



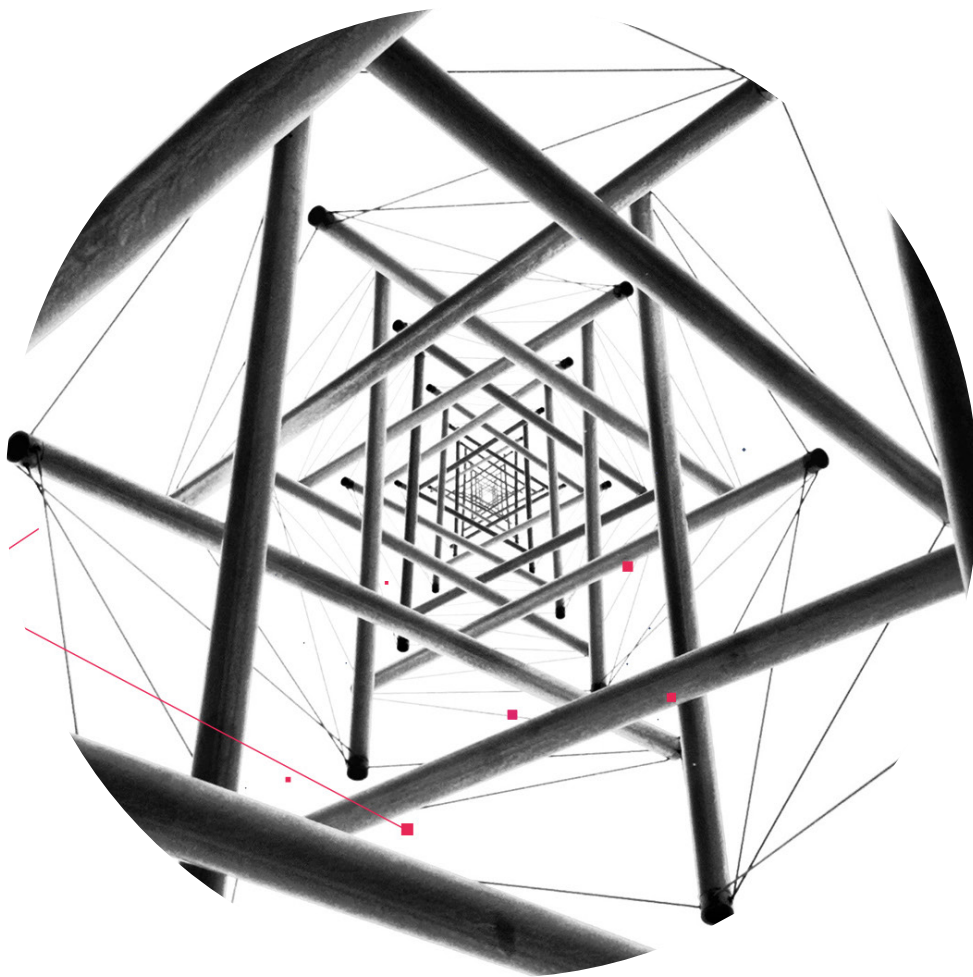
Viale Piero e Alberto Pirelli, 6
20126 Milano, Italy

RES IT



Business case

RES and SGS - Banco Popolare



THE SUPPORT OF RES IN THE PROCESS OF MERGER & ACQUISITION OF SGS BP

The merger between Banca Popolare di Verona e Novara and Banca Popolare Italiana group has seen the creation, in one shot, from eight to twenty-managed institutions.

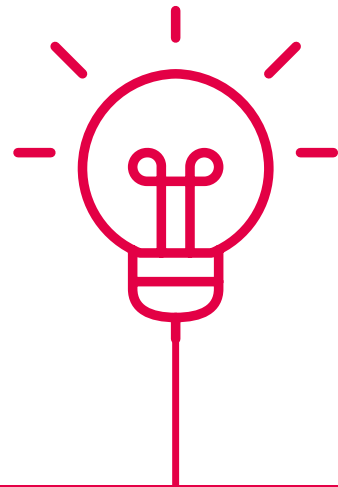
The implementation of the RES Suite and operational support of the RES organization allowed the bank's I.T. staff to complete the merger in less than one year.

