LANSA Case Study

LANSA Pays Off for VISA Card Services

The company is now called International Card Services (ICS) and is a member of the Fortis group. ICS issues Visa and MasterCard credit cards and co-branded cards with partners, major retailers and travel organisations and is the largest credit card issuer in the Benelux and a top-10 player in Europe.

A LANSA customer since 1991, ICS extended its mainframe back-end card management system with LANSA-based customer service front office application. By replacing overnight batch processing with online access and automating follow up actions, the customer service department has greatly improved customer service and doubled its efficiency. The customer service applications helped ICS to save millions of dollars. When ICS replaced its card management system in 1999, it kept the LANSA-based customer service front end. In 2001, ICS launched MOTOMAAT, a Web-based service for its Mail Order Telephone Order (MOTO) merchants, built with LANSA for the Web. In 2006, ICS used LANSA Integrator's XML, MQ and SMTP java services to connect the iSeries with electronic payment services.



Dick de Graaf, IT manager of ICS, said, "It is remarkable how LANSA has evolved over the years. We can now use our existing LANSA skills to build secure Internet extensions to our iSeries front office application. We feel confident that with LANSA we can continue to offer our customers high quality service."

The Challenge

Dick de Graaf, IT manager of Visa Card Services, explains "The card management system on our mainframe handled the actual charging of the card holder and payment to the merchants. But it could not satisfactorily support the information requirements of our users. Our customer service staff specifically needed information on-line, not overnight batch reports."

"Other shortcomings were its limited flexibility in payment collections methods and lack of support for the tasks surrounding disputed transactions. As well, even simple transactions, like an address change, had multiple entry screens and there were no facilities for automated follow up actions, such as confirmation letters to the customers."

"We started building customer service application about 8 years ago and have now automated almost the entire front office environment with LANSA to provide online inquiry and update facilities for card holder information, transactions and authorizations"

Front Office Features

Automated Charge Back

This module deals with disputed customer transactions and is a very complex application that involves a large number of complicated rules and conditions from Visa International that dictate how disputes are handled especially in today's world of using credit cards over the phone and Internet. The Charge Back modules get messages about these disputed transactions via the Visa network and actions the majority automatically. Only the most difficult exceptions need to be handled by Visa staff.

Card Application and Approval

The whole application process, including the verification with a centralized credit bureau, calculating the contract based on

"The efficiency of the application has saved us millions of dollars."

selected card type and special offers and sending letters to the applicant cardholder are handled by the LANSA application. It also sends approved applications to the mainframe system.

Merchant entry solution

"The front office application also handles Merchant applications. This involves entering the details of the merchant and price agreements in relation to the fee structure. The LANSA system then makes the appropriate calculations and generates a Merchant Contract and sends this in with a cover letter to the applicant merchant. When the contract is approved, the LANSA system automatically forwards the contract to the mainframe card management system."

Payment Collection

Two years Visa moved payment collection from the mainframe to the AS/400. The LANSA Repository contains assessment rules based on multiple factors and triggers the appropriate actions if a customer doesn't stick to the agreed schedule of payments. Depending on the number of days a payment is overdue and other assessment rules a differently worded reminder letter is generated and different payment collection actions scheduled.

Better Customer Service

"The customer service front office applications are a great success. The work of our service department is a lot easier. Inquiry and update transactions now only require a few efficient screens and far less key strokes," continues Dick.

"Now we provide a quality service to our customers with 40 staff, otherwise we would need at least 80 people. We can handle most customer phone requests directly from the system,





rather then having to open paper based files."

"If we don't react swiftly and correctly on a disputed transaction, it will cost us money as the card issuing bank. The efficiency of the Charge Back module has saved us millions of dollars."

"We also built in sophisticated facilities that trigger follow up actions. For example, a customer may request a temporarily increased credit limit while on a holiday. Our staff simply enters the requested credit limit and dates. The system does the rest. It triggers a credit worthiness check, sends a confirmation letter to the customer, increases the limit on the mainframe system on the agreed date and restores the original limit after the holiday period."

Future proof software

"We have used LANSA successfully for eight years now and recently re-evaluated development tools," explains Gerard Edelaar, Manager System Development. "We will stick with LANSA because it works well. We find LANSA very intuitive and easy to use."

