

## Understanding & Designing a Data Warehouse

### Business Overview

Our client (“FFP”) is a mid-sized, family-owned business specializing in many flexible food packaging options for its clients. FFP is a full service packaging company taking projects from concept to completion by using cutting edge technology to deliver their solutions. They currently run their business using many systems - the largest is a mid-sized ERP and accounting package (Infinium running on an AS400).

Through a sales effort done before LPA arrived, they purchased a full suite of IBM Cognos products (Cognos Express, which combines BI capabilities with Planning capabilities). They purchased this because they believed they needed to get a better understanding of various reporting metrics around operational and financial data, if they were to continue to grow their presence in the market.

### Business Challenge

Their technical environment had grown with them over time, but was focused around many manual processes (Excel-based reporting and “green-screen” reports). Management was having difficulty getting timely data to use for analysis, and the cost to continue to have IT develop the analyses was expensive.

They believed that building a data warehouse would allow them to build an end-user advanced reporting environment for both Operations and Finance. They also knew that their current IT/analytics team was not capable of designing and building it, though they believed that their team could maintain and enhance the solution. They engaged LPA.

### Solution

LPA started by performing a full evaluation and review of FFP’s reporting needs. This review spanned current report requests, data sources, source systems, and analytics desired by management. Additionally interviews with key stakeholders were done to identify the desired business environment and the data needs. Due to the growth over time, a review of the functional business requirements was also performed. The result of this consulting effort was a high-level design of a solution and a confident estimate for a detailed development and implementation of the solution. The solution was to

leverage their investment in IBM Cognos to design a data warehouse and reporting environment.

After the high-level architected solution was developed, it was reviewed and approved. LPA was engaged to develop and implement the initial phase of the solution. We installed the previously purchased IBM Cognos software, and mocked up complex pieces of the deliverable for FFP's team to review. We then designed the framework model and built out the required components – data source tables, warehouse components, cubes, and reports. During this process LPA provided mentorship and knowledge transfer to the FFP IT team to ensure that they “owned” the solution and could provide ongoing support. The FFP end user team was also integrally involved in acceptance testing, ensuring full understanding of how the data was made visible.

The initial phase took six months elapse time and resulted in a mid-sized warehouse (40 tables, 15 reports, 3 subject areas). At the end of phase I, the client was able to continue building additional reports and was able to maintain the system.

Subsequently, FFP called LPA back to help them design and implement a planning/budgeting system, using the same software, augmenting the BI system that we had built months earlier.

## Results

- FFP Analysts had fast, complete access to key data and could perform their own reporting without engaging the over-burdened IT staff
- Financial analysts can execute the analyses using cube technology to quickly slice and dice the numbers
- FFP personnel were trained in how to continue to enhance the data warehouse and reports, allowing faster response to changing business needs (and less expensive as they did not need to engage outside experts like LPA)