■ Business overview

Banco Popolare Group was initially founded in 2007 as a result of the merger between Banca Popolare di Verona e Novara and Banca Popolare Italiana. The initial nucleus, which consisted of eight banks, have been merged with an additional thirteen, each with its own specific I.T environments, both in terms of infrastructure and process. The need for systems integration of all these organizations had to be resolved in a small amount of time, respecting the needs of each of their business processes and the specifics of each of the different institutions involved.

■ The challenges of the Project

The constraints posed by the project were twofold: on the one hand the requirement to manage the complexity and variety of information systems present and the other was to respect the deadlines imposed by a consolidation process certainly was found to be not easy. RES was already a supplier of SGS (**Society of Management Service**) of Banca Popolare di Verona e Novara with the **RES solutions** for process automation. The acknowledgement of the work already done and the value brought by the **RES Suite** solutions are two key elements in the necessary support for the customer in new project of this magnitude.



■ The solution

RES has leveraged its technology expertise and its knowledge of the dynamics of banking processes and had proposed to SGS BP, through the use of the **RES Suite** of tools, a way of cloning job scheduling nets and jobs. To this RES added and supported the provision of skills and specialized technical resources to uniquely high standards, which have supported first the analysis of the requirements, then commissioning the project.

■ Results and success Factors

It would not have been possible to achieve a complex integration process where it was intended to bring from eight I.T. environments to twenty of the number of banks managed by SGS BP without the use of the **RES software** tools. The project was managed by SGS BP without increasing internal resources all the while respecting the time required by the management and making sure that today, to create definitions useful to the system and create the environment for a new bank it takes just five minutes ... leaving the rest to automation.

The context

What is now known as Banco Popolare Group is the result of a long process of mergers and acquisitions that began in 1995, with the first merger between Banca Popolare di Verona and Banco di S. Geminiano e S. Prospero, which would be followed shortly thereafter by the Credito Bergamasco, Banca Aletti and then, in November 2002, Banca Popolare di Novara. In the first phase of expansion, it resulted in the creation of a conglomerate of banks gathered under the umbrella of Banca Popolare di Verona e Novara. The group size then began to increase exponentially when, in 2007, along came the acquisition of Banca Popolare Italiana, which resulted in “**the incorporation**” of the thirteen other institutions, for a total of twenty-one banks.

It is quite obvious that such an operation has involved a costly and complex process of integration at different levels. Already at the time when the first merger was created within the then Banca Popolare di Verona, the Company Management Services (SGS), our “**computer operations arm**” of the entire group, had been tasked with the responsibility to improve operational efficiency, ensure coordination of all activities related to the development of operating systems and computer systems, as well as the performance of back-office activities for the benefit of all Group companies BPVN.

The relationship between the customer and RES, at the time of Banca Popolare di Verona, goes back to the end of the last decade, when in 1998 RES managed the integration of Banca Popolare di Verona and Credito Bergamasco which created the technological management of the integration of the new entities in an effort to automate the related processes. Already with the first acquisition the bank had raised the issue of managing multiple environments and had therefore identified in the technology of RES an unique capability with which to govern the growth process.

The first **RES contacts** were of a technical nature, in the processing of Information Services, and from there the relationship has extended to areas associated with the organizational aspects of IT Governance and Change Management who could appreciate the project and enhance the return on investment by becoming a sponsor which further extended the relationship between RES as the supplier and Management Information Systems at the client site.

At that time, we laid the foundations for the development of an overall project and process value which lead to the management of the next phase of expansion of the customer and their need for integration of new environments in terms of sizing The Information Systems Group had estimated an increase of a factor of three at the time of the acquisition of Banca Popolare Italiana.



At this juncture, therefore, for the direction of the Information Systems of SGS, it was not just the problem of integration between previously unrelated environments, but also the challenge of having to manage a workload that, at a minimum, would be tripled according to a first and not particularly conservative estimate. It was therefore necessary to have a solution with a very strong automation capability in place to replicate the logic already existing in the banking group BPVN, to pursue the simplification of the most costly management processes and information systems that could provide, in a short time, the operation of the new Banco Popolare Group on the basis of a similar process logic.

