Global Information Provider Reinvents Itself

Migration to Web-based, interactive environment unlocks new revenue streams across key sectors.

As a leading provider of information, a company serves more than 30 million scientists, students and health and information professionals worldwide. With roots in book and journal publishing going back more than 100 years, much of the company’s operational data resided on a mainframe. By 2008, the company’s management determined it was critical to modernize its technological backbone to enable faster cycle times and improved efficiency.

The company collaborated with us to develop a series of new products and thus open up a business model with potential new revenue streams that would better leverage its information assets, globally. The company succeeded in reducing both costs and cycle times, and will now continue to virtualize its workforce and content development process for greater efficiency.

Eliminating the Cost of Mainframe Support

In 2008, the company initially enlisted our help to manage the IT operations for its technology business unit. The premise: Rely on our global scale and expertise to reduce heavy mainframe maintenance costs and free additional resources for its core information business. The company was spending a large sum of money monthly to maintain the data on its mainframes. A systems migration onto a MarkLogic database running on a Linux server would eliminate costly mainframe support while easing data access across the company’s global locations.

The company also had in its sights improvements to the reliability, availability and performance of its systems. The company wanted to improve application downtime and usability of its mainstream products; it looked to us to help resolve these challenges.

Short-term objectives for the five-year, multi-million dollar engagement: reduce development and support costs, improve development and maintenance, reduce the application performance-related problems and speed time to market.

In parallel to the migration off the mainframe system, our team also took on development of a new product suite. Initially, this suite would contain Web-based versions of legacy products the company had gained in recent corporate acquisitions. Since information is the company’s area of expertise, the five products that made up the suite each covered a specific discipline. Our team used an Agile development methodology to increase flexibility and timeliness.
For example, the first product we developed for this company was an application for scientists to search for and discover sources of funding for their latest projects, facilitating communication between the researchers and funding institutions. Other applications include a database with extensive information about hazardous materials, a database of ongoing scientific research projects, a data repository for university officials, and finally, a description of how to compose particular chemical compounds.

The new product suite was very crucial in maintaining the leadership status for our client. The company also decided to open the data for its products to the global developer community to build upon. Developers can create widgets that go on top of each product, enriching its value to users.

For example, an add-on to a database product might include the ability to search on different data sets in addition to the company’s native data so the end user can obtain a more comprehensive and up-to-date view. The fees from developers presented a new revenue stream and business model for the company. And it now has an application marketplace for its scientific information product set. The end result: The company is making more effective use of its global content thanks to its new systems capabilities and business model.

The company has seen a significant productivity improvement and corresponding cost reduction year on year. Also, the migration from mainframe to the MarkLogic system has greatly speeded access to information, both internally and externally. It used to take 24 hours for a new document to be posted to the Web from the company's system. Now, it takes four hours for the document to become available - a major improvement in an industry in which there is a premium on having the latest information.

What’s Next
Over the next 18 months to two years, company goals for the engagement include increased use of the global delivery model, continuous improvements in application quality and performance, identification of innovation opportunities in product and technology and increased breadth and depth of the application portfolio.

The company plans to continue virtualizing processes, rationalizing people and systems resources and reusing content. As part of a broad initiative to operate more effectively, it plans to leverage cloud and consolidate servers to reduce cost. It expects to expand its use of managed services, leveraging global talent. Though it has been a leader in its field for decades longer than most of its competitors have existed, the company is committed to continually reinventing how it does business to take advantage of new opportunities, content and talent, wherever they reside, with speed and efficiency.