IBM

Safeway achieves growth and profitability through innovative supply chain management.

Application	Web-based supply chain management application
Business Benefits	$1.2 million "interface" cost savings during trial year; 100% return on investment; 5% improvement in supplier service levels; 10% improvement in promotional forecasting accuracy; 100% reduction of "interface" costs with suppliers
Software	IBM® DB2® IBM Net.Data® IBM CICS® IBM OS/390® Java™
Hardware	IBM S/390® Parallel Enterprise Server™ IBM RS/6000® SP™ Servers IBM Network Computers IBM 4694 EPOS Terminal
Services	IBM Global Network™

Every day, Safeway bets its profitability on its agility to navigate the very thin line between overstock and out-of-stock for about 20,000 grocery items at more than 500 stores. Order too much, and Safeway is stuck with the costs of wastage, excess handling and inventory. Order too little, and Britain's third largest supermarket chain loses a sale and risks customer dissatisfaction.

By combining flexible and reliable IBM e-business technology with advanced supply chain integration, Safeway accurately choreographs the complex interplay between the changing demands of its customers and the capabilities of its suppliers.

"IBM has provided the reliable tools and systems integration that allow Safeway to effectively meet its strategic goal of synchronizing supply and demand."

– Danny Edsall, Business Solution Manager for Safeway, Hayes, United Kingdom

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e-business

Safeway combined IBM e-business technology with advanced supply chain management to meet the changing demands of its customers.

The result – the right product at the right time at the right place, maximizing both profitability and customer satisfaction.

"We've gone beyond the traditional view of just looking at our own corporate capabilities. We now understand that our growth and profitability will come from managing and improving the end-to-end process that delivers goods from the suppliers into the hands of customers," says Danny Edsall, business solution manager for Safeway in Hayes, United Kingdom. "That involves a better understanding of our customers, improved internal efficiencies and increased cooperation with suppliers."

Safeway Stores plc, headquartered in London, has about 525 Safeway and Presto stores across England. The grocery chain (not affiliated with the U.S. Safeway chain), with sales approaching $11 billion, has 70,000 employees, servicing 6.5 million weekly shoppers.

Strategy drives demand, reduces expense, ensures realtime information

One of Safeway's strategies is built on improving processes and increasing collaboration – both within the company and with the chain's 2,500 suppliers. To implement its strategy, the company developed the Safeway Supplier Information System (SIS), which uses the Internet and Java technology to understand and drive customer demand as well as help eliminate the "interface" costs between Safeway and its suppliers. These interface costs, which can reach as high as 25 percent of the total price, represent such non-value-added expenses as storage, wastage and fulfillment problems.

SIS, which gives suppliers realtime views of sales and stock levels to ensure timely replenishment and improve promotional planning, is built on two core concepts. First, it is an attempt to elevate the classic antagonisms of buyers and sellers into an understanding that the profitability of both will improve if they remain focused on satisfying the customer's requirements. And second, it seeks to provide the realtime sales and information required to ensure effective collaboration, timely replenishment and more targeted promotions.

SIS is based on efficiently collecting, analyzing and disseminating sales and other data via the Internet to suppliers. Initially, sales and inventory data is collected from IBM 4694 EPOS Terminals and from systems that monitor inventory in stores and distribution centers. This data drives sophisticated forecasting and replenishment systems, which combine historical trends with current demand to predict how much consumers are likely to buy. The results drive store replenishment and supplier orders. All this information is stored securely on IBM S/390 Parallel Enterprise Servers, in Safeway's DB2 parallel data warehouse using IBM CICS Transaction Server software.

Within seconds, information on actual sales, store inventory and shelf space is available to suppliers equipped with Internet access and any standard browser. According to Edsall, "We have an open book on all key measurements. If we know it is useful, we will share it with our suppliers."
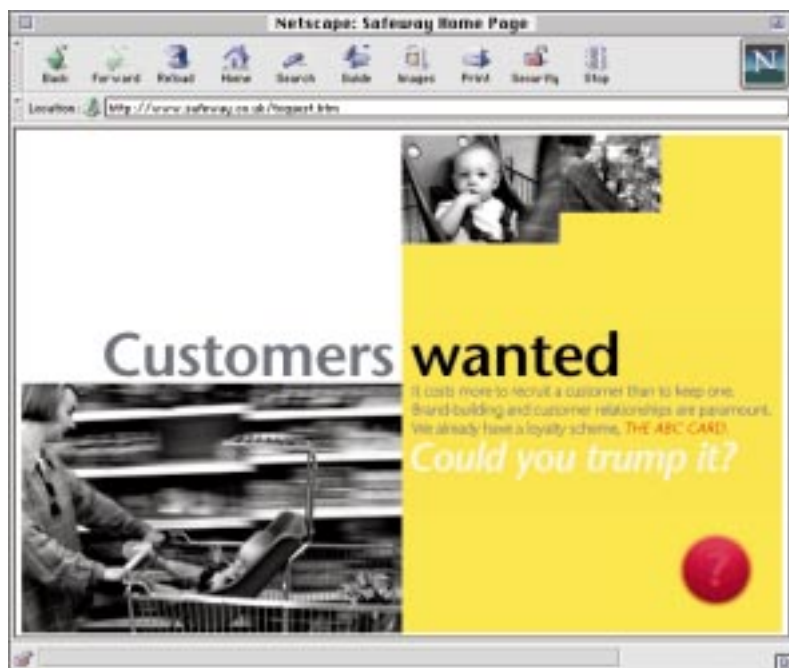
Detailed customer insights, combined with collaborative supply chain relationships, take Safeway to the next generation of retailing.

