MAGNITUDE™
SOFTWARE

Imperial Brands — DW

Imperial Brands is a global tobacco company which manufactures, markets, distributes, and sells an extensive variety of tobacco-related product lines. Imperial Brands adopted Kalido Information Engine in 2006 to provide consistent data warehouse solutions that it can replicate and evolve quickly and at low cost.

PROBLEM

Imperial Brands went through a major merger in 2008, which highlighted the need for corporate BI and data warehousing initiatives to combine and coordinate information between the head office and over 70 business units and 46 factories.

Imperial Brands sought to provide visibility into all aspects of corporate performance across multiple, recently merged organisations. Data sources would include multiple ERP and CRM systems, a variety of country-specific applications for products, with many different product hierarchies in different geographies. Imperial Brands' established practice of acquiring companies would continue to add to IT diversity and complexity, and necessitate maintenance and evolution of the data warehouses.

Imperial Brands required systems that meshed together within a cohesive overall strategy for global management of data on product, brand, markets, supplier, and materials master data accessed via consistent, reliable business intelligence.

SOLUTION

In 2008, Imperial Brands launched a business intelligence (BI) program in its Sales & Marketing Centre of Excellence, to provide standardised BI solutions for all Imperial Brands' markets at the corporate, divisional and market level. Imperial Brands selected Kalido Information Engine to build the data warehouses that would combine data from all its sources, to feed the BI program. Imperial Brands decided to begin implementing one data warehouse per major market, plus one devoted to marketing and analytics. Tracking many thousands of retail outlets, and a large number of SKUs results in a high volume of data coming from multiple data sources, including dozens of different ERP systems. Complexity also stems from the fact that Imperial Brands has extensively customised internal sources

"Kalido gives Imperial Brands an advantage in that each of our data warehouse projects can be small, and at reasonable cost and timeline."

"We can step out of the BI tradition where needed, and give operational results to our local business units.

Daniel Dickinson
MANAGER OF BUSINESS INTELLIGENCE FOR SALES AND MARKETING GROUP IS Imperial Brands

such as its Siebel systems.

Since then, Imperial Brands has steadily added more data warehouses, rolled out more standardised reports to all its markets, and expanded the BI program to allow flexible, analytic views into corporate level data, via the Kalido-based data warehouses.

First things first: MDM

A top priority was to "get corporate master data running across this huge company. We had to obtain agreements on master data across the whole group, and knew that would let us create data warehouses faster, better, and cheaper." Anticipating this need, Imperial Brands had already implemented Kalido's master data management capabilities, beginning in 2005.

Terabyte-plus size

Imperial Brands currently has three corporate data warehouses and ten for its major markets. All are Kalido-based and handle Imperial Brands' different data structures and quality levels, and its great variety of data types. Among the largest, with about three terabytes, is one processing data from Imperial Brands operations in Russia. An even larger project in the US will hold approximately seven terabytes of data, including 1.5 billion records from one particular source.

The biggest challenge: "The data always requires plenty of cleansing, and our solution must tie together these murky data sets," according to Dickinson. "We also have to verify the business processes are represented correctly in the implementation and workflow."

▶ RESULT

In addition to its Kalido-based major-market data warehouses, Imperial Brands has to date created two corporate data warehouses, plus an additional one for corporate master data management, for a total of 13. The data warehouses are used regularly by 250 to 300 people. Their activity is divided roughly equally between 60% accessing standard reports and 40% ad hoc analysis. The standard reports, distributed monthly to all marketing and finance teams, are used to highlight areas for analytic enquiry.

Imperial Brands' implementation timeline differs for each additional data warehouse. From project inception, the average timeline to going live is 12 months, at a cost that Dickinson pegs at 300,000 euros per project (including consulting, hardware and database licenses). This represents a significant savings and dramatically faster go-live compared to complex data warehouse projects that can take 2-3 years before go-live and cost upwards of 1 million euros. Imperial Brands uses a third-party resource to handle implementation. Imperial Brands maintains

oversight via a project manager and a technical team it assigns to review the work and act as a Technical Design Authority to ensure Imperial Brands standards are maintained.

Kalido makes it easy to reuse the same warehouse model from market to market, or adapt it as needed. Only 60 percent of the consumer-based data overlaps across markets, and 40 percent is usually unique to the particular market, requiring some customisation of each new data warehouse. This repeatability is key because Kalido automates many of the programming tasks required to create a data warehouse. "These data warehouses are quite complex, and use complex data sets," notes Dickinson. "We are always under time pressure from a cost perspective and the ongoing need to keep the pipeline full but moving."

Imperial Brands recognized that a hybrid agile/waterfall implementation methodology would be needed to achieve the development velocity required to meet their demanding requirements. Kalido's flexible, iterative approach to building and deploying data warehouses adapted to meet those needs, putting Imperial Brands on a path to consistent and predictable data warehouse deployment. As Dickinson explains, "While we have shifted from an exclusively waterfall approach, we haven't yet managed to do a full agile data warehouse implementation end to end."

To modify the data warehouse requires little more than revising the data warehouse model in Kalido Information Engine. "Our Group sales force was reorganised from geographic structure to a divisional structure, and we had to reflect all the adjustments in the PR application and every performance report on volume and value sales by brand and market," notes Dickinson. "We had a very challenging timeline, and we accomplished that entire change in just three weeks. It would not have been possible without the flexible model in our Kalido data warehouses."

Imperial Brands has relied on Kalido as a pillar of its BI and analytics foundation through significant company changes. The model-driven, quickly updated data warehouse approach continues to be important to Imperial Brands. Says Dickinson, "Deploying data warehouses via Kalido makes change much easier over the long haul, as we take a more agile approach and utilise Kalido for rapid data modeling."

The use of Kalido data warehouses enables corporate to assist local operations more flexibly. For example, Imperial Brands' unit in France had a reporting project in a country-specific legacy reporting solution which needed a fresh approach because the application was not being adopted locally. Dickinson's group included a set of daily operational reports on their country-specific CRM activity—based on data from a Siebel system—that met with popular adoption. "We were able to revisit the project, adjust, and efficiently come out with a replacement."

Imperial Brands' Kalido users exercise a significant degree of self-service autonomy. Imperial Brands favors giving

its end users "what they need to create their own reports and only come to us if there are issues." Dickinson's team steps in to help if the user or business unit needs help to create a report or analytic inquiry, or more infrequently, to set up their own OLAP cube.

In practice, Dickinson's group often interacts with a local market analyst who becomes the business unit's primary resource for particular data. These local resources, spread around the world at Imperial Brands units, are skilled BI users. They occasionally help their local teams work with the Kalido-based application and facilitate a largely self-service approach.