



# Quipu Success Story:

# Global banking success across 11 time zones with Compass Plus Technologies

# **Challenge**

to organise a technologically efficient, faulttolerant, profitable card business capable of running without idle time for the bank group located in 11 time zones across a number of countries.

# **Implementation**

- establishment of Quipu Sh.p.k. responsible for card personalisation using Compass Plus solutions:
- provision of comprehensive interaction tools enabling Quipu to independently create online interfaces between the banks' IT systems and Compass Plus Technologies' switch solution;
- 3D Secure technology for issuing and acquiring;
- implementation of DRS to enable fault-tolerance and minimise downtime.

#### Results

- migration of 18 of the 21 banks of the ProCredit Group to Quipu GmbH;
- Visa and MasterCard certification of both Quipu GmbH and Quipu Sh.p.k.;
- compliance in PCI-DSS;
- achieved 100 per cent service availability of the processing centre since 2012;
- Four-fold increase in business volumes since the project started.

#### The client

Quipu GmbH is an IT consultancy and software development company that provides dedicated support services to the ProCredit group, which currently includes 21 banks operating in four regions: Africa, Latin America, Eastern Europe and Germany. Quipu also provides services to third-party banks outside of the ProCredit group. Wholly-owned by ProCredit Holding, Quipu's roots lie in IPC (International Project Consult), one of ProCredit Holding's major shareholders and a well-known consulting company with vast experience in the implementation and development of projects for financial institutions in developing countries with emerging economies.

The primary activity of Quipu GmbH is the development and implementation of a wide range of software products to cover all essential banking activities as well as the provision of processing centre services. Quipu Sh.p.k is a Visa and MasterCard certified Third Party Personaliser, based in Kosovo as a separate division of IPC and is responsible for issuing cards for banks of the ProCredit group that do not have their own personalisation solution and additionally for third-party banks outside of the group.

With its headquarters situated in Frankfurt, Germany, the company is truly international – with over 20 different nationalities employed at its head office and offices located in Colombia, El Salvador, Ghana, Macedonia and Ukraine. This allows the company to offer its services worldwide regardless of lingual and cultural barriers. Currently Quipu works with over 20 clients located in three different continents and speaking 11 languages.

# A long-standing partner

In 2001, IPC required the organisation of a technologically efficient, fault-tolerant, profitable card business capable of running without idle time for the banks of the group located in 11 time zones across a number of countries. In order to achieve this goal, IPC made the decision to set up Quipu Sh.p.k, the processing centre for the banks of the group, and started searching for a processing solution provider.

The key criteria were as follows:

- ability to handle large volumes of cards and an extensive number of devices:
- host-effective solution;
- multibank software solution allowing flexible integration into the existing bank infrastructure, creation of complex interbank settlement schemes and quick reaction to new customer demands;

- integration of the processing host with various devices and protocols;
- complete support of the personalisation and acquiring of EMV cards;
- multi-language and multi-currency support;
- ability to incrementally grow the system's functionality as and when required;
- a supplier with extensive experience in the development and implementation due to the varied demands from customers in different countries.

After considering several vendors, the solution offered by Compass Plus Technologies was the closest fit and the company was chosen to supply the processing solution for Quipu. As a result, IPC purchased the full processing product suite from Compass Plus Technologies.

The first stage of the project was the implementation of a local card project for the ProCredit Bank of Kosovo, in 2001. In January 2002, Quipu Sh.p.k was established as a separate division of IPC responsible for ATM processing and card personalisation using Compass Plus solutions.

Quipu Sh.p.k, a modern and highly flexible card personalisation centre, issues magstripe and EMV cards for banks in the group that do not have their own personalisation solution as well as for thirdparty financial institutions. It is worth noting that the personalisation data for banks is prepared in Frankfurt, not only for Compass Plus' solution, but also for the third party personalisation systems operating in the ProCredit banking group. The availability of the flexible integration mechanisms was one of the criteria for choosing Compass Plus Technologies. Since 2001, Quipu Sh.p.k. has issued more than 2 million cards.

In 2003, during the later stages of the project, ProCredit Bank Albania commenced using Quipu's services and the first MasterCard certification took place for ProCredit Bank Kosovo. In 2004, the switching solution was migrated to Germany and Quipu GmbH was founded. The subsequent stages of the project involved the multiple certification of ProCredit Banks in Visa International and MasterCard International followed by the gradual switching of other ProCredit Group banks to the processing centre.

A feature specific to this stage was that, in most cases, Quipu demanded a different approach for the online interaction with the IT systems installed at the banks. To address this, Compass Plus Technologies provided Quipu with interaction tools, such as the FIMI protocol and the TCI SDK toolset, which allowed the processor to independently create online interfaces to the Compass Plus processing solution.

As the banks only have client applications that connect to the processing centre in Frankfurt, the system administration for the ProCredit group is significantly simplified. During the bank switching process, Compass Plus Technologies supported Quipu in the bank certification processes with the international payment systems, as well as with the system configuration and testing of the interfaces created by Quipu customers.

Quipu also actively uses Compass Plus' interchange solution to enable the complete automation of the multilevel settlement processes between the participants of the banking group.

Managing Director at the time (2010), Ralf Niepel, said: "Compass Plus Technologies has provided us with an EFT solution, which has satisfied all our needs at both the initial and all subsequent stages of the project. Today we see Compass Plus Technologies not just as the vendor of software for our processing centre; Compass Plus Technologies is our long-term strategic partner. During our years of partnership the company has proved time after time the competence of their professional team providing complete support and guaranteeing the delivery of solution to business problems of any complexity, which of course also means the growth of our business as a whole."

# Strengthening the relationship

The staged switching of ProCredit Group banks was completed in 2012 with the migration of ProCredit Bank Colombia to the processing centre. Since 2001, a number of additional projects have been completed successfully, including the processing centre achieving PCI DSS compliance in 2007 and the implementation of 3D Secure technology for issuing and acquiring in 2011.

The processor also set up a Disaster Recovery Site (DRS) in early 2011 to enable it to boost its processing centre's fault-tolerance and service availability by minimising both planned and unplanned downtime. The DRS mirrors Quipu's primary processing complex, holding a synchronized copy of the database which enables the rapid restart of the system. By the end of 2012, Quipu achieved 100 per cent service availability, which the company continues to maintain.

Commenting on the significant achievement of 100 per cent service availability for its processing centre, Quality Manager Bjoern Pysall said: "We have made a commitment to our customers: that their accountholders can use payment services at any time of day, every day of the year without interruption and inconvenience. The outstanding performance and reliability of the Compass Plus Technologies platform has helped us to fulfil this promise to customers by delivering 100 per cent service availability."

# Looking to the future

Today, Quipu GmbH successfully delivers an extensive spectrum of processing services to 18 banks of the ProCredit Group and 5 other banks outside the group. Since the start, its business volumes have quadrupled. Currently the processing centre uses Compass Plus' solutions to process three million transactions per month, manage the network of 5,000 POS terminals and around 1,000 ATMs working in many languages amongst which are English, Portuguese, Serbian, Spanish, Albanian and Moldavian. Quipu has not stopped there and continues to grow its functional capabilities offering its customers access to state-ofthe-art payment technologies. Quipu is planning to utilise and implement the revolving credit module in Compass Plus' card management solution in the near

