efficiency?

Strategic Importance of the Network

What is the value of a reliable network infrastructure? The performance and reliability of the Cisco network, as well as its support for Web-based applications, contribute to the smooth functioning of the Wal-Mart supply chain and to the continued effectiveness of Wal-Mart associates. "Having a network that is designed to meet our business requirements-growth, future functions, cost savings, and reliability-gives us a competitive advantage," says Flanagin. "We're utilizing technology to provide customer satisfaction, everyday low pricing, and an enhanced shopping experience," he explains. "By supplying the products we need and acting as our trusted advisor, Cisco plays a primary role in helping us achieve our objectives."

What are the mission-critical services your network provides? What kind of performance is your network infrastructure supporting?

Lessons for All Companies

Final text Internet Business Solutions help companies like Wal-Mart satisfy their

customers, providing the products they want with the quality and low prices they expect-critical factors in today's highly competitive marketplace. To be successful with Internet Business Solutions, you need networked applications that support your corporate vision and also integrate well with existing systems-and a reliable, high-performance network to deliver them. Cisco can help you put this together. Cisco, the worldwide leader in networking for the Internet, is an Internet Business Solutions success story in its own right. The Cisco Internet-based business model has helped Cisco quadruple in size during the past three years while achieving an annual financial impact of more than $550 million in operating cost savings and headcount avoidance. Today, with Web-site sales of more than $32 million per day, Cisco is one of the world's leading electronic merchants. Call to action Cisco is committed to helping other companies succeed in the Internet economy. Contact Cisco today to learn about Internet Business Solutions-including Internet-powered business methodologies, Internet-powered application frameworks, and networking reference architectures-and to assess the readiness of your network to support them.