

# Staples makes it easy for online customers and becomes a more flexible and successful business.

## Overview

## Business Challenge

With its online channel a critical part of its growth strategy, Staples needed a commerce platform that would support and fuel its online business growth—not constrain it. Staples needed more flexibility to pursue creative, customer-centric business strategies.

## Solution

Teaming with IBM to deploy a powerful and flexible online commerce platform, Staples leveraged it to create a series of groundbreaking services on Staples.com that have set a new standard for delivering customer value.

## Key Benefits

- 60% increase in online conversion rate
- Increase in customer satisfaction
- 30 percent increase in peak transaction volume with no adverse impact on performance or reliability



With 2006 sales of \$18.2 billion, Staples serves consumers and businesses ranging from homebased businesses to Fortune 500 companies in 22 countries throughout North and South America, Europe and Asia. Staples Business Delivery is a unified selling channel that combines staples.com and Staples' catalog business.

In the decade since online retailing burst onto the scene, the role it plays within retailer strategies continues to evolve. At first seen as a necessary supplement to retailers' traditional strategies, online stores now play a first-tier role within retailers' overall channel portfolios—and their importance continues to grow. Behind this steady progress is a long trail of challenges that have been

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#### **Business Benefits**

- 60% increase in online conversion rate
- · Increase in customer satisfaction
- 30 percent increase in peak transaction volume handled, reaching a high of 9,000 orders per hour (or 2.6 transactions per second) with no adverse impact on performance or reliability
- Ability to bring differentiating services and programs to market more rapidly and efficiently
- Support for rapid business growth through increased infrastructure scalability and resiliency

overcome, as retailers have gained more experience and commerce technology has become more mature and standardized. Some of the biggest improvements in online commerce practices have been in the area of multi-channel integration, creative merchandising, product search and the overall streamlining of the user experience. With the kinks that plagued the early days of Web commerce largely worked out, online retailing has clearly reached a new level of sophistication, manifested by the growing share of revenue retailers have gleaned from their online sales.

But online retail is a perpetual work in progress, with the boundaries of the online purchasing experience continually being pushed by the retailers that have done much to shape it to date. Staples, whose aggressive development of their Web channels has placed them among the top two eRetailer sites, is one such retailer. The growing volume of business generated by its two sites—Staples.com (targeted to small businesses and home offices) and StaplesLink.com (targeted to larger businesses)—has been a major factor in the company's overall top-line growth. Both channels figure prominently in the company's long-term growth strategy.

To achieve the high rate of growth it envisions in the small business/ home office segment, Staples realized it needed to realign the technology that powered the Staples.com site to make it better able to support the company's business strategies and meet the growing competitive demands of the market. Perhaps the most basic requirement was the ability of the Staples.com infrastructure to handle volume surges with no loss of performance or reliability, which customers have come to expect. But while Staples viewed reliability and performance as foundational requirements, it also realized that the ability to execute business initiatives with speed and flexibility was increasingly essential to staying ahead of the competition and delivering an online experience that kept customers coming back. Due to complexity and functional limitations, its existing systems fell short.

# Lessons from within

For guidance, Staples only had to look inside the company. Not long before, Staples had worked with IBM Global Business Services to move the StaplesLink.com site to an entirely new platform based on IBM WebSphere Commerce. The result was a sharp improvement in performance and scalability. Seeing this positive experience as directly relevant to the future of Staples.com, the company again teamed with

"The fact that we are more flexible and responsive as a business made us a leader in the office supply market."

 Christine Putur, Vice President, Information Systems, Staples North American Delivery and Supply Chain IBM Global Business Services in a broad engagement involving software, hardware and services. The new, more consolidated Staples.com architecture is built on IBM System p servers, chosen for their power, scalability and efficiency. IBM WebSphere Commerce, the key software element of the solution, runs on IBM WebSphere Application Server and utilizes IBM DB2 to store the site's customer and transaction data. IBM Global Business Services worked closely with Staples in designing, deploying and integrating the solution with Staples' backend systems (using IBM WebSphere MQ).

