



▶ Delivering Insight

Emtec's information management team helps client turn its data into valuable information.

In today's digital economy, most organizations don't have any trouble accumulating data. The problem is how to take this data and develop information that can be used for business insight. For example, businesses have spent billions on enterprise resource planning (ERP) and customer relationship management (CRM) applications only to find that while these systems effectively manage and produce data, they don't lend well in supporting insightful reporting. Generating useful reports becomes a tedious external process of pulling data from multiple sources and then manually creating spreadsheets, charts and graphs — many of which are already out of date by the time they're finished.

The experts in Emtec's Information Management practice show organizations how to unlock the value of data trapped in their information architecture in order to get actionable data quickly.

"We specialize in developing data integration and business intelligence solutions that give our clients the ability to understand and use information relevant to their operations," said Saj Patel, Managing Director of Information Management Practice, Emtec Inc. "The ultimate goal is to improve your ability to make informed decisions that will translate into increased profitability and greater opportunity."

Advanced Analysis

One of the world's largest distributors of distilled beverages called on Emtec for guidance with respect to the architecture and implementation of two key projects designed to deliver faster and more robust sales reporting.

Like most large enterprises, the client had been accumulating operational data for years. SAP, legacy ERP and several external sources provide the bulk of sales related content. Although with many limitations, the client was able to slice and dice this information for some strategic benefit through a number of very loosely connected and independent home-built solutions. However, they now wanted to use that information to more tactical advantage, integrating the information directly

within key business processes for much improved and timely decision-making.

In the initial engagement, the client was looking for help in developing a solution to support its national accounts team, which is responsible for sales to large chains that sell or serve its products across the country. The company's IT team had already settled on a new BI framework based on the SAP BusinessObjects toolset, but it sought Emtec's expertise to develop a reporting data mart for the integration of key sales data.

"They wanted a solution with the flexibility to leverage the various levels of information available on sales — both actual and forecast — from within the organization and from external sources," said Peter Lepine, Managing Director of Information Management Practice, Emtec. "The integration of internal and external sales data was critical for a complete sales picture. Although the solution was regarded as a data mart, it fundamentally required a complete data warehouse solution due to the implementation of new technologies and the new design approaches."

The key piece of this effort was the design of a layered data architecture to ensure that information from these multiple sources was properly integrated and presented for use in the most flexible manner. The data was captured at a transaction level, effectively integrated with other data to create meaningful

information and then presented with dimensional flexibility to allow the business to slice and dice information in the manner that supports their operational and analytical needs.

"It gives them the ability to extract meaning from their data. They can mine the raw data they obtain from multiple sources to expose patterns of customer behavior and make informed business decisions," said Saj Patel. "This insight into market trends and customer habits can help them identify cost-cutting ideas, uncover new business opportunities, effectively develop sales plans and targets, develop crossover sales leads, react quickly to retail demand, optimize prices and more."

Success Breeds Success

Around the same timeframe, the client began an internal project to improve its reporting solution for delivering key metrics for the regional sales teams. Whereas the national accounts team had a broader focus on large customers spanning multiple regions and states, the regional sales team focused on sales for their independent areas. This was a tactical initiative to rehost the existing reporting environment for improved automation and control. However, the client began to reevaluate that approach only a few months later.

The organization found that the rehosted environment could not easily support the changing demand for enhanced key performance indicators (KPIs) that were now required for regional sales. Considerable changes to the overall architecture would be essential to support these new requirements. Rather than staying on the current path, the firm engaged Emtec to help implement a new solution for the regional account team that would mimic the framework Emtec developed for the national accounts team.

"The success of the previous project and our subject matter expertise with the company and its data proved to be very valuable," said Peter Lepine. "They asked us to establish the baseline for the solution, which included defining all requirements, and then design the overall solution, the data architecture and the reporting framework."

Working collaboratively with the client's IT and business teams, Emtec documented the data requirements from multiple sources, clarified the various reports and level of analysis that would be required by the sales team. This

included itemizing the individual characteristics of each report and working with users to refine the delivery of the content.

Based on these requirements, Emtec designed the data models for the transactional and dimensional layers in the database. Since internal and external sales data was necessary to support the requirements, the integration of this content along the right dimensions was critical. Dimensions and hierarchies had to be reconciled and modeled correctly to represent the main metrics at the right level and allow the business teams to view the information at the various levels necessary for their KPIs.

Information is Power

After verifying the data requirements, Emtec produced the overall solution design, developed the data architecture and designed the initial Business Objects reporting universe to accelerate the development process. Once Emtec completed the initial phase, the project was transitioned to the client-led teams that were responsible for completing the data integration detailed design, ETL and report development, test and implementation. Emtec provided transitional support and oversight during the overlap handoff period.

The end result is that the client's national and regional sales teams now have an extremely user-friendly data reporting mechanism that is powerful enough to conduct fairly complex analytics. Query and analysis tools allow users to extract business information and answer ad hoc questions themselves, without advanced knowledge of the underlying data sources and structures. Interactive visual models allow anyone to quickly take the information on key performance indicators and develop engaging business presentations with dynamic charts and