The Computerworld Honors Program

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Final Copy of Case Study

Status:
Laureate

Year:
2013

Organization Name:
OCLC Online Computer Library Center, Incorporated

Organization URL:
www.oclc.org

Project Name:
WorldShare Management Services Global Deployment

Please select the category in which you are submitting your entry:
Innovation

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

OCLC is a nonprofit, membership, computer library service and research organization dedicated to the public purposes of furthering access to the world's information and reducing library costs. More than 74,000 libraries in 170 countries around the world use OCLC online services to locate, acquire, catalog, lend, preserve and manage library materials all to the benefit of researchers, students, faculty, scholars, professional librarians and other information seekers. OCLC has been a leader in helping libraries meet evolving needs of their users through innovation in information technology. Our most recent challenge was to deploy OCLC WorldShare Management Services (WMS), a Web-based environment that streamlines cataloging, acquisitions, license management and

circulation workflows and offers a powerful discovery and delivery tool for library users. WMS enables libraries to share infrastructure costs and resources, as well as collaborate in ways that free them from the restrictions and management of local hardware and software. To support an environment that is responsive to local conditions we needed to deploy the WMS application into several regions outside the US including Europe, Australia and Canada. After validating the distributed architecture, we moved to evaluating deployment models (from managed hosting model to IaaS), selecting a hybrid model which provides the best level of cost, security and reliability. Challenges: Selecting a cloud partner that offered consistent services across multiple regions to normalize deployments across multiple time zones. Building global IT organization and process capabilities to ensure our service levels are maintained ITIL adoption and ITSM deployment. Ensuring privacy and security: With the emphasis libraries maintain for protecting personal information, OCLC took a holistic approach to protecting the privacy and safeguarding the cooperative's data. In February 2012, OCLC achieved certification for the ISO 27001:2005 Information Security Management System from Lloyd's Register Quality Assurance.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

The project was implemented in phases by region starting with Europe in December of 2011. The announcement date of the infrastructure coincided with the announcement of WMS as a Webscale service. The Sydney, Australia deployment was completed in March, 2012 and Toronto, Canada in June, 2012. We have OCLC members in all regions using ILS products; this provides a natural migration path to WMS a key component of our strategy. The distributed deployment methodology provides other market opportunities to host WMS in members' partner managed data centers.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

Yes, the project as originally scoped was completed in June 2012.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

"OCLC's Webscale solution represents transformative change. Libraries have been working toward this type of solution for years. Taking routine library

functions to the cloud will reduce duplication of loading records locally, and eliminates the need for maintaining local systems. In addition, as the first academic research library in the U.S. to implement OCLC WorldShare Management Services, the Library is glad to have the opportunity to develop these services to help meet the needs of other research libraries." - Gregg A. Silvis, Associate University Librarian for Information Technology and Digital Initiatives, University of Delaware "WorldShare has helped us improve services for our patrons. They are discovering more resources and they are making better use of our existing databases. It's saving staff time because we aren't devoting time to system administration anymore. We're not duplicating effort by adding holdings to both a local catalog and WorldCat -- we just do it once and we're done. And we're finding that acquisitions cataloging and serials check-in are all saving time with all of those functions in WorldShare as compared to our old system. And the important thing is that WorldShare is allowing us to focus more staff time on service to our patrons." - Marilyn Murphy, Director of Library Services, Mount Mercy University "WorldShare Management Services enabled us to have traditional ILS functionality without hardware, software and associated maintenance and staffing." - Stefanie Wittenbach, University Librarian, Texas A&M University-San Antonio

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

OCLC is applying the concept of cloud computing to magnify the power of library cooperation and create a significant presence on the Web for libraries. OCLC's strategy to move library management systems to the cloud builds on OCLC's 40-year history of innovation and cooperation. In 1967, OCLC Founder Fred Kilgour revealed a strategy to create a computerized online union catalog through shared cataloging in order to reduce costs for libraries. The result of that vision has been WorldCat, the world's largest database of its kind. WorldShare Management Services extends that strategy of cooperation to reduce the costs of library management functions such as circulation and acquisitions. OCLC's goal is to lower the total cost of managing library collections while enhancing the library user's experience. WorldShare Management Services supports management for print, electronic and licensed materials built on a new, Web-scale architecture that provides streamlined workflows and cooperative solutions. WorldShare Management Services not only include the functionality of disparate systems, but it interoperates with third-party systems and reduces the total cost of ownership for libraries. The cooperative nature of the platform creates network effects for libraries with enhanced discovery, resource sharing, metadata management, and through sharing collection management information, identity management, and collective intelligence fueled by data shared through the cooperative and with

partners. The global deployment model is a technology innovation that enables our business strategy, allowing us to continue to transform services we offer to our members. It allows our member libraries to have access to infrastructure and platforms that enable them to reach a broad, geographically diverse community and scope their services to focus on meeting the specific needs of a single person. It enables consistent delivery of WMS services across multiple regions, with centralized management and decentralized customer support.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

As a nonprofit computer library service and member organization, OCLC has always worked closely with its member libraries and partner organizations to ensure that development of services, such as WorldShare Management Services, meets the needs of libraries and library users. OCLC has been fortunate to have library leaders willing to get involved in research, product development and testing of new services. The spirit of cooperation that is the cornerstone of OCLC has helped in the development of WorldShare Management Services, and adoption of the new system will change the way libraries work for many years to come. "When the opportunity came to become one of the participants for OCLC's WorldShare Management Services, there was no question we were on board. Above all, we liked that OCLC is a library cooperative. We are members working together toward a common vision, sharing many of the same challenges. And it is through this shared vision that we hope to eliminate many of the barriers that prevent access to information." - Sandy Ashworth, Library Director, Boundary County District Library (Idaho)