

Introduction

This case study aims to demonstrate a real life example of *RV Rating*© and *RV Credit*© systems put into practice by a complex banking organization. We shall see how they addressed the needs of a complex risk management operation, ranging from day-to-day risk measurement and reporting to strategic economic capital evaluation.

About the Cooperative Banks

The cooperative Banks of Greece consist of 16 individual Banks spread around Greece. Together, they founded Panellinia Bank, a commercial Bank, which also acts as their “central bank” and their “technology arm”. It is noted that DZ Bank, one of Germany’s largest financial organizations, is a strategic shareholder of Panellinia. The group has exposures mostly in the SME segment, while many of its obligors do not issue complete financial statements, and are considered to be of average/ low quality. Furthermore, the Risk management function was either non existent or under-utilized at most of these banks.

The road to Basel II implementation

In the above context, and while the Central Bank of Greece was exercising pressure to the banks to start preparing for the new Basel II framework, the group decided in early 2005 to select a third party vendor to assist it in the following areas:

- Collect all risk components in a centralized location;
- Measure minimum regulatory capital under the Standardized approach;
- Coordinate with the central bank regarding clarifications required (classification of exposures, collateral eligibility etc.);
- Produce reporting to the Central Bank;
- Prepare the grounds for future migration to the Internal Ratings Based (IRB) approach. More precisely:
 - ➔ Evaluate internal Risk Rating and Default probability for all obligors;
 - ➔ Incorporate risk elements in business decisions such as exposure pricing;
 - ➔ Evaluate Economic Capital and Risk Adjusted Return at a business unit level;
 - ➔ Train all risk managers in modern risk management concepts;
 - ➔ Apply best practices in the field of risk management.

Why SYSTEMIC was chosen

While a number of well established software vendors and consultants were considered, SYSTEMIC was immediately short listed to provide its *RV Rating*© and *RV Credit*© systems, and also to undertake the risk management outsourcing tasks.

«There is a lot of work that needs to be done at the Cooperative Banks in the risk management field, not merely in terms of systems but also in terms of training and guidance. SYSTEMIC was an obvious partner for us because they could efficiently undertake both. They have a local team of experts with a good understanding of our requirements particularly in the SME sector, and most of all they are very accessible by our remote risk managers requiring guidance and customizations. Furthermore, SYSTEMIC has a proven track record with many other Banks», commented D.

Charalambakis, General Manager of the Association of the Cooperative Banks of Greece.

Obligor Risk Rating

The implementation started from the ***RV Rating***© system in order to assess for the first time the creditworthiness of the group's 30.000+ obligors. In order to gain time, the system was calibrated based on default data from other banks with similar characteristics, while as soon as sufficient default data is collected, the system will be re-calibrated using actual data of the cooperative banks as a group.

All banks have already incorporated in their facility extension procedures and workflows the inclusion of the rating sheet issued by ***RV Rating***©. This ensures that within one year from implementation start date, all obligors will be rated.

Regulatory and Economic Capital

The cooperative Banks have opted to follow the Standardized Basel II approach in 2007, and eventually migrate to the Internal Ratings Based (IRB) approach at a latter stage. However, as most of the group's SME obligors are not adequately rated by any external agency, it became obvious that a more accurate measure of *economic* capital needs to be evaluated, as also required by the second Pillar of Basel II. The ***RV Credit***© system will undertake all regulatory and economic capital calculations based on all risk elements such as exposures and collateral which are being collected by its central servers and reconciled with each bank's core banking system.

Outsourcing of Risk Management functions

It is widely acknowledged that creating a robust risk management culture within an organization requires a lot more than an IT investment. Furthermore, installing a sophisticated risk management system is useless if the organisation lacks adequately trained resources to use it. In this context, it was decided that during an initial two year period, SYSTEMIC's specialized personnel will run the systems' main processes via remote access to the servers in order to verify the consistency of the data and to present the results to the banks' senior management.

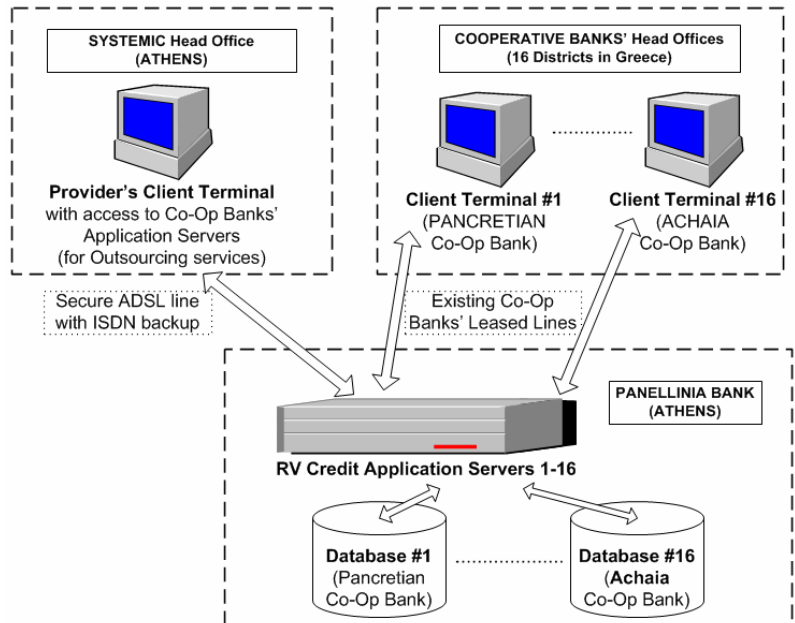
At the same time, different departments are involved in the training process, such as Executive Directors, Risk Managers, IT, Credit administration, Financial control, Compliance:

- In-depth understanding of all qualitative and quantitative risk drivers used by the risk rating model.
- Financial statement analysis, using the statement projection tool
- Case studies and group discussions of obligor evaluations done by different risk managers: Justification of inputs and assessment of output rating and PD.
- Basel II training related to classification of exposures, eligible risk mitigation techniques and all issues relating to the three Pillars of Basel II documents, the EU Directives and Consultation documents by the Central Bank, CEBS, and other respected organisations.

- On-going discussions with IT staff related to the collection, control and reconciliation of all required risk elements as well as some improvements to bring to the core systems for compliance with the new requirements.
- Case studies and group discussions on the validation of capital requirements produced by the system.
- Application of best practises in the risk management field

Efficient and cost effective installation scheme

The group had to identify a system installation scheme that was practical, secure, reliable and at low cost. It was decided to take advantage of the system's remote access capabilities to install all 17 independent servers and databases at PANELLINIA BANK, and distribute the client applications to each individual bank ensuring total independence between systems. At the same time, remote access was also granted to SYSTEMIC in order for the latter to perform its outsourcing functions via a secure network.



Further Information

To obtain additional information about **RV Rating**© and **RV Credit**© systems or to explore how they can be used to serve the needs your organization, please do not hesitate to contact us:

Systemic Risk Management
 8 Akadimias
 106 71 Athens
 Greece

E-mail: info@systemic-rm.com
 Tel.: (+30) 210 33 89 250
 Fax: (+30) 210 33 89 251