



Implementation of the Sara reporting system in Bank Pekao S.A.

Client's profile.

Bank Pekao SA has operated for over 80 years. It is one of the largest banks in Central and Eastern Europe. It has the second largest network of divisions in Poland (over 1000 centres in the whole country) and the network of over 4000 free-of-charge ATMs in Poland and 20,000 ATMs all over Europe. Bank Pekao S.A. provides services for nearly 5 million clients, including over 250,000 small- and medium-sized enterprises and over 15,000 large companies.

Bank Pekao SA Group consists of financial and nonfinancial institutions concentrated around a universal bank; it offers all financial services available in

Poland for individual and institutional clients. At the end of 2009, the capital group consisted of 22 entities: Bank Pekao SA as a dominating entity, 16 subsidiaries, and 6 indirect subsidiaries. Moreover, the bank holds shares and minority shares in affiliated and co-controlled entities (e.g. KIR S.A., Xelion. Doradcy Finansowi Sp. z o.o.). Bank Pekao SA belongs to UniCredit Group, one of the leading international financial institutions, which holds a strong position in 22 European countries, runs almost 9,600 centres, and employs over 160,000 people (as at the end of 2010).

Client's requirements.

Before implementation, preparing mandatory reports according to NBP and Polish FSA requirements was very time-consuming. Expanding the reporting procedures with new systems, which constantly appear in relation to development of the bank, was a considerable challenge. Drawing up essential reports required many hours of processing and presenting specific data by bank employees. Therefore, automated reporting system in the bank was an important reason for selecting a new IT solution. The bank decided to invest in a new IT solution which was supposed to automate periodical generation of reports. It was also supposed to enable collection of historical data, taking the organizational structure of the bank into account, and to enable verification of generated reports correctness as to their form and presented facts.

Elements of implementation.

The implementation of the Sara system enabled creation of extensive sets of reports with layouts and contents fully based on flexible metadata. Periodical reporting procedures were implemented in the bank, which were required by supervising authorities, in particular by:

- WEBIS
- EBC
- Statystyka stóp procentowych OPN-OPS
- FINREP
- COREP [STD i AIRB]

Client's benefits.

Owing to the implementation of the Sara system, the bank has had a reporting process fully integrated in one environment, from obtaining and transforming data from various systems (into the form which can be used to import data to reports); feeding, analyzing, and validating reports; to making reports available to end users. It is possible to draw up reports concerning a specific project (layout and contents), collect data using historical approach or from a point of view of a specific division, process data in batch as well as interactive mode, verify data correctness as to its form and presented facts, make results available, and

publish results. The system enables importing data from various sources and stores them divided into types. These types are defined during implementation and may reflect factual diversification of data (e.g. loans/deposits separately etc.) as well as technical one (e.g. data imported from various systems). Multiple data sources can be used to calculate one set of reports at the same time. Technical expertise is not essential to define reports and conversion rules. Changes of reporting requirements do not require modifications to system codes; they only require updating metainformation defining reports.

The Sara system supports internal reporting processes of the bank performed by the Accounting Department, the Management Information Department, the Tax Department, and the Credit Risk Department. Using this system, data was imported from various sources and converted to a shared standard model, which was then used to feed reports.

Owing to the implementation of the Sara system, the bank has had a reporting process fully integrated in one environment, from obtaining and transforming data from various systems (into the form which can be used to import data to reports); importing, analysing, and validating reports; to making reports available to end users. Owing to the implementation of the Sara system, it is possible to draw up reports, taking into consideration the following:

- a specific project (layout and contents);
- a collection of data using a historical approach and from a point of view of a specific division;
- processing data in batch as well as interactive mode;
- verification of data correctness as to its form and presented facts;
- making results available to others and publishing them.

The system enables importing data from various sources and stores them divided into types. These types are defined during implementation and may reflect factual diversification of data (e.g. loans/deposits separately etc.) as well as technical one (e.g. data imported from various systems). Multiple data sources can be used to calculate one set of reports at the same time.

Defined rules for data conversion from one source to another form enable performing a process related to reporting. For example, this concerns transformation of parameters and values used in one system to parameters and values from the standard model, which is used to construct rules for filling in reports. During the conversion, it is possible to perform the process of data aggregation at the same time.

Using the Sara reporting system enables easy definition of reports (their layout and rules for filling in fields which should be fed directly with data) and calculation rules for fields with values determined based on values from other fields. Rules of filling in fields can be defined based on any data model (parameters and their values). Reports are rectangular tables with a defined number of columns. It is possible to define reports with a dynamic number of rows

and to determine control rules. Technical expertise is not essential to define reports and conversion rules. Changes of reporting regulations do not require modifications to system codes; they only require updating metainformation defining reports.

Description of technology.

The system was implemented using client-server architecture on MS WIN platform (version for UNIX available) and SAS system. A module providing access to data and reports via a web browser was also implemented.

The solution is highly efficient in data processing. It is based on a system of intuitive and flexible metadata, what enables easy adaptation of the application to changing requirements.