



Leaner and smarter – how the information revolution transformed a financial institution in Eastern Europe



Petr Novák
HEAD OF INFORMATION MANAGEMENT, KOMERČNÍ BANKA



KB

TERADATA

Executive Summary

Situation

In 1990, Komerční banka was demerged from the state bank of Czechoslovakia. As a former government institution, the bank consisted of several large branches, each with their own departments, processes and underlying IT solutions. A lack of common business rules and measurements resulted in low consistency and accuracy of information. At the end of the decade, the country's economic downturn led to considerable losses, revealing the weaknesses of the bank's information management.

Challenge

The effects of the slump called for the centralisation of information in a single system. This was the first of four distinct stages which characterise the evolution of the bank's business intelligence, each with its own challenges. The acquisition by Société Générale in 2001 brought more customer-oriented business models, implying the need for an analytical customer relationship management. Basel II regulations, published in 2004, required enhancements in risk management. Most recently, the focus on cross-selling has led to continuous improvements in customer segmentation and the extended use of advanced analytics to gain new insights.

Results

With Teradata as a technology provider and trusted advisor, Komerční banka has managed to turn business intelligence from a siloed approach into a cohesive, data-driven information management, carried out by a dedicated division. In terms of financial achievements the bank has outperformed competitors. Compared to 1999, when the information revolution began, Komerční banka has increased its share value by a factor of 17. Implemented as part of achieving compliance with Basel II, the solution for integrated risk management alone accounts for savings of about 200 million Euros annually.



Founded in 1990 in the midst of political and economic turmoil, Komerční banka has evolved into a highly profitable enterprise with some 7,000 employees serving more than 1.5 million customers. The financial institution, which today belongs to the Société Générale Group (SocGen), has undergone a number of organisational and technological changes since the 1990s, all bringing new challenges to its business model. As a result, it has developed solutions to adapt to the constant change with the support of comprehensive and yet targeted business intelligence. Supported by Teradata, Komerční banka has developed a sophisticated data-driven approach towards information management, and has advanced its data analytics.

"Every company is an information company, every manager an information manager – especially in the banking business. We had to learn how to use our data and manage the information."

Petr Novák,

HEAD OF INFORMATION MANAGEMENT AT KOMERČNÍ BANKA

Compared to the beginning of the information revolution in 1999, Komerční banka has increased its share value 17-fold, has outperformed competitors and ranges amongst the big Czech banks, holding the largest market share. Three distinct technological advancements and ongoing investments in data-driven business models made this possible: the implementation of a Teradata Enterprise Data Warehouse (EDW) in 1999; an analytical customer relationship management (CRM) system in 2002 and risk data integration for Basel II in 2004. Since then, Komerční banka has focused on evolving its technology to understand its end customers and cater to their needs through targeted marketing campaigns and customized product offers – an effort which continues to date.

Stage one: crisis management

A former part of the state bank of Czechoslovakia, the bank not only inherited its client base, but also its static bureaucratic processes. Several large divisions were almost operated as if they were independent businesses with siloed IT systems, resulting in a lack of common business rules and definitions, also with regards to data extraction and business intelligence. "You might think it should have been easy to say how many customers we had. Yet it was hard to tell," Jiří Omacht, manager of BI Operations & Infrastructure, recalls.

In the late 1990's, the Czech economic recession led to considerable revenue losses, and Komerční banka needed to reestablish a profitable business model. At the same time, a new management team was preparing the organisation for full privatisation. They soon realised that banking success would largely depend on an information system which is able to collect, integrate and analyse the data from all different branches in one single system. "Every company is an information company, every manager an information manager – especially in the banking business. We had to learn how to use our data and manage the information," Petr Novák, head of information management at Komerční banka, summarises the company's endeavors, which led to the implementation of a Teradata EDW in 1999 as the central information platform of the bank.

One of the main reasons for choosing the EDW was its scalability that made it adaptable to future needs. While the technology was robust and easy to use, it included all the specific tools needed to turn massive amounts of diverse data into transparent, detailed and relevant information for the bank to respond to any business changes. The EDW quickly enabled Komerční banka to get a full picture of the group's performance across the different branches. Consistent and comprehensive key performance indicators (KPIs) enabled analysts to develop substantiated reports on sales performance, as well as risk and revenue management, and produce comparable results. The improved information management became the key factor to consolidate and optimize Komerční banka's business.

