



Let's build a smarter planet



Smart is...

Smarter Commerce: Precision marketing lifts revenues

Staples is a trusted source for office solutions and the world's largest office products company. The company was looking to improve the Staples.com customer experience relative to performance, reduce TCO and increase the flexibility of the infrastructure for more nimble future releases.

Staples turned to IBM and IBM Global Services to deliver a next generation platform that would provide a differentiating customer experience on Staples.com for years to come. IBM servers increase the scalability of the site while improving site performance and enable the company to test changes for impact on the customer experience—at a lower cost.

Staples, Inc.

IBM WebSphere Commerce software and IBM POWER7 servers improve performance

Staples invented the concept of the office superstore in 1986 when it opened its first store in Brighton, Massachusetts. Fast-forward 25 years, and Staples is the largest office products company in the world, serving businesses of all sizes and consumers in 26 countries with sales of \$25 billion as of 2010, and 90,000 associates. The company provides products, services and expertise in office supplies, copy and print, technology, facilities and breakroom, and furniture.

Staples prides itself on making its customers' buying experience "Easy." The company's brand promise is "We bring easy to your office."

So whether online, via phone or in one of its stores, Staples works diligently to ensure its customers can do business quickly and reliably. Once seen as a necessary supplement to retailers' traditional strategies, online channels now play a first-tier role. The company's success in the brick-and-mortar world is mirrored online, where Staples has the second-largest Internet retail revenue in the world with \$10.2 billion in 2010 sales, 42 percent of the company's total revenue.¹

Personalized selling, with speed and simplicity

"We are planning to be an even larger player in e-commerce as we grow our omni-channel strategy," says Ken Moore, Vice President - IT, North American Delivery. Staples began exploring the improvement and enhancement of its already powerful web site to continue the focus on customer retention. At the same time, Staples observed that its customer base was increasingly pressed for time and demanded high degrees of speed and simplicity. These factors taken together pointed to the need to deliver a much more personalized shopping experience to its online customers to live up to its Easy brand promise.





Business benefits

- Up to 55 percent performance improvement for page loads
 - Anticipated increase in market basket size, conversion rates, retention rates and revenue
 - Tens of thousands of dollars in energy cost savings in the first year and lower TCO for server platform
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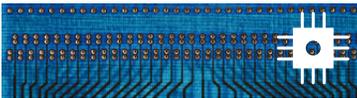
The cost of the server platform was also a major factor. “We couldn’t grow our ability to handle peak capacities without a major investment,” says Moore. “And we also wanted to do performance testing alongside production to be able to predictably model what changes are going to feel like from a performance perspective. The goal was to ensure that our customers would have a great site experience relative to performance. We wanted to decrease our total cost of ownership for the hardware technology while increasing flexibility and scalability for the future.”

Staples had been running its existing web site for five years with IBM® WebSphere® Commerce on IBM POWER5 and POWER4 processor-based servers. Due to its success with this platform, the company decided to develop its new release with IBM WebSphere Commerce Version 7 and other IBM software on IBM Power® 780 and 750 servers to increase scalability, flexibility, personalization and customer satisfaction with the website.

Spectacular savings with server consolidation

Staples took 35 older servers off the floor and replaced them with seven IBM POWER7® processor-based servers, reducing rack space requirements from 256 units to 112, or 56 percent. The saved space can be used for other projects. Reducing the number of servers from 35 to seven, cut hardware and firmware maintenance requirements by 80 percent. The consolidation on more powerful, energy-efficient servers, enhanced with IBM EnergyScale™ Technology, reduced energy consumption by up to 65 percent, potentially saving tens of thousands of dollars in the first year. Thermal output has been reduced by 65 percent, potentially saving tens of thousands in costs in the first year. “IBM helped us build a server platform able to scale to future growth at a lower TCO,” says Moore.

Smarter Commerce



Instrumented

Whether by web access from a site kiosk in a Staples store, from smart phones or office desktops, customers have access to a portal tailored just for them.



Interconnected

The customer’s web commerce presence and the commerce engine are integrated with its enterprise systems. Linkages are provided to web services to perform real time address validation, set delivery expectations, or track packages in transit.



Intelligent

Precision marketing campaigns enable the retailer to serve different ad areas to different customer segments, providing the right targeted marketing message to the right customer.



Solution components:

Hardware

- IBM® Power® 750 servers
- IBM Power 780 servers

Software

- IBM DB2® 9.5
- IBM Rational® Application Developer
- IBM WebSphere® Application Server, Version 7.0
- IBM WebSphere Commerce, Version 7.0
- IBM WebSphere MQ

Services

- IBM Accelerated Value Program for Software
 - IBM Global Services
 - IBM Global Services – Application Services: IBM GBS Application Innovation Services
 - IBM Software Lab Advocate Program
 - IBM Toronto Labs
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Driving e-commerce revenue growth with IBM technology

IBM WebSphere Commerce 7, the key software element of the solution, runs on IBM WebSphere Application Server and utilizes IBM DB2® database. IBM WebSphere MQ reliably transports messages internally to enable fast responses to transaction demands, and IBM Rational® Application Developer provides optimal development of IBM middle-ware. IBM Global Business Services worked closely with Staples in designing, deploying and integrating the solution with Staples' backend systems.

