



CardProcess GmbH

**Automation of Credit Card Transactions
using MessagePlus/Open**



Settlement of transactions for 3 million credit cards

CardProcess GmbH was founded in 2004 to concentrate all activities for the settlement of credit card and debit card transactions including the operation of Point of Sale (POS) terminals within the Cooperative Banking Group in Germany. Today the company provides this service for 3 million credit cards.

Paper based manual operation

Initially CardProcess performed all card transactions using manual work processes:

For card applications, cancellations, blocking of cards and many other transactions the issuing banks typically filled out paper based forms and sent these via facsimile to CardProcess. Then the received facsimile pages were printed, manually sorted according to transaction type, the issuing bank, the region and other criteria and distributed, again manually, to operators who finally typed all relevant data such as the transaction type, credit card number, account number etc. into proprietary back office systems.

Risks in a laborious process

In 2005 CardProcess conducted an analysis and identified several disadvantages and risks in this laborious process:

- It was slow
- It was error prone
- Facsimile pages could get lost
- The paper based archiving did not correspond to compliance rules
- Investigations were difficult and time consuming
- The processing costs were high

Requirements for an automated solution

To overcome these obstacles and disadvantages CardProcess initiated a project with the following key objectives:

- Replacement of the paper based storage by a digital archive in accordance with compliance rules
- Automation of the data extraction from the facsimile images
- Ease of investigations
- Implementation of a computer based workflow

Step by step implementation

These requirements may look quite straight forward, however in practice they required the implementation of several new technological components as well as a complete restructuring of the existing work processes. Due to the complexity of this challenging task and to reduce operational risks CardProcess decided to implement the new architecture using a step by step approach.

A reliable fax server solution

The first essential step was to store the received facsimile images as digitized data instead of printing them via a traditional facsimile machine. This technology was implemented by Fiducia IT AG - the IT service provider for the Cooperative Banking Group in 2007 over a very short timeframe. Fiducia had already operated a MessagePlus/Open server for email users, SAP applications and a monitoring system for many years. Additional facsimile channels were added to this system and due to the multi-client capabilities of Message Plus/Open within a few weeks CardProcess had their virtually independent facsimile server solution in production without any interference to other Fiducia applications.

Integrated OCR processing

In a second step Intercope and OCR experts from B&L integrated an Optical Character Recognition (OCR) component with MessagePlus/Open to allow received facsimiles to be automatically split and classified according to individual business transactions and in addition to extract all relevant data such as credit card numbers or account numbers, credit limits and other information from the received images. The major challenge involved here was to define the many different forms used by the sending banks. However, after 6 months of joint effort between CardProcess, Fiducia, Intercope and B&L 89% of all transactions could be identified automatically by the new system, and for the remaining manual operations Intercope provided a highly efficient end-user interface optimized for the demands of credit card operations.

All information in a few mouse clicks

"The big advantage of this integrated solution is that all processing steps from facsimile reception through OCR processing up to the final delivery of business transactions are handled by one unique system enabling us to access all relevant information with just a few mouse clicks within the same application", explains Detlev Schöneberger, responsible for the MessagePlus/Open system with Fiducia.

Workflow management and compliant long term storage

At the end of the message processing cycle MessagePlus/Open forwards the relevant data for each transaction in XML format and the original facsimile image via WebSphere MQ to the Card Process Workflow Management System where the transactions are approved by the responsible staff members and executed in SAP or a proprietary application. Then all data is safe stored in Tivoli Storage Manager on non erasable media meeting all the compliance regulations.

100 % system availability

"With MessagePlus/Open we have a powerful tool which really streamlined, automated and secured the former manual work processes to a very high degree. Currently we process some 36,000 transactions per month without problems. Fiducia guarantees us virtually 100% availability of the system and the solution is perfectly adopted to our specific business needs" states Patrick Lenz, the responsible project manager with CardProcess.

Perfectly adopted to the business requirements

"The intuitive graphical user interface of MessagePlus/Open presents the data in our business terminology instead of cryptic technical terms and all investigations can be carried out in real-time in seconds instead of hours. Very important for us also are the extensive monitoring features of the solution such as the supervision of card blocking for which we guarantee a maximum timeframe of 2 hours to the banks. I am really impressed by the adaptability of this software to our specific business requirements, its comprehensive application functionality and the flexibility and stability of the solution" says Patrick Lenz of his experience with Intercope and MessagePlus/Open.