"We make increasing use of LANSA templates. By investing time in designing standard templates our developers have more time to focus on the more complex development issues. We store most of the business validation rules and triggers centrally in the LANSA Repository. But it is not just a matter of a productive development environment. When you take advantage of LANSA's central Repository, maintenance is much easier as well."

LANSA's openness makes it easy for Visa to integrate with its own mainframe applications as well as those of Visa international. It also integrates well with other development tools, as Gerard explains.

"For example, we use the System Development Workbench (SDW) for the design and documentation of our systems. We have developed a two-way LANSA/SDW link (in LANSA) to exchange design specifications between SDW and the LANSA Repository. Even though LANSA comes with its own upper case tool facilities, it also allows you to integrate with other case tools."

The Future

"We have replaced our mainframe based card management with an iSeries packaged solution. To change the core system underneath required only small changes to the LANSA-based front office system. We are now enjoying increased opportunities for closer integration. Now that we experienced how easy it is with LANSA to Web extend our system to Mail Order Telephone Order merchants, we are considering to give our customers online access to their account statements via a browser."

"It is remarkable how LANSA has evolved over the years," concludes Dick. "We can now use our existing LANSA skills to build secure Internet extensions to our iSeries front office application. We feel confident that with LANSA we can offer our customers the same high quality service as we have offered to our own internal staff."

About MOTOMAAT

MOTO merchants are those merchants that accept card payments without the physical presence of the card. Typical MOTO merchants are Internet shops, mail order companies and telephone sales

"We can use our existing LANSA skills to build secure Web extensions."

companies. Because the card is not present, it cannot be swiped at the cash register and the transaction cannot follow the standard retail procedure. However, the merchant does have the card number, expiry date and amount.

Dick de Graaf, IT manager of Visa Card Services, says, "With MOTOMAAT, merchants can use the Internet to log onto our secure site and enter their own authorization requests. MOTOMAAT is far more efficient than the old fax procedures that required re-keying."

"Before the implementation of MOTOMAAT, merchants had to use a fax for sending us their payment authorization requests. A fax would usually contain between 10 or 30 requests that needed to be entered one-by-one in our system. Our system would give a separate authorization code for each request. The person entering the requests would write down each authorization code on the original fax. The fax with authorization codes would then be sent back to the merchant, usually a day later. Merchants would then send approved orders to their warehouse for dispatching."

"As the orders were processed, merchants might send the same fax again, but this time indicating which orders had been fulfilled and which were still pending. Orders that had been marked as fulfilled were ticked off in our system and processed as payment transactions. Merchants can still enter their requests in batches, as they were used to, and submit that batch for authorization to us. Basically MOTOMAAT follows the same process as fax authorization, but now there is no re-keying or other human intervention required and the authorization process is instant and more accurate."

"Merchants that have low transaction amounts and don't need Visa's authorization before delivering their goods also use MOTOMAAT, but they enter transactions for payment processing immediately, bypassing the request for authorization step."

"The main advantage of MOTOMAAT is a notably decreased number of faxes that need to be manually entered by us. As well as being more efficient for the merchants and us, the merchants have the advantage of being able to place their authorization and payment requests at any time of the day and get an immediate answer and quicker payment. Another advantage is that merchants can integrate MOTOMAAT with their own order entry system. Last, but not least, MOTOMAAT gives merchants a clear status overview of their transactions and provides daily and periodic statistics."

"We developed MOTOMAAT in one week with LANSA for the Web. The online authorization requests are processed by the same system as the internally entered authorization requests. We reused our existing authorization backend modules that are written in LANSA as well. The most difficult part was to setup secure access with SSL 128-bit encryption. We also set up a link between our production and Web server iSeries machines."

"Merchants have commented that MOTOMAAT makes their order fulfillment procedures a lot more efficient and a growing number of merchants are implementing the solution."

Company and System Information

- International Card Services (ICS), based in the Netherlands and a member of the Fortis group, issues Visa and MasterCard credit cards and co-branded cards with partners, major retailers and travel organisations. ICS is the largest credit card issuer in the Benelux and a top-10 player in Europe. VSB is the only bank in the Netherlands licensed to offer this credit card. ICS is an independent company that handles VSB's Credit Card activities. For more information about ICS's Visa Card services visit: www.icscards.nl/visa
- ICS has about 1.5 million cardholders, 80,000 merchants and processes tens of millions of transactions per year. Of the total ICS staff of 230 at least 200 staff work with the LANSA applications.

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