IBM

Somerfield gains 25% savings through re-use of data interfaces built with IBM WebSphere Information Integration

Overview

■ **The Challenge**

To facilitate rapid deployment of a new promotional demand forecasting application through the flexible and accurate migration of large-volumes of complex data from disparate legacy systems. To minimize cost by implementing a solution re-usable on subsequent development projects.

■ **The Solution**

IBM designed and created an enterprise data integration capability using the IBM WebSphere Information Integration platform. IBM consultants worked with Somerfield to set up procedures to profile, cleanse and transform data. An interface toolkit was provided to enable Somerfield staff to handle future developments simply in-house.

■ **The Benefits**

– *Accelerated introduction of innovative business applications*
– *Ability to change data models in line with moving business needs*
– *Consistent interpretation and use of data throughout Somerfield*
– *25% cost through re-use on subsequent applications*
– *Visibility of data and flexible deployment across the business*

Somerfield is a leading convenience and local food retailer, operating over 1000 stores across the UK. The company encountered a challenge when introducing a new system to increase the accuracy of demand forecasting and optimise the effectiveness of in-store promotions. It wanted to generate accurate demand forecasts and correlate these with on-shelf availability and supply logistics to maximize sales. This required data of many types and formats to be extracted from various existing systems, consolidated and cleaned before being fed into the new application.

Rather than build a bespoke data integration solution specifically for this project, Somerfield decided to use an existing ETL suite and capitalise on the greater benefits of creating a structured data interface environment for use on the immediate solution and across the business on all future data integration projects.

Somerfield reviewed the market and chose to implement the IBM WebSphere Information Integration platform which has accelerated new application deployment and automated consistent, high quality data integration. IBM WebSphere Information Integration has generated cost savings of over 25% of interface development costs.

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Mike Bell, IT Director at Somerfield.

Price promotions are key to driving sales in the highly competitive food retailing business. However, promotions are only effective if stock levels and shelf availability are geared to reflect rapid changes in customer demand. To improve the accuracy and speed of demand forecasting, Somerfield decided to implement specialist software from Manugistics.

Much of the raw data required by the Manugistics application resides in many different applications and databases installed in stores and head office functions over many years. These systems held similar data but in different formats, in different databases, and embodying different detailed content. The quality of the data varied a great deal as local applications had been moulded to address various local requirements. Before this diverse array of data could be used within the new Manugistics solution, it had to be profiled, matched, cleansed and transformed.

Initially Somerfield considered developing bespoke software to extract and manipulate data and migrate it to the new platform. However, it quickly realized that this would be a costly project, incur a great deal of ongoing support and maintenance, and would not deliver the flexibility and documented traceability that would be needed as business rules and migration needs changed in the future.

The IT Department decided to go out to tender and evaluate the ETL products generally available on the market.

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"We shortlisted three suppliers and selected the IBM WebSphere Information Integration platform on functionality, price and our confidence in the supplier to deliver," said Mike Bell, IT Director at Somerfield. "The IBM solution is one of the few products to address all three elements of data profiling, data quality and data transfer. IBM provided consultants with excellent knowledge of our industry and a great deal of experience of large-scale, complex data integration projects."

The corporate forecasting project is critical to Somerfield's business. The data elements to be migrated and interfaced to Manugistics in some cases comprise up to 6 million rows, and come from many different databases, applications and incompatible data sources. It was vital that the chosen vendor could deliver a solution with comprehensive functionality, in-depth consultancy and support, and a commitment to support Somerfield in achieving its corporate goals.

Tough challenges
The main challenges centred on understanding Somerfield's business and operational processes so that, as business rules were designed to consolidate, cleanse and transfer data, they accurately reflected the state of existing data and the operational needs of the business. Some existing systems were over ten years old and different stores and functions held data in different ways for different purposes.

"During the project, many unexpected data conditions came to light. The IBM Information Integration platform gave us good visibility of the data profiled, and allowed us to quickly match any new data conditions, verify quality, manipulate formats and implement a controlled migration," said Mike Bell. "IBM provided a highly capable and professional team of consultants to work with us to design the business rules. These are now used to automate and control all our data migration needs."

The project was completed under intense time pressures and user demand, reflecting the tough and demanding nature of the retail business. The migration project was complicated by the fact that the Manugistics solution was in its early stages and data integration was subject to continual change and refinement.

"IBM coped well with the changes, remaining flexible and sharing our desire for a successful project outcome. They stuck to the original quotation even though some of the events and deliverables took them beyond the original project scope," Mike Bell added.

Benefits of a corporate integration environment
Within Somerfield, data within legacy systems is often required for a variety of new applications. The IT department recognised that the most significant benefits would result from designing and building a structured corporate programme for data extraction, transformation and migration that could be re-used on all future development projects.

Extending and re-using a standard data integration model would cut development times, accelerate the speed of change, and generate significant cost savings in the data migration processes.

IBM consultants wrote procedures for data profiling, extraction, transformation and loading, and set up development and test environments as a corporate toolkit that could be used on the Manugistics implementation and all future development projects.

Somerfield has already used the standard migration kit designed by IBM on two other projects, and estimates that this saves around 25 per cent of the migration / Interface development costs for each new application deployment. IBM has worked closely with Somerfield staff transferring knowledge and expertise such that the IT function can now handle much of the migration work in-house. An IBM consultant is assigned to each major project to provide specialist support when necessary.

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Speed and flexibility

Using IBM's fully-supported, structured product for data migration projects means that Somerfield can deploy new applications very quickly and accommodate business changes easily. There is no need to search through endless lines of code to find data elements that need to be changed, and then re-write code. The IBM WebSphere Information Integration platform holds a profile definition of all data elements and tracks data matches and usage. Users can address any modifications automatically by simply changing the appropriate parameters.

During the testing phase of the Manugistics solution, a data migration problem came to light just as the software was about to go live. Using the IBM Information integration suite, Somerfield was able to fix the problem quickly, avoiding fresh software development, re-testing and unacceptable delays in the launch of the new system.

"IBM has given us the facility to model the data integration needs of our business rapidly and flexibly at an enterprise level. With IBM Information Integration, we can deploy innovative applications of a high quality much more quickly which helps us compete more effectively in the tough retail market," Mike Bell concluded.

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