

SciQuest.com e-marketplace makes buying laboratory supplies elementary.

Application

B-to-B e-marketplace for scientific laboratory equipment and supplies

Business Benefits

\$5.1 million in first quarter revenues this year and \$2.6 million in fourth quarter revenues last year; projected \$1 billion in revenue in 3 years; more than 140,000 user sessions per month; est. 80% less time to find and purchase products; 70% reduction in order processing costs

Software

IBM WebSphere™
Application Server,
Advanced Edition
IBM WebSphere
Commerce Suite
IBM DB2® Universal
Database™ for AIX®
IBM MQSeries®
IBM Net.Data®
Lotus® Domino™
Lotus Notes®

Hardware

IBM RS/6000®

Scientific research laboratories are the breeding grounds of innovation. Many of the great advances achieved throughout history would have been unthinkable without proper tools for study and speculation. But, finding such tools typically requires laboratory procurement staff to browse through hundreds of dense catalogs from a seemingly endless list of suppliers. Now, SciQuest.com, Inc., based in Research Triangle Park, North Carolina, has developed an e-commerce Web site that makes it easy for researchers to find and purchase the equipment they need, from rubber gloves to microscopes.

"We're extremely pleased with the advanced functionality of WebSphere Commerce Suite, which simply makes the management of our e-marketplace easier—in terms of time and cost."

-David Skowron, Vice President of Technology, SciQuest.com, Inc.



SciQuest.com's B-to-B e-marketplace offers more than one million laboratory supplies and equipment from 600 suppliers.



It's about business, not just technology.



IBM e-business solutions help companies like SciQuest.com grow big fast.

"In our industry, you need the ability to handle a high volume of new information quickly. WebSphere Commerce Suite and DB2 Universal Database enabled us to do just that, making it possible for us to open our doors to millions of potential customers within weeks."

-Scott Andrews, CEO, SciQuest.com, Inc.

SciQuest.com's business-to-business (B-to-B) e-marketplace, located at www.sciquest.com, was developed using IBM WebSphere Commerce Suite and IBM DB2 Universal Database for AIX. IBM WebSphere Application Server, Advanced Edition was used to develop applications that support the company's back-end business processes. Since launching the e-marketplace last year, SciQuest.com has seen user sessions skyrocket, now reaching more than 140,000 per month. Revenues are soaring as well, with \$2.6 million in the fourth quarter of last year and \$5.1 million the first quarter of this year. "In our industry, you need the ability to handle a high volume of new information quickly," says Scott Andrews, chief executive officer at SciQuest.com. "WebSphere Commerce Suite and DB2 Universal Database enabled us to do just that, making it possible for us to open our doors to millions of potential customers within weeks."

Consolidating information on more than one million items from approximately 600 vendors and storing it in DB2, SciQuest.com has eliminated much of its customers' procurement paperwork. This gives the customers a one-stop solution for all of their laboratory supply needs. "Buying supplies through SciQuest.com reduces the average time needed to find and purchase products by an estimated 80 percent," notes Andrews. "Since launching our e-commerce Web site, our user sessions have tripled."

Start small, grow fast

Before opening its online store, SciQuest.com conducted some thorough research of its own. The company first launched an informational Web site and product-sourcing service in 1995, based on a powerful search engine and an online database. This venture strengthened the company's understanding of its market. During this time in its development, SciQuest.com relied solely on advertising revenue to support its business.

However, SciQuest.com's founders had a much broader vision of what their Web site could become. As former sales professionals for Baxter Scientific Products, they were well aware of the frustrations experienced by scientists and researchers when purchasing laboratory supplies. They also understood the myriad problems associated with selling supplies. "Industry analysts estimate that Internet procurement automation like SciQuest.com's could reduce requisition-processing costs by 70 percent per order, from \$107 per manual order to \$30 per automated order," notes Rob Fusillo, chief information officer at SciQuest.com. "From the outset, our goal was to utilize the Web to both reduce transaction costs and increase the value of the average order by allowing customers to purchase from a single vendor."

To facilitate the transition from information provider to online distributor, SciQuest.com needed a robust e-commerce solution that would integrate powerful search capabilities with easy-to-use online shopping functions. "Two years ago, we evaluated nearly every major e-commerce product on the market, including products from Microsoft, Oracle and Netscape," recalls David Skowron, vice president of technology at SciQuest.com. "Our final decision was based on an evaluation of product scalability, flexibility and price—and IBM Net.Commerce won hands down. This decision was reconfirmed when we recently reevaluated our burgeoning business needs and opted to migrate to WebSphere Commerce Suite, which we believe is the most comprehensive, robust e-marketplace solution today."

