

ABN-AMRO fosters corporate synergy with a repeatable and customizable IBM banking solution

A big part of Amsterdam's personality is the scene constantly at play just under the traffic signals. Colorful bicyclists and scurrying pedestrians dodge cars, taxis, tour busses and trams. Rail tracks snake in and out like loose threads in a haphazard tapestry. To the uninitiated, the image is chaos, but to the daily participants, there is a connection and a specified sequence

of events – the consistent information delivered by signal lights, signs and sounds – and the similar way in which each player interprets the data.

At first glance, the scenario faced several years ago by the Amsterdam-based Corporate MIS Data Modeling Team at ABN-AMRO seemed remarkably similar. The institution's



The ABN-AMRO corporate headquarters in Amsterdam

Overview

■ **The Challenge**

ABN-AMRO's large network of diverse country locations previously implemented independent data warehouse projects. The executives at the corporation wanted to bring consistency and efficiency to these projects in order to gain synergy, cost savings and the potential to share information.

■ **The Application**

Data warehousing to ultimately facilitate customer service and bank operations.

■ **The Solution**

IBM Banking Data Warehouse (BDW) Solution

■ **IBM Checklist**

IBM IBM Banking Data Warehouse (BDW) Solution

IBM Desktop PCs

*IBM DB2® Universal Database™
EEE Version 7.2*

*IBM DB2 OLAP Server
version 8.1*

IBM AS/400® servers (currently known as iSeries™ servers) in many country locations' data warehouses

IBM Business Partners:

Business Objects

Cognos

diverse banking locations in different countries wove their own ideas, tools and methods together locally to build disparate information management solutions in the form of data warehouses. The difference between this image and the city scene, however, was that the many loose strands had no common tie. Similar information meant different things to users in various country operations.

With that in mind, the challenge identified by the executives at the ABN-AMRO was to make synergy, economies-of-scale, cost and timesavings and a staged delivery of data warehousing best practices available to all of the disparate banking locations within the corporate network. This approach would eliminate duplicated effort and the cost of largely redundant projects. The strategy ultimately would speed the process of making decisions based on fact – for marketing, customer service, account management, risk assessment and more. Most important, the process would enable the country locations of ABN-AMRO to communicate, rather than collide, on the common path to gaining insight from information.

Beginning the journey

Thanks to the ingenuity of the ABN-AMRO Corporate MIS Data Modeling Team and the IBM Banking Data Warehouse (BDW) Solution, numerous in-country technology and business leaders now expediently reach their respective data warehousing goals.

IBM Banking Data Warehouse enables the creation of a range of data warehouse solutions from departmental data marts to enterprise-wide data warehouses (EDWs). BDW includes all of the key components required for the core of a data warehousing solution.

Now it takes less time to close the loop between implementing a data warehouse, analyzing the information uncovered by it and using that insight to measure results for improvement and learning.

“We help ABN-AMRO entities begin the data warehousing process by gathering and outlining business needs. Any unique requirements our constituents present help us customize

our reusable data model,” explains Jan Klaver, vice president, management information systems. “Local teams can shorten project time lines and implement proven best-of-breed data models, following the Corporate MIS processes, and by working with our Corporate MIS consultants.” He notes, “The Corporate Team adds value by helping constituents capitalize upon the work already completed for other projects.”

The Corporate MIS Data Modeling team collaborates with local teams to complete a small part of each respective data warehouse project. The tasks executed by Corporate MIS Data Modeling team comprise approximately 20% of any given data warehouse implementation and the Team completes the same activities repetitively for each of the data warehousing projects in which it engages.

Given the short planning horizon of two to four months or less for many of the warehouse implementations, the Team’s proven methodology enables local groups to meet their own tight implementation schedules. If necessary, the Corporate MIS Data Modeling Team can support a local

team during an implementation on a consultative basis, providing advice to local resources, members to serve on steering committees or technical education.

Traveling full circle

“Reuse” is top among the list of benefits delivered by the solution. By executing the same actions over and over for multiple projects, our skills get better and better,” explains Mr. Klaver. “In addition, the repeatable aspects of our solutions help local teams realize savings in cost and time.” He adds, “Once a data warehouse is operational in a region, cycle time decreases. This translates into faster time to market for delivery of new products and services, and typically that could mean realizing more profit more quickly than otherwise would be possible.”