Stage two: new business models

This new data management approach offered potential investors access to reliable financial insights to evaluate the business. The good performance of the bank soon attracted the attention of SocGen, a French multinational banking company and one of the biggest players in the Eurozone. SocGen acquired 60 percent of the bank in 2001 and became the new majority shareholder. This, of course, led to yet another change in the organisational infrastructure.

Komerční banka expanded its product portfolio and established a more customer-centered business model. The business intelligence team set up a CRM system based on the key product information and client data derived from the data warehouse. With all information about each customer in one system, they could achieve a more detailed and reliable segmentation, which in turn enabled marketing and sales to better focus on their clients and provide them with more individualised product offers.

Stage three: improving risk management

While operational efficiencies improved, banking regulation became another main driver for innovation in business intelligence. In 2004, Basel II allowed banks to calculate required capital in relation to their credit risk using own internal methods. Komerční banka implemented its Basel II IRB (internal ratings-based approach) tool and integrated risk management techniques into the central information architecture of the bank.

"Some people in the business called the Basel II requirements a regulatory tsunami. However, our Basel II tool and integrated risk management was one of the most profitable solutions, saving roughly 200 million Euros annually."

Petr Novák,

HEAD OF INFORMATION MANAGEMENT AT KOMERČNÍ BANKA

The unified database and the enhancements in data quality quickly paid off. Managers were able to assess various risk factors much more accurately and could reduce their equity capital significantly. According to Petr Novák, "the solution was one of the most profitable ones, saving roughly 200 million Euros annually."

Continuous improvements

The Teradata EDW cut costs across the bank. For instance, storing and analyzing all data in one single system made it possible to establish lean divisions. A lot of activities have been moved into a central back office, enabling the bank's branches to focus on direct sales channels and value-added processes.

Customer segmentation has grown more sophisticated year by year, providing Komerční banka with much more profound information about customer profiles. At the same time, client data has become more complex. The rise of online and mobile banking has changed customer behavior significantly. Better access to information enables clients to compare fees quickly and find out which bank meets their needs best.

Teradata helps companies get more value from data than any other company. Our big data analytic solutions, integrated marketing applications, and team of experts can help your company gain a sustainable competitive advantage with data. Visit teradata.com.

Focus on cross-selling

To provide customers with tailor-made cross-selling offers, Komerční banka has continuously stepped up its capabilities and shaped its information technology landscape towards business support with targeted insights over the last years – relying on Teradata as the technology provider and trusted advisor. By re-bundling different products such as pension funds and insurances as packages, the financial institution further aims at increasing customer value. This, in turn, requires detailed information about individual customer behavior.

Thanks to the Teradata EDW, the information managers can connect all kinds of complex data types and analyse them directly. The detailed information from different stages of the customers' life cycles give them more insights into their customers' needs. By calculating their future value, the bank can offer customised products with fees that correspond to the individual customer value – a process that Petr Novák calls "master management of products".

The opportunities of 'dark data'

Today, Komerční banka strives to be ahead of market developments, and updates its solutions accordingly. For instance, Teradata hardware upgrades are anticipated one year ahead. The information management currently deploys an Active EDW 6680 and the Teradata Database 14. 200 technology users work with the solution every day, while the business reports benefit more than 4000 users throughout the bank. "The Teradata solution is very stable, particularly at critical stages. We enjoy working with the Teradata team and are very satisfied with the results," Petr Novák underlines.

In the era of big data, Petr Novák and Jiří Omacht see even more opportunities to serve customers quicker and better with advanced analytics – a term that describes the utilisation of new tools and techniques, for example the integration of Hadoop, cloud solutions, and in-memory processing. Furthermore, advanced analytics will contain the use of new data types. Novák and Omacht are sure that correlations between disparate, intertwined data sources promise great new insights. Novák has no doubt: "We will enhance our skills to make use of all the data we have – including the 'dark data', the sort of data we have somewhere but cannot yet access for analysis."

This article was written by Teradata on the occasion of the presentation at the Teradata Universe 2014.

Teradata and the Teradata logo are registered trademarks of Teradata Corporation and/or its affiliates in the U.S. and worldwide.

Copyright © 2014 by Teradata Corporation. All Rights Reserved. Produced in E.U.



TERADATA