The **RES proposal**, based on the application of a methodology associated with the concepts of process-model and its automatic cloning, defined for each environment and related to the specifics of each of the applications run, was immediately successful.

Assumptions of the Project and Customer needs

The solutions available through the **RES Suite** include systems aimed at optimizing and managing complex information systems, they are not end-user applications, but applications that support and benefit those involved in 'production' information systems. Management activities of the I.T. environment at financial organizations by their very nature, are typically very expensive, with significant impacts in terms of daily operations, task scheduling, maintenance and programming of applications. **RES Suite** intervenes at different levels to reduce this burden, in particular **RES Suite** provides answers to four basic aspects that underpin the capacity to govern a complex system: the knowledge, the reduction of operating costs of the systems, the control loop of management and quality of software, control and process optimization.

The presence of RES in SGS has grown over time thanks to the expertise demonstrated by the technical team and the superior quality of the **RES Suite** that is now used on the SGS reference platform for the production part of the information system. As a result, the daily operation of the various infrastructure management processes on which rests the whole application component oriented business is the most efficient possible.

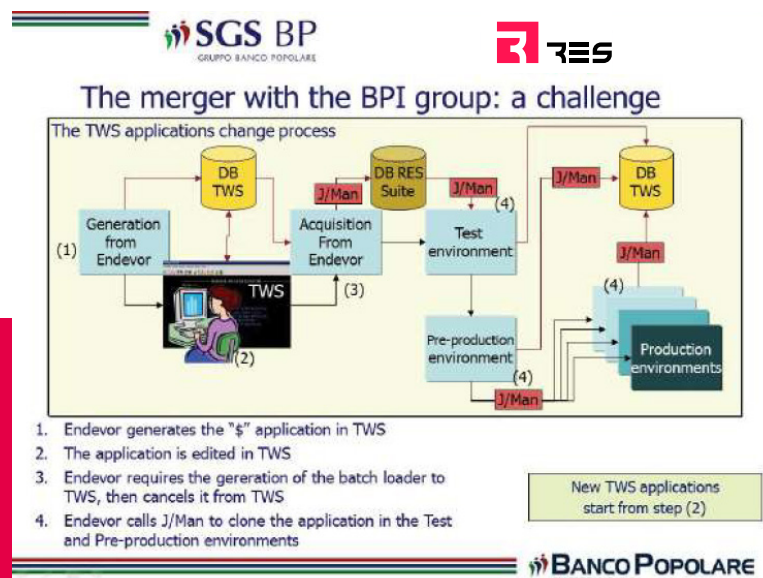
To better understand everything it should be noted that the systems and applications in the banks have, and will always have, a large component of batch processes for which infrastructure tools are indispensable to automate the execution of the various tasks on time and within the established procedures relating to the various complex plans (**automatic schedulers**).

At the head of the management of the operation flow and scheduling plans in SGS BP is the Tivoli Workload Scheduler (**TWS**) system of IBM, through which are handled approximately 100,000 scheduling nets (**Batch Applications**) that, in turn, are responsible for the execution of almost a million batch jobs (**JOB**) written in the JCL language (**Job Control Language**). JOB and Batch Applications for all sites of the group come with many features and differences from those of the primary information system that has evolved from the original system of Banca Popolare di Verona. It was immediately apparent that managing such a large, articulated and differentiated quantity of items would have been impossible without adequate methodological support and effective automation.

The project has therefore included from its early stages the implementation of the **RES Suite J-Man** module and the subsequent usage of **UpTown**, which is part of the **RES Suite** as well. The two products pertain to the class of **RES Suite modules** oriented to the area of Production systems with particular focus on the issues relating to the reduction of the management costs over time.



The combination of the RES and IBM Tivoli technologies has created the basis for the integration of the new IT environments resulting from the acquisition of Banca Popolare Italiana.

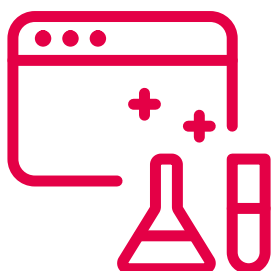


Both the Batch Applications scheduling plans and the related JOB JCLs are generated by **RES Suite software** components starting from general “**models**” defined during the project.

