

National Envelope provides a unified view across systems



National Envelope Corporation, founded in 1952 by William Ungar, has grown to become the largest envelope manufacturer in the world and one of the largest women-owned businesses in the United States. Based in Uniondale, New York, the company operates facilities across the US and produces more than 180 million envelopes per day. National Envelope uses Visual LANSA and WAMs to provide browser-based access to its ERP systems, LANSA Integrator for a variety of data assimilation tasks and LANSA Commerce Edition for eCommerce.

Scott Steinacher, Web/Data Architect at National Envelope, says, "We used Visual LANSA and Integrator to develop a sophisticated, browser-based application that provides our user community with a unified view of enterprise data. The system has improved customer service, reduced license fees and simplified training. Using the same tools from LANSA, we can also publish and consume Web services, exchange XML documents, and perform many other tasks without intensive coding."

The Need to Integrate

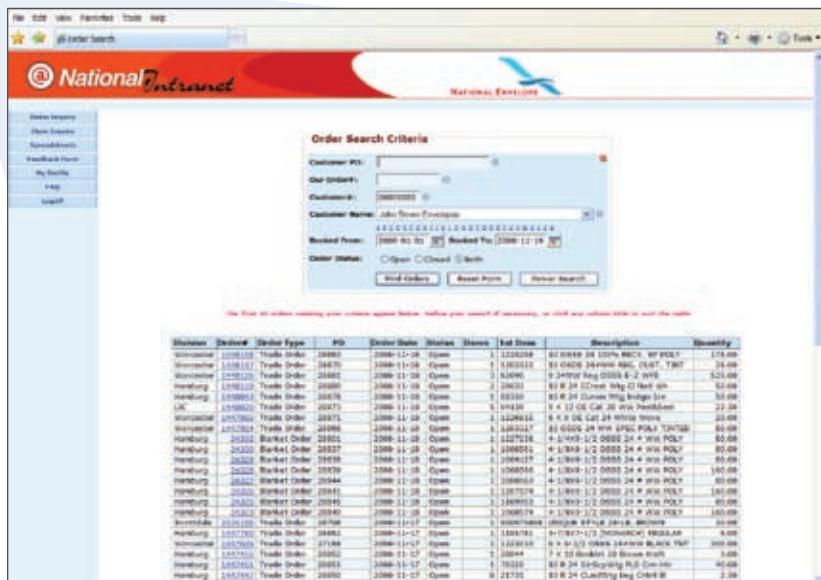
National Envelope has grown dramatically since the nineties through acquisitions and, as a result, it maintains two ERP packages (JD Edwards and Baan) and two home-grown legacy solutions. The company relies heavily on the System i and logical partitioning and even runs its Informix-based Baan application on the platform.

"Integrating data from diverse systems was one of the challenges faced by the technology group", explains **Aaron Brown**, IT Director at National Envelope. "Users on both sides of the firewall wanted a unified view of data from across the enterprise."

However, the unique characteristics of each system made it difficult to provide a cohesive view of that data. To help minimize transportation costs, customers can place orders at a location nearest to them. Since customers also often have offices across the country, their orders may reside in multiple systems.

"We wanted to provide a better service experience, especially for those customers who chose to use the phone. They should only have to place one call to their nearest National Envelope office and their questions should be answered immediately," adds Brown.

With that goal in mind, the technology



With Visual LANSA WAMs and LANSA Integrator, National Envelope has developed a sophisticated browser-based application.

group used Visual LANSA Web Access Modules (WAMs) and LANSA Integrator to create a system that would provide browser-based access to order, production, inventory and shipment data across the company.

"Technology that improves service and helps the bottom line is sorely needed in today's climate."

Integration Across Multiple ERPs

The new system, aptly named "Unity", culls data from four ERP applications and three databases (DB2/400, Informix and SQL Server). What's more, it gives users access to millions of PDF documents such as invoices, statements and work orders. Unity runs natively on the System i under Apache.

Unity's main focal point is a single Web page with just four tabs. The Shipments tab displays delivery information, the Production tab provides manufacturing details, while the Order Header and Detail tabs present information about the customer and orders. Within each tab, data appears in grids that can be re-sorted by clicking on any column. Each grid also features subject-sensitive links that can be used to drill down to more detailed data.

In addition to viewing data on Web pages, Unity users can generate and distribute spreadsheets with a wide variety of selection criteria, including date ranges, order types, customer and product attributes. The spreadsheets are not simple 'CSV dumps' that contain flat text data. Thanks to LANSA Integrator's Excel services, columns contain true dates and numbers and are professionally formatted with fonts and colors. LANSA Integrator's SMTP service then delivers the spreadsheets to one or more recipients via email.