Because of the flexible IBM infrastructure already in place and the functionality of IBM's e-business technology, the main obstacle to implementation was not technological but cultural. "Both Safeway and its suppliers had to adopt new attitudes toward the sharing of information that had once been considered confidential," says Edsall. "The entire relationship between buyer and seller, once driven solely by a narrow focus on cost, had to be redefined to emphasize the common goal of serving the ultimate customer."

Typically, a supplier might request, via a browser-equipped PC or network computer, a report on product sales among Safeway stores. The request is formatted into an SQL query by IBM Net.Data, which serves as a connectivity gateway between DB2 databases and Web servers. After DB2 returns the query results, Net.Data formats the data into HTML pages that feature Java applets used to build graphs. The supplier sees the requested information in a clear, understandable format that can easily be downloaded to the firm's own enterprise resource planning (ERP), spreadsheet and other systems. Workers can input data concerning the availability of the supplier's own products easily into the system via the browser, and suppliers can receive "news flashes" about product sales.

Safeway's suppliers are using its supply chain management system to keep their products in stock in more than 525 stores across England.

Security is maintained by the use of industry-standard, SSL (Secure Sockets Layer) encryption as well as authentication procedures involving user IDs and passwords. IBM Global Network provides additional transmission and firewall security, while the IBM RACF® component of OS/390 is used for database security.

Workflow improves supply chain management

SIS provides other capabilities as well. A workflow tool allows Safeway managers and supplier managers to collaborate on upcoming promotions and track such preparation as printing and in-store displays. Previously, suppliers would independently suggest promotions to Safeway account managers. These managers would take several weeks to check resource availability, potential conflicts with other promotions and other issues. If the promotion was approved, both firms would operate independently until a final check close to the start of the promotion. Occasionally, miscommunications or inaccurate forecasts would lead to either expensive last-minute product sourcing or lost purchasing opportunities.

But SIS enables a strategic, collaborative approach toward promotions. Safeway buyers and supplier account managers now plan promotions on an annual basis. These promotions are then tracked and synchronized during implementation by the appropriate buyers and suppliers. During the promotion, production can be ramped up or inventory shifted to meet variable consumer demand. SIS captures the data from the promotion, which allows the participants to analyze effectiveness. More importantly, this data is stored to provide a

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historical baseline for future promotions. Performance and other reviews are much more effective because all participants can view objective data against original expectations.

Suppliers can send e-mail that is contextually linked to the Web pages they are browsing. They can also look up key contacts at Safeway, research organizational structures and review contract terms and conditions. At the same time, Safeway managers can learn about supplier production capacity, available inventory, delivery frequencies and lead times.

Despite its advanced capabilities, SIS was initially conceived and rolled out in about 12 weeks at the end of 1997. The speed of the development was due to the flexibility of the existing IBM infrastructure as well as the capabilities of Java and Net.Data. By keeping data centralized and taking advantage of the universal reach of the Internet, the "write-once, run-anywhere" capabilities of Java allowed Safeway to extend the functionality of SIS quickly throughout the company and even to smaller suppliers.

The system is still under development, with releases scheduled every 3-4 months. These releases incorporate new IBM e-business technologies as well as supplier input. SIS is expected to be fully implemented by the end of 1999 at a total cost of less than $1 million. Safeway has already recovered its initial investment.

SIS receives high marks

According to Edsall, SIS has been enthusiastically accepted by all suppliers. The benefits were so compelling that it encouraged several suppliers to begin to use the Internet within their operations.

Safeway estimates that SIS has contributed to a five percent improvement in supplier service levels that measure deliveries to approximately 20 distribution centers and individual stores, translating into more working capital for Safeway. "The major benefits of improving supplier service levels flow from being able to spot and mitigate the damage of stockouts or production problems by dealing with them effectively," says Edsall. "By spotting a production problem early, Safeway can avoid disappointing tens of thousands of consumers." Benefits also include a 10 percent improvement in promotional forecasting accuracy and a major reduction in wastage and obsolete inventory, estimated to be $1.2 million in its first year of trial.

Safeway's strategic initiatives have paid off. Compass, a well-known UK consulting organization, recently honored Safeway as the most cost-efficient and productive organization in Britain.

Forging partnerships that last

The scalability and flexibility of IBM's solutions have enabled Safeway to leverage earlier IBM investments in its IT infrastructure. At the same time, continuing IBM advances in e-business technology are letting Safeway harness the Internet to both lower the costs of computing and extend collaborative relationships out to even the smallest suppliers. According to Edsall, "IBM has provided the reliable tools and systems integration that allow Safeway to effectively meet its strategic goal of synchronizing supply and demand."

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