The “**models**” of JCL and TWS applications, determined during the assessment phase of the project, contain the rules of systematic propagation of objects across different production environments (**cloning**). They also contain parameters that define the characteristics of each set and their operating environment.

In addition to generating complete JCL and Batch Applications for a whole new environment (**the cloning process**), the **RES Suite solution** makes it possible, directly through the Change Management system with which it seamlessly integrates, to undertake the activities associated with Application Maintenance of JCL and the TWS applications on “**models**” rather than individual clones along with a myriad of other tasks associated with ongoing management of applications and TWS schedules. .

This huge increase in efficiency, added to the ability to control precise and methodical application of the appropriate syntax and the quality of the JCL, was a deciding factor in the choice by SGS BP in favor of the **RES Suite** solution, it would be possible not only to tackle the project of integration of Banca Popolare Italiana in the desired timeframe, but also to not have to increase the human resources needed to manage and reduce the incidence of errors in the production environment.



■ The elements of the project

Initially mainly interacting with the IT resources dedicated to the production of information systems which, in turn, maintained a direct coordination with Information Systems management staff, RES first did work for an assessment and preparation of the operational environment, which lasted about two months. This initial phase was used to establish the creation of a new model of master/clones in preparation for the merger with Banca Popolare Italiana which resulted in the definition of a suitable model of cloning JCL, based on the generalization of the existing BPVN-SGS and implemented through the **RES Suite J-Man** product

The next phase of the project, which included the customization, implementation and testing of the entire RES/IBM solution, lasted about five months which was then followed by the final part of the production release and roll out, starting from an initial bank (**specifically the holding company**) and then moving on to replicate the model in all the other banks involved. Overall, this activity lasted about a year, while fully respecting the time constraint posed by the management of the bank and considered a critical success factor for the entire merger project, as it allowed parallel migrations to proceed rapidly as the data of the other acquired banks was brought into the overall project.

In addition to what was put in place and implemented through the use of the **RES J-Man** product, SGS BP has also implemented the **UpTown solution**, also part of the **RES Suite**, for “**On Demand**” execution of batch processing. The **UpTown tool** addresses the problem of enforcement of batch processes which typically cannot be included in a scheduling plan since the need for their execution comes up only when there is a need by the end user.

These situations typically are placed across the intervals of execution of the various batch processes (**for example, a request from a specific account holder asked on an unpredictable day of the month**) but contain the process which are made up of applications, data and information that normally already are part of the mass batch processes available (**to keep in line with the previous example: the generation of monthly statements for all bank accounts**). UpTown has a high-level Web interface that provides to the end user the ability to submit autonomous processing requests directly to the scheduling systems, without the intervention of the production control department who are normally responsible for the management of batch processes.

This results in a considerable saving of resources and time, also achieved in the end with a greater overall efficiency.

In this case, SGS BP already had a product, but not considered as powerful as **UpTown**. SGS has chosen the time of the integration with BPI to update the existing solution which resulted in an optimizing of the process of defining an **“On Demand”** application without the need to manually create any ad hoc information system procedures, incorporated into and customized for each institution.