As the project progressed, a small group of pilot users helped fine-tune Unity. Most LANSA development and JDE integration was performed by Steinacher, while several programmers provided integration support for the other backend systems. From concept to pilot, the project required roughly three months. →

During development, Steinacher made extensive use of Visual LANSA's Tab, Grid, Anchor and other Weblets. "Weblets are very helpful because they eliminate the need to write JavaScript or VBScript," says Steinacher. "LANSA Integrator also proved invaluable. Without having to code at the sockets level, we can populate spreadsheets and Web pages with data from multiple backend databases. Conversely, from a single source, we can push data to multiple backend systems."

"Overall, LANSA exploits the System i and Windows beautifully. It's really the best of both worlds – the ease-of-use of Windows coupled with the reliability, security, scalability and performance of the System i."

Better Customer Service

Sales reps and other users rely on Unity to access data from across the company. For example, a staff member in an East Coast plant can now easily view orders at a facility in California. The need to call around has been greatly reduced.

"With LANSA WAMs and Weblets, we created an intuitive, modern application that offers lots of context sensitive help and instructions. It even has its own FAQ to answer common questions. There is virtually no need for training," says Steinacher.

Theresa Kasesnik, an Account Executive at National Envelope's New York facility, agrees. Kasesnik piloted Unity and contributed to its success. Given that most of her business revolves around custom orders, she receives lots of phone calls about envelope specifications.

"With Unity, I can locate orders instantly," says Kasesnik. "For example, if a customer calls about the release or repeat of a specific order, but all he or she knows is that it was for a 9-by-12 'white wove' envelope, I can find all the orders that match that specification, regardless of where they were processed. I can then zoom in on the results with other criteria. Being able to view what was ordered at other locations and at which price, really helps me to make more informed decisions and give better advice to customers."

"I can even view the actual invoice in PDF format. And when I am in a tab, I can sort the information any way I want. This makes it easy to analyze data right in my browser."

"I estimate that Unity has increased my efficiency level by 20 to 30 percent. For the customer, that means getting all their



National Envelope's state-of-the-art envelope manufacturing facility in Ennis, Texas, USA.

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questions answered in one phone call," concludes Kasesnik.

Ed Ringer, Senior Vice President of IT at National Envelope, points out that, from a cost perspective, it is a big plus that Unity is browser-based. "Both Baan and JD Edwards charge license fees per user. With LANSA, we developed a solution that reduces our need for additional licenses. Technology that improves service and helps the bottom line is sorely needed in today's climate", adds Ringer.

Lasting Success

National Envelope's introduction to LANSA was in 2001, when the company wanted to provide its customers with Web-based access to their orders. At that time, the company selected LANSA Commerce Edition for JD Edwards. In addition to placing orders directly, customers use the site, dubbed @ National, to view orders, shipments, inventory, invoices and other critical information. The application also emails order confirmations and shipment notifications to customers.

"LANSA Commerce Edition was very appealing to us because it came with the

source code," explains Steinacher. "We didn't want to build an eCommerce site from the ground up because shopping cart functionality is essentially a commodity service. At the same time, we didn't want to be dependent on a vendor for maintenance tasks. LANSA consultants showed us how to maintain the site ourselves."

"And here it is, seven or eight years later, still running strong and meeting our needs."

Productivity is Key

Going forward, National Envelope will continue using LANSA to deliver innovative solutions. "Our focus is always on the customer", says Brown. "For the technology group, that means using our expertise to help the company build tighter relationships with its customer base. Whether it's letting customers view data over the Web or integrating their systems with our own, LANSA helps."

"In lean times, productivity is more important than ever", concludes Steinacher. "We can't afford to spend hours writing low-level code if a tool can do it for us. LANSA's IDE comes with an editor, compiler, debugger, data dictionary and page designer. Because it also supports frameworks, it provides a structured, rapid-development environment. It's the most pragmatic development solution I've seen for the System i." ■

COMPANY AND SYSTEM INFORMATION

- National Envelope Corporation, headquartered in Uniondale, New York, is the largest manufacturer of envelopes in the world, with facilities located across the U.S.
- Unity is integrated with JD Edwards, Baan/Informix and several homegrown applications. All these systems reside in logical partitions on the System i. Unity also integrates with several Microsoft SQL Server-based applications.

For more information about National Envelope Corporation, visit www.nationenalenvlope.com