Designing and Building a BI System

Business Overview

Our client is a mid-sized regional brewery ("The Brewery") that received a substantial infusion of cash to allow it to grow through a strategy of controlled acquisitions into a national presence.

Initially, The Brewery had five brands with 97 different flavors. After the first acquisition, this increased to 6 brands and 113 different flavors tripling both volume and annual revenue for the brewery.

Currently the company brews 11 different brands with 240 flavors of their own beer and distributes it through wholesalers in 8 geographic regions though out the US. In addition to their commercial brands, they brew 8 brands under contract from other national breweries.

Business Challenge

Many of the processes for manufacturing, quality, human resources, etc. were scalable and robust enough to support this expansion. Key gaps in people were identified and hiring put in place to support the growth.

While The Brewery had an existing order entry system that could scale, the existing reporting environments – for Sales, Quality, and Finance – were not scalable. Given time was of the essence, and the acquisition needed to be integrated and managed, the Sales Reporting area was identified by management as the initial target. During this time, two critical success factors were identified:

- 1. Fill an immediate need for a reporting environment that is both easy to use and that provides accurate consolidated Financial, Sales and Plan reports from both companies during the transition period
- 2. The reporting solution must be able to expand to meet new business needs for the existing company and support future acquisitions

Solution

Due to the aggressive schedule put in place by management to integrate the acquisitions, and the need to source data from the current applications of each entity at least in the short term to keep the business going, LPA immediately focused on the data sourcing and extracting needs.

While that work was underway, LPA's consultants interviewed key stakeholders to identify the set of information that would be needed in the integrated solution, and documented the business processes and requirements. A review of the current reporting environment was done to both identify the data and sources and to see about any potential re-use due to the tight time schedule.

Knowing that the solution had to be able to support multiple future acquisitions each with their own systems and processes, LPA designed a data warehouse and ETL process that made use of multiple staging environments where the data could be loaded, cleansed and prepared for the single reporting repository.

LPA followed is trademarked Compass[™] design, development, test, and implementation method to build a comprehensive reporting environment that initially consisted of Sales and Volume related reports and subsequently has been expanded to include Planning and Financial subject areas.

Despite the well-developed process LPA used, we encountered many issues along the way. For example, some source systems had no automatic way to extract data from them; each accounting systems used their own account numbering scheme, making the integration across them much more difficult; there was a lack of source data accuracy and timeliness; and inconsistent reporting hierarchies between the different organizations.

Ultimately, LPA designed and built a data warehouse to use as the base platform, sourcing the data from four major entities (with data for thirteen key metrics, fourteen dimensions, and three years of history for trending analysis) and has subsequently supported multiple acquisitions in the last 2 years.

Results

- Full integration of the acquisition was done in nine months allowing full
 disconnect from the acquired source systems. This saved significant dollars due
 to the ability to eliminate that original technical infrastructure and support.
- The Brewery started to establish an enterprise set of processes for reporting and managing the Sales business. This allowed a common language to be used and for collaboration to occur.
- With an integrated environment built on IBM Cognos, the Brewery could build their own reports (including graphics, charts and text) and do ad hoc analysis without engaging the IT department.