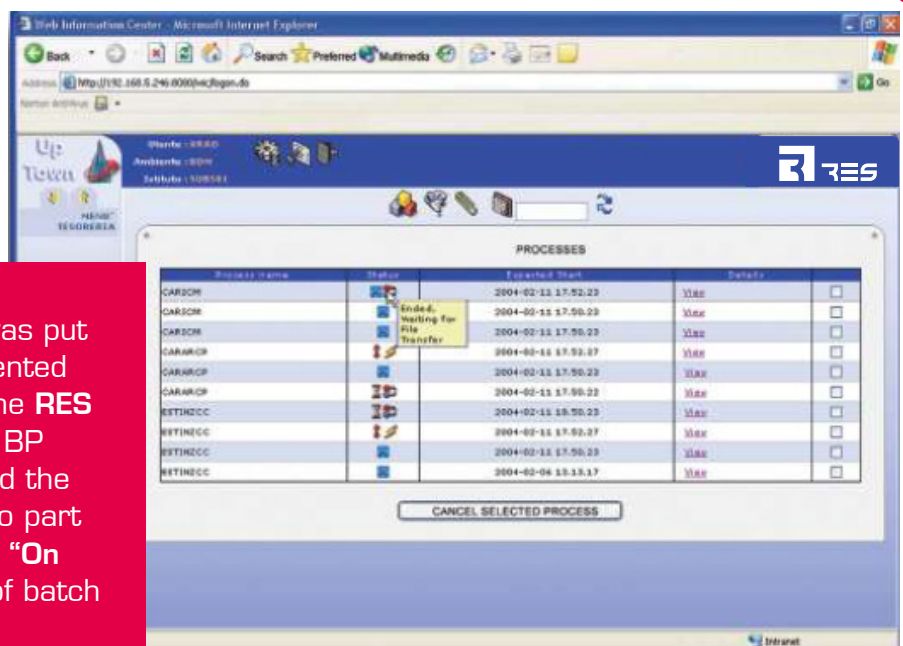
The choice of developing this project in parallel and that of the cloning of the environments described above was deemed an overall functional objective of working with the environment's processes, to reduce the time of cloning **“On Demand”** processes and to speed up the integration of the operations of the different institutions.

The overall project, with all the activities described above, took about a year to come to complete. Another factor of great importance for the customer, and that has contributed significantly to the success of the initiative was the **“savings”** in terms of resources involved in the migration and merging of the various systems.

The project team that was dedicated by SGS BP for this project was minimal: only three resources were required to support RES at various stages, with no full time involvement. The project team consisted of five **RES technical professionals** with specific skills of analysis and development, technical know-how and product skills, whose activities were constantly coordinated by a project manager dedicated to the customer.



In addition to what was put in place and implemented through the use of the **RES J-Man product**, SGS BP has also implemented the **UpTown** solution, also part of the **RES Suite**, for **“On Demand”** execution of batch processing.



Results and reasons of the success

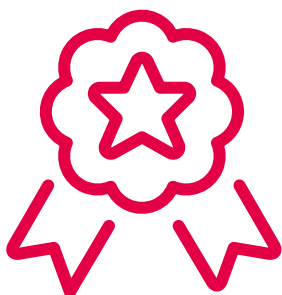
The overall opinion that comes out when talking to the management of BP SGS is that it would not be possible to realize such a complex integration process such as this, which was required to go from eight to twenty banks, without the use of the automation tools of the **RES Suite**.

The introduction of **J-Man** has allowed us to drastically reduce the complexity of managing the final production due to differences in the JCL and TWS applications between the different banks.

The saving of resources and time was on two levels: the first phase of the project which was initially under the management of systems, and then the move into production.

It should be emphasized that the entire project has been managed by SGS BP without increasing the number of internal resources: an original estimate made by RES was that it would take approximately a thousand man/days of the effort in order to complete the integration of each bank, keeping the same management infrastructure. Conversely, an alternative choice of technology and organizational differences was estimated to have added at least a dozen new dedicated resources, and this was only in the phases of development and deployment.

Thanks to the availability of the **RES solutions**, it took less than a year to solve all the infrastructural aspects of the process and complete the full integration of all the banks.



Moreover, even during the post-integration time period, dedicated management structure at SGS has not increased: the company now operates a clearly more complex structure **(with a three times increase in size)** with the same number of resources that previously ran the data processing arm of the original I.T. departments: this clearly shows the size of the impact that the **RES Suite solutions** have and that it is able to ensure an appropriate size of which may have been the return on the investment.

In terms of ROI, this means the SGS BP I.T. organization had paid off the project in less than a year, in addition to having fully complied with the time required by management it obtained a high level of quality and reliability on the path towards continued process automation. As proof of the latter, the same customer has estimated that today the possible merger of additional new institutions and/or the result of possible new acquisitions could be managed in a very short time.

To create the required new definitions that are necessary to the system to create the corresponding environment for a new business it takes **"... less than five minutes"** **(as it was said by a representative of SGS)**. You just need to incorporate the few required information parameters for the new context and then ... just leave it to **J-Man** and **UpTown**.

In addition to what is put in place and implemented with **J-MAN**, SGS BP has also implemented the **RES Suite UpTown** tool to manage the execution of **"on demand"** batch processing.