The e-marketplace is hosted on multiple IBM RS/6000 Enterprise Server Model H70 servers for redundancy and delivered by IBM HTTP Server. At the heart of SciQuest.com's online catalog is DB2 Universal Database for AIX, residing on an IBM RS/6000 Enterprise Server Model F50. DB2 stores all of SciQuest.com's business-critical information, including product specifications, vendor information and customer purchase histories for tracking orders. Front-end Web queries and transactions are connected to enterprisewide information using IBM Net.Data and Java™ servlets. Net.Data macros and JavaServer™ Pages (JSP) deliver the results to the user's Web browser. "WebSphere Commerce Suite gives us the flexibility to employ more advanced technologies, such as JSPs and Enterprise JavaBeans™ (EJBs), while simultaneously supporting existing technology applications such as those developed using Net.Data," notes Skowron. "We're thus able to deploy new applications and build more functionality without replacing our existing infrastructure."

The WebSphere Commerce Suite solution is connected to SciQuest.com's back-office order processing and financial reporting applications using IBM MQSeries. "We've been able to dramatically reduce development time using MQSeries, integrating our internal enterprisewide applications as well as supplier back-end systems to front-end Web transactions," says Fusillo. To protect its critical information from unauthorized access over the Web, SciQuest.com uses IBM eNetwork™ Firewall.

SciQuest.com recently launched an online auction on its Web site powered by Lotus Domino and Lotus Notes. Customers can now submit bids for used and refurbished laboratory equipment. An e-mail response confirming receipt of a bid is sent using Lotus Notes. Items for bid are posted to the Web site with Domino. SciQuest.com plans to migrate the auction functions to the newest release of WebSphere Commerce Suite later this year, citing its support for Java technology and XML as key factors. "We'll be able to integrate front-end auction transactions with back-end distribution systems," says Skowron. "We're extremely pleased with the advanced functionality of WebSphere Commerce Suite, which simply makes the management of our e-marketplace easier—in terms of time and cost," notes Skowron.

"The fast development cycles facilitated by WebSphere Application Server allowed us to meet an ambitious production schedule."

-Rob Fusillo, CIO, SciQuest.com, Inc.



Online ordering — provided by IBM WebSphere Commerce Suite — makes laboratory supply procurement easy.

Fast production cycles open doors to market

Because it never had a brick-and-mortar storefront, SciQuest.com needed to build its retail enterprise from the ground up, complete with back-end transaction processes, including fulfillment and accounting. WebSphere Application Server, Advanced Edition played a key role in developing the applications that would manage these transactions.

To develop these applications, SciQuest first identified the features that would deliver the largest business impact in the shortest amount of time. After conducting detailed analyses of its business needs, SciQuest.com deployed a series of Java servlets running within the WebSphere Application Server environment to manage complex processes such as order acquisition, generation of vendor purchase orders, customer invoicing and order tracking.

Developing with WebSphere Application Server allowed SciQuest.com to design a platform-independent system for optimal flexibility in a short time. "The fast development cycles facilitated by WebSphere Application Server allowed us to meet an ambitious production schedule," says Fusillo.

Web site success spurs company growth

While the system's architecture is complex, the connection between all of the elements that make up the e-marketplace are invisible to the end user. Logging on to the site with a user name and password, customers can conduct product searches, compare prices and make purchases. Behind the scenes, individual purchase orders for each of the vendors involved are created, the customer's credit status is verified and the account history is updated. And while these transactions are not seen by the customer, what is clearly visible to any observer is the accelerated growth that SciQuest.com is experiencing as a result of its e-marketplace.

When the project began more than two years ago, the company employed approximately 15 people. Since then, the staff has grown to over 300 employees, including Web site developers, sales personnel and high-level executives. Today, the company that once sold advertising space on its site thrives on its online sales revenues.

Considering the average expense budget of its customers — which include academic research institutions, public health organizations and large pharmaceutical companies — SciQuest.com has carved a highly profitable niche in the e-commerce marketplace. By carefully choosing the tools to deliver its core business services, SciQuest.com has delivered a Web site that offers its customers a fast, easy-to-use and cost-effective alternative to traditional catalog shopping. "We recognized early on that IBM had a strategic vision for its e-business solutions," says Andrews. "It is a vision that complements our own business goals, assuring us that we will have the best products and support in the long run."

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For more information about SciQuest.com, Inc., visit: www.sciquest.com



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