LANSA Case Study

LANSA on show at New York's Museum of Modern Art

The Museum of Modern Art (MoMA) situated right in the middle of Manhattan, New York, houses one of the greatest art collections in the world. Since the completion of its 425 million dollar renovation in 2004, MoMA has over 630,000 square feet of space, including 125,000 square feet for exhibitions and public programs. MoMA used LANSA for integrated Windows and Web-based membership management, Point of Sale and entrance ticket verification using Wireless PDAs.

Steve Peltzman, CIO at MoMA, says, "We developed three major systems in a year and a half. LANSA has been a key ingredient in keeping productivity up in our application development department. Even with all the major development projects over the last year, we kept the same number of people.

Time for a Technology Overhaul

MoMA was a long-time iSeries user, but wasn't using the platform in the most optimal way. MoMA's staff saw the iSeries as a somewhat outdated character-based proprietary platform. When Peltzman took over as CIO, it was time for a technology overhaul.

MoMA needed a new membership system to replace the two unintegrated membership and donor systems that made it impossible to provide proper services to members.

MoMA also needed to replace a 10-year-old DOS-based Point of Sale system that was slow, limited in functionality and wasn't integrated with the membership system. It could not validate membership details for associated discounts and could only issue temporary membership IDs.

Another priority was automating entrance ticket verification. MoMA has a large variety of entrance documents, from membership cards to tickets, coupons and city passes for multiple museums sold by third-party vendors. Staff checked tickets manually at the entrance, resulting in long queues on busy days.

"It made sense to have the membership, POS and ticket scanning systems on the same platform and integrating off the same data base," says Peltzman.

But with so much planned systems redevelopment, continuing with the iSeries was not a certainty. "Ultimately, the decision to stick with the iSeries came down to two factors. One, the in-house staff was well versed in

"LANSA takes each person and doubles or triples their productivity."

operating iSeries products, but more importantly, I can count on the hardware."

But developing in RPG was not the way to continue. Bob Rocco, director of MoMA's application and development group, evaluated several development tools and proposed LANSA to Peltzman.

"LANSA's strategy made sense to me," says Peltzman. "The LANSA demonstration very convincingly showed how productive it is to develop and maintain programs. In our old RPG line-by-line coding, it is usually very difficult to understand code that was created by somebody else. But because of the way LANSA-built programs are assembled and business rules are kept in a central repository, it is much easier."

"I also don't want to bet on which way technology will be going and LANSA's track record of moving existing business logic to newer technology environments is reassuring," says Peltzman.

An Integrated Solution

MoMA used Visual LANSA to develop its new central membership management system, which caters to over 50,000 members and is growing fast. MoMA will extend the system by launching LANSA-built individual and corporate member Web sites to allow members to change their address and upgrade their membership.

LANSA
ADVANCED SOFTWARE MADE SIMPLE

New members can get their permanent membership card printed instantly, eliminating time-consuming mailing procedures and phone calls about incorrect address details.

Membership information is available in real-time to MoMA's POS stations in the retail stores and the Wireless ticket verification system at the entrance doors.

MoMA's POS stations are Windows-based PCs equipped with a barcode scanner. The LANSA-based POS software links to the iSeries membership system. This allows staff to verify a member's status and activate discounts and promotions. Just as importantly, when members swipe their card, details pop up immediately on the sales clerk's screen, allowing a more personalized greeting and immediate recognition of donors.

MoMA's entrance staff now use wireless Symbol pocket PCs to scan the barcodes on various entrance documents. The Visual LANSA-based software on the pocket PC checks the scanned code against an iSeries-based scan file, which is a database of valid tickets and membership codes, populated by LANSA Integrator in real time from transactions in the ticket issuing system.

User Friendly Systems

"The membership and POS programs that we created are very user friendly," says Peltzman. "This is especially important since we get help from a large pool of volunteers at the member desk."

New members can use cards immediately at the retail outlets to get a discount, an added incentive for visitors to join on the spot. Existing members can swipe their card at the membership desk or retail stores and membership details will pop up immediately for updating.

"We like to think of our members as supporters and family members rather than simply customers. We did the right thing by treating them to a seamless experience. Not only is the membership experience a lot better, it is also likely to boost sales."

Peltzman says, "The new ticket verification system gives MoMA's Visitor Services department an efficient and single way to validate tickets and count entries. The scanning program pulls in any barcode for real-time validation, even though tickets are generated through many ways. We welcomed over one million visitors in the first four months after re-opening. We couldn't have handled that with our old system."

The POS system, since it is fully integrated with the membership system, keeps a history of members' purchases, which allows MoMA to serve its members better. For example, when a member wants to buy a second copy of an art book, but cannot remember the title, the sales clerk can simply swipe the member's card and call up the member's shopping profile.

This also offers the potential to make the museum a more sophisticated marketer. The POS and membership systems

can capture email addresses and MoMA may use these to drive eCommerce sales in a tailored Amazon-like approach. For example, when a member buys a Starry Night poster, the system could send a personalized email messages about van Gogh-related exhibitions, classes and books.

"We developed three major systems in a year and a half. That is pretty good. LANSA takes each person and doubles

"We developed three major systems in a year and a half."

or triples their productivity," says Peltzman.

Rocco comments on the first Visual LANSA development project, "The learning curve in event-driven programming was maybe a little bit longer than we anticipated. But once the team was going and familiar with LANSA, there was no stopping them."

"LANSA's philosophy of having a single skill set among a pool of developers, rather than having specialized Web, Windows and PDA programmers, makes sense to me."

"This approach boosts team spirit, allows better integration and is far more interesting for our staff," says Rocco.

RFID Tracking and Pocket PCs

"We had a big challenge on our hands, launching a new museum system in a small time frame," says Peltzman.

"We could have started all over again with a new platform, new staff and something like Java. Or, keep the iSeries, leverage the knowledge and loyalty of existing staff, and simply do things better than before. LANSA allowed us to take the latter approach. And I have to say, it really paid off."

MoMA has started a pilot project of handing Toshiba Pocket PCs to visitors. These PDAs will be loaded with digital video and audio content about the museum's art and exhibitions. At the end of the tour, the visitor can register their email address. Later, when logging on at MoMA's Web site at home, the visitor will find a personalized Web site section with merchandise related to the artwork bookmarked during the tour."

MoMA is also planning an RFID pilot project that will involve the tagging of the art inventory so that RFID can be used to automatically register exactly where any piece of art is located.

"Once all art pieces are tagged we will find other ways to take advantage of it," says Peltzman. "This may extend to visitors using RFID to bookmark their favorite pieces of art using PDAs."

"The bottom line is, the iSeries and LANSA tools have enabled us to do some pretty cool stuff, without requiring a budget increase for applications development," concludes Peltzman.

Company and System Information

- Founded in 1929 as an educational institution, The Museum of Modern Art (MoMA) is dedicated to being the foremost museum of modern art in the world. MoMA offers a permanent art collection of the highest order and also presents temporary exhibitions and educational programs. MoMA's library, archives, and conservation laboratory are recognized as international centers of research. For more information visit www.moma.org
- MoMA uses an i5 520 server (with a HA520 server as hot backup) for development, operations and its membership Web site.

LANSA
ADVANCED SOFTWARE MADE SIMPLE