In the big picture, Staples saw its new commerce platform as the foundation of a new way of interacting with its customers. And while the new platform's performance and scalability would prove essential to future growth, its biggest strategic benefit would be in enabling Staples to create a truly unique retail experience built around the needs of the customer. While the benefit of customer-centric features like personalization and customer profiling were well established, Staples sought to take them to an altogether new level. Underpinning Staples' emerging vision was an awareness of a changing dynamic in the online office supply marketplace. For one, Staples saw customer retention becoming a higher strategic priority, largely because of the high cost of establishing new customer relationships. At the same time, it saw that its customer base was becoming increasingly pressed for time and demanding of speed and simplicity. To Staples' strategists, the new commerce solution helps meet this challenge by making it easier to bring groundbreaking capabilities to market more rapidly. In this way, the Web site is able to support Staples' "easy" brand promise.

# Meeting the need

To better understand its customers' needs, Staples went straight to the source, conducting an extensive field study designed to gather fine-grained details of customer ordering behavior. One of its central findings was that customers were in desperate need of a more organized way to inventory and order their office supplies. Staples responded by rolling out a service called Easy Reorder, which uses a customer's ordering history to calculate ordering patterns and create a comprehensive, pre-assembled list that is updated with each order. With its research pinpointing the rebate submission process as another pain point for customers, Staples also introduced Easy Rebate, which enables customers to submit rebates online, with all supporting information automatically forwarded by Staples. These examples show how Staples is focusing its innovation efforts on creating a truly differentiated experience that makes life easier for its customers, encouraging more browsers to buy and more buyers to return. The fact that conversion rates—the share of online shoppers that go from browsing to buying—have risen 60 percent attests to the effectiveness of this approach.

With a superior customer experience driving more business on the Staples.com site, the company's powerful new infrastructure has more than kept pace. This was in evidence on Black Friday (the day after Thanksgiving) in 2006, when

# **Key Components**

#### Software

- IBM WebSphere® Commerce
- IBM WebSphere Application Server
- IBM DB2®
- IBM WebSphere Message Broker
- IBM WebSphere MQ

#### Servers

IBM System p<sup>™</sup> servers

## Services

- IBM Global Business Services
- IBM Software Group Lab Services

#### Timeframe

• Design, deployment and integration 2 years

# Why it matters

Staples teamed with IBM to create a series of first-of-a-kind services on its Staples.com site that deliver revolutionary order automation capabilities. Staple's newfound ability to introduce stand-out services faster than its competitors has contributed to 30% online sales growth—making it the number two online retailer.

volume on Staples.com exceeded 9,000 orders per hour (or 2.6 transactions per second) with no impact on performance or reliability. This record—a 30 percent increase over the previous volume mark—attests to the inherent robustness of WebSphere Commerce and the System p platform, which represent the core of the Staples.com architecture. Importantly, it also reflects the impact of specific IBM core technologies like the dynamic caching capability of WebSphere Application Server—known as WebSphere DynaCache—which contributes to the site's consistently high level of performance.

#### A more flexible future

While Staples sees intensifying competition in the retail office supply market as a significant challenge to its growth goals, it considers the online channel a powerful source of differentiation. A key reason is that online channels represent the fastest way for retailers to respond to customer needs with new services and other sources of value. By combining a scalable processing infrastructure with the rich functionality of the WebSphere Commerce platform—Staples now has more flexibility to execute creative business strategies rapidly—without the encumbrance of complex systems. The goal of increased business flexibility has also driven Staples to introduce a service oriented architecture (SOA) framework into its broader IT strategy, with the aim of uncoupling and sharing services across the Staples enterprise. These efforts, made in collaboration with IBM, employ IBM WebSphere Message Broker as the core integration technology.

Pete Howard, Senior VP of Staples Business Delivery, the division responsible for staples.com, sees the new commerce platform as an important pillar of future growth. "By giving us the means to create an innovative, more customer-centric buying experience, the IBM solution is helping us deliver more value to customers, which has helped us increase their satisfaction and loyalty," says Howard, pointing to a 28 percent increase in 2006 companywide online revenues—to \$4.9 billion—as evidence. Christine Putur, Vice President, Information Systems, Staples North American Delivery and Supply Chain, added: "In addition to providing a rich customer experience from a business feature perspective, we are also able to scale the environment as the business grows and provide excellent performance for our end users."

# For more information

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Produced in the United States of America 8-07

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