“Precision marketing”—a personalized online shopping experience—allows Staples to serve different ad spots to different customer segments and provides the right targeted marketing message to the right customer. This capability was crucial to Staples' stated strategic goal of increasing retention of its high-value customers while also driving larger basket sizes and higher conversion rates. Precision marketing, supported by web analytics tools, creates direct benefits that are reflected in sales uplift.

Offering the right product at the right price

Staples is testing the WebSphere Commerce Management Center business tooling to give its marketers the ability to drive different messaging and click behavior to customers according to customer attributes. These can range from whether or not they are a first-time user of the site, to which zip code they reside in, to past purchasing behavior. Marketers can bring these variables into a campaign utilizing a graphical environment and pull-down menus. Campaign creation and scheduling can be managed through workflow for proper approvals and previewed on the site internally before it goes live, all without the intervention of IT staff. The ad spot will then display different content to different customers based on who they are and what customer segment they belong to.



“This was the smoothest platform upgrade that we’ve ever done. We’re thrilled with the partnership that IBM brought to us with services and products to make it that smooth.”

— Ken Moore, Vice President - IT, North American Delivery, Staples, Inc.

In addition, Staples secured a future benefit when it migrated to an extended sites model. The extended sites framework sets the foundation for future capabilities whereby the company will be able to serve multiple sites from a single code base and infrastructure (and by extension, obtain more efficient use of that infrastructure). The retailer will also be able to utilize the extended sites functionality to provide microsites targeted for specific events and/or customer segments.

“The smoothest platform upgrade ever”

In delivering the new platform for staples.com, Moore has high praise for IBM Global Services and IBM products. “I was a founder of the original Staples.com in 1998,” he says. “The site has gone through a number of upgrades of varying sizes including a complete re-platform onto IBM in 2005. And this was the smoothest platform upgrade that we’ve ever done. We’re thrilled with the partnership that IBM brought to us with services and products to make it that smooth.”

A direct line into product development experts at IBM Toronto Labs through the IBM Software Lab Advocate Program provided quick answers to questions during the project. Staples is also a member of the IBM Accelerated Value Program for Software, which assigns an advisory team to Staples to build a foundational understanding of its environment in order to facilitate faster deployments and risk mitigation. “Staples has had a longstanding relationship with IBM Global Services as well as IBM Software Services for WebSphere,” says Moore. “They do a nice job at having people who are familiar with our environment and continue to stay engaged with us, so we bring them back for events such as this.”

Up to 55 percent performance improvement

Although Staples does not share financial information about the results of the platform upgrade, precision marketing with personalized ad spots is anticipated to increase customers’ market basket size, provide a higher conversion rate from shopper to buyer, and therefore drive revenue and customer retention, since customers feel that the retailer truly understands their needs. “Staples.com is part of our \$10 billion in global e-commerce sales and we expect to see the new Staples.com platform help us better meet our customer’s changing needs and drive growth in our e-commerce sales,” says Moore.



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“From a performance perspective, we saw customer experience and page download times improve anywhere from 25 percent to 55 percent with the move to IBM POWER7 servers,” he continues. “That’s substantial, especially when you consider mobile computing over a 3G or 4G connection delivering the same great experience that our desktop users get—that’s very important for us.”

One of the bigger appeals for Staples with its new web site release on the POWER7 architecture is the servers’ flexible workload capability provided by IBM PowerVM™ technology. “We can shift capacity around so that if our production system is in a lower volume period, say, overnight or on a weekend, we can actually take capacity away on the fly and put that into another environment to do performance testing,” says Moore. “That helps us deliver an “Easy” web experience by seeing the impact of changes from our customers’ perspective first, and it helps us be more customer-centric, which is the purpose of everything we do.”

► The inside story: Getting there

E-commerce fit for the future

Staples was making significant investments in its business capabilities to meet objectives and needed an IT platform to help it achieve these goals. Going through a major upgrade every two or three years would be a disruption to its business, and was not the way it wanted to prepare for future growth.

“The notion of having a core-based platform in IBM’s new product roadmap with feature packs was very appealing to us,” says Ken Moore, Vice President - IT, North American Delivery. “Being able to take specific targeted functionality out-of-the-box with WebSphere Commerce and doing a feature pack install versus a full product upgrade would enable us to make smaller commitments in the future. Being tied to doing forklift upgrades was something that we viewed as very limiting in our previous platform. IBM’s move to incremental business releases also made it easier to sell the idea of a technology upgrade to senior management.”

For more information

Contact your IBM sales representative or IBM Business Partner, or visit us at: ibm.com/websphere

For more information on Staples, visit: www.staples.com



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¹ <http://www.internetretailer.com/2011/03/11/web-accounts-42-sales-staples>



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