“Our data warehouse solution – based on the IBM Banking Data Warehouse Model and our hands-on experience and ideas – bridges the gap between IT and business teams at the beginning of a data warehouse project,” Mr. Klaver continues. “The process and the model ensure that all business-critical issues are considered.”

The data model also guarantees that the technology infrastructure is consistent with that of other companies in the ABN-AMRO network that recently have implemented data warehouses. Once the model is agreed upon and the infrastructure design considered, in-country teams, or a central development team, typically provide the staff and manage the implementation of the data warehouses.

“The IBM BDW model helps us communicate with the business sponsors,” he says. “In a concise, relative easy-to-understand visual way, business users can understand how the warehouse will deliver insight to them,” adds Hans Bernheim, consultant, management information systems (MIS). “Prototypes based on our model enables these professionals to see and understand how they will interact with it.” He continues, “The prototype gives business users a framework to which they can add requirements or changes before we get into the final data model design work.”

From an internal standpoint, both ABN-AMRO and the local teams now have consistent data definitions and structures. “Our business has seen significant benefits by beginning to institute global standards. The fact

that many locations now refer to similar types of information in the same way means that our institution now has a great deal of flexibility,” says Mr. Bernheim. “For example a future switch to one or more central corporate data warehouse(s) could be more easily accomplished with this global consistency already in place, for example, or a business operation in one country easily could be moved from the current location to another because information is defined in the same way.”

Statistics have shown that the percentage of ABN-AMRO data warehouse projects deemed successful has increased since the bank instituted the Corporate MIS Data Modeling Team. For the Team, this provides great incentive to handle as many projects as possible.

Real examples

One project was completed in the Private Clients Group of ABN-AMRO. The initiative included nearly 80 measures and 60 dimensions. A large portion of the model used in the

initiative was reused in a completely separate project implemented by another strategic business unit. "This strategic business unit (Wholesale Clients) was able to complete the implementation in just three months because the business requirements were virtually the same as those in the other project," Mr. Klaver says. "Minimal adjustments were necessary due to nuances in the wholesale business, but nevertheless, the first phase was operational in record time – three months after delivery of the data model."

Mr. Bernheim continues the anecdote, "By comparison, we required elapsed time of approximately five months to deliver a model to our Private Clients and Asset Management strategic business unit. Software development took an additional five to six more months to complete."

Mr. Klaver summarizes, "The sponsors in Wholesale Clients saved nearly 50%. This was due in part to our reusable modeling approach and in part to the open communication between the Corporate MIS Data

Modeling team and Private Clients. The model used for Private Clients has since been implemented in six countries and in fact, a seventh and eighth location soon are to follow.

The milestones

What are the stages in the process? First, a requirements model based on information gathered from business users is delivered. The model is customized to include such things as issues particular to the size of the warehouse or legal banking requirements for the specific country in which the warehouse is being built.

"We use the BDW Business Solutions Templates at a business level as one of the inputs for the requirements model. This gives us a means to check completeness and quality," notes Mr. Klaver. "At this point, we determine if we have captured everything. We can point to areas in which investigation may be needed."

A requirements document contains all relevant dimensions, including definitions, the sets of domain values for each dimension, measures and their definition, a high-level snowflake diagram and more. One of the activities in the process to delivering the data requirements model is to establish a scope that is feasible in size.

The next step is Data Modeling. ABN-AMRO customized the Banking Data Warehouse Model to create an ABN-AMRO specific version. The ABN-AMRO Data Warehouse Model has grown out of the experience the team has gained in a number of data warehouse projects. Data models are usually followed by prototype implementations for new business areas, to prove that the model really supports the business requirements.

Usually there are requirements that are not present in ABN-AMRO's Data Warehouse Model. "When specific additional needs arise, our team goes back to the IBM BDW Model. Sometimes we find a perfect match; sometimes components match but definitions need to be changed," notes Mr. Bernheim. "Our team's goal is to align all of our clients projects as closely as we can with ABN standards. "The IBM BDW Model is used as a reference model," interjects Mr. Klaver. "We customize parts of it and then reuse those parts for various projects."



*Hans Bernheim, consultant, management information systems (MIS),
and Jan Klaver, vice president, management information systems*

The Corporate MIS Data Modeling team is careful to point out that it has not yet been asked to implement one corporate data warehouse, but rather, a series of consistent independent warehouses. What the team has pioneered, the members say, is a repeatable set of corporate standards. "Having this consistency in place at different locations makes it easier for us to suggest global changes and gain agreement from country management teams to make those modifications," concludes Mr. Bernheim.

The team

The ABN-AMRO Corporate MIS Data Modeling Team is comprised of a diverse group of international

technology experts. IBM provides nearly one third of the staff. "The IBM team members play an important role in guaranteeing the quality of our deliverables," explains Mr. Klaver. "Our core data modeler hails from IBM, and we have one prototype developer who also comes from IBM. Both bring expertise from past data warehouse projects," he says.

The Corporate Team is organized according to the roles played by individual contributors. Job roles relate to three areas: business analysis, data modeling, and prototype development. Each of these three roles is involved when the team participates in a data warehouse project. The first activity in any given initiative is business analysis. The second is modeling. The final one is prototype development. Mr. Klaver has assembled experts on the team who specialize in each of these respective functions.

The IBM connection

Before BDW was used, several independent project groups in various countries selected various tools independently. Each group executed its own customization, and between them, none had consistent data definitions or structures.

"When our executive management saw the duplication of effort, IBM consultants were asked to help. At that time, the IBM BDW Solution was recommended as a consistent way to solve the problem," Mr. Klaver notes. "Additionally, it was recommended that the institution implement a Central MIS Data Modeling team at the corporate level to execute modeling work.

The Corporate MIS Data Modeling Team was formed in near the end of 2000. The Team's first assignment was to reuse the work done for early data warehousing projects. Since that time, the group has reused many of the components that came with the BDW solution.

Both Mr. Klaver and Mr. Bernheim note that working with the IBM BDW provides creative challenges from a

modeling perspective. “The possibilities provide a thrill for our team members,” Mr. Klaver says. “While there is a lot of variation in what functions our respective team members perform, there is also a great deal of satisfaction to be derived from bringing a measure of consistency to the entire ABN-AMRO network of companies.”

About ABN-AMRO

Netherlands-based ABN-AMRO is a leading international bank with total assets of approx. EUR 556 bn. It has over 3,000 branches in 66 countries and territories, and has a staff of about 105,000 full-time equivalents worldwide. ABN-AMRO is listed on the Euronext, London and New York stock exchanges.

ABN-AMRO operates through three Strategic Business Units, each responsible for managing a distinct client segment. Wholesale Clients provides integrated corporate and investment banking services to corporate, institutional and public sector clients worldwide. Consumer & Commercial Clients focuses on retail and SME clients in three home markets – the Netherlands, the US and Brazil and in a number of selected growth markets. Private Clients & Asset Management provides private banking services to wealthy clients

and investment products to financial intermediaries and institutional clients.

ABN-AMRO's Consumer & Commercial Clients Strategic Business Unit serves more than 15 million personal customers and clients in the small and medium enterprises (SME) sector worldwide. ABN-AMRO is among the

“When our executive management saw the duplication of effort, IBM consultants were asked to help. At that time, the IBM BDW Solution was recommended as a consistent way to solve the problem.”

*– Jan Klaver, vice president,
management information systems*

leading players in these segments in its three home markets – the Netherlands, the US and Brazil. The SBU also has a presence in India; in Italy through shareholdings in Capitalia and Banca Antonveneta; and interests in the Hungarian Kereskedelmi és Hitelbank, the Saudi Hollandi Bank and the Bank of Asia in Thailand.

ABN-AMRO's Wholesale Clients Strategic Business Unit provides integrated corporate and investment banking solutions to around 10,000 corporate, institutional and public

sector clients in over 45 countries. Its client-led approach is sector based and structured around four product groups: Financial Markets, which includes fixed income, syndicated loans, treasury, structured and project finance and risk management; Working Capital, which offers liquidity management, global payments and receivables and trade finance; Corporate Finance & Equities, providing corporate advisory as well as equity capital markets expertise and secondary market services; and Private Equity. With a global network, specialists in all major industry sectors and a broad range of products, ABN-AMRO provides local and global expertise for complex cross-border deals.

ABN-AMRO's Private Clients & Asset Management Strategic Business Unit provides private banking services to wealthy clients and asset management and trust services to individual and institutional clients. ABN-AMRO is a leading player in private banking both in the Netherlands and in France, and has also strong positions in Luxembourg, Miami and Switzerland. Private Clients ranks among the world's top 10, with EUR 96 bn Assets under Administration. Asset Management has

local presence in 30 countries and offers mutual funds and investment mandates to financial intermediaries and institutional clients. Financial intermediaries are ABN-AMRO's own distribution channels, third party distributors and asset consultants. Assets under Management are EUR 150 bn.

IBM BDW – a landmark banking solution

IBM Banking Data Warehouse (BDW), enables financial institutions to build data warehouse solutions to suit their specific needs. BDW has the flexibility to enable the creation of a range of data warehouse solutions from departmental data marts to enterprise-wide data warehouses (EDWs). BDW includes all of the key components required for the core of a data warehousing solution.

Consisting of a series of more than 55 predefined Business Solution Templates enabling the rapid definition, scoping and implementation of commonly required data warehouse applications such as Customer Profitability, Wallet Share Analysis, Customer Attrition Analysis, Liquidity Analysis and more, BDW delivers competitive advantage by providing consolidated, clean data. BDW

supports rapid implementation of warehousing solutions with meaningful banking data and provides a combination of sound infrastructural techniques, a proven data management product set and rich functional content. BDW facilitates the subsequent customization and extension of the data warehouse, enabling business users to effectively control the definition and scoping of the solution and provide a solid basis for expansion into CRM applications and integration into other decision support and executive information applications.

Futures

"Our internal customers keep coming back to us, and new customers contact us although we have not publicized our services," says Mr. Bernheim. "We see this as an indicator of success." Mr. Klaver continues, "The Team and our solution provide a bridge between different IT groups within the institution. We also bring cohesiveness, a factor that tremendously improves the chances of successful implementations."

Already there is a steady influx of requests for repeat and new projects. "Now there is a continuing flow of requests for our services," notes Mr. Klaver. "Ultimately, there will be a limit to the number of new projects that we will be able to handle." Now numbering 11, the group currently must increase immediately to compensate for ongoing additions to the workload.

Despite the fact that the possibilities for new and add-on projects are endless, Mr. Klaver has set a goal of limiting the size of the department to 15 staff members.

"There really is no comparison between the number of projects we now handle and the workload in 2000," Mr. Bernheim concludes. "Many of the earlier projects we completed now have reached advanced stages that require add-on work from us. We are constantly fully booked."

ABN-AMRO's Corporate MIS Data Modeling Team is gaining more and more momentum each day in solving the problem of consistency throughout the institution's global network. The intersection now has been built. The signals are functioning. Most significant, the vehicles of change stretch for as long as the team can see.

Want to know more?

For more information about IBM solutions for specific industries visit <http://www.ibm.com/industries/financialservices>. For more information about ABN-AMRO, visit <http://www.abnamro.com>. For more information regarding IBM DB2-based solutions contact your IBM client representative or visit our Web site at <http://www-3.ibm.com/software/data/>.



© Copyright IBM Corporation 2003

IBM Corporation
Global Business Intelligence Solutions
Route 100
Somers, NY 10589

Printed in the United States of America
05-03
All Rights Reserved

IBM, the IBM logo, the e-business logo, AS/400, DB2, DB2 Universal Database and iSeries are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries or both.

Other company, product or service names may be trademarks or service marks of others.

This case study illustrates how one customer uses IBM products. Many factors have contributed to the results and benefits described. IBM does not guarantee comparable results. All information contained herein was provided by the featured customer. IBM does not attest to its accuracy.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

 Printed in the United States on recycled paper containing 10% recovered post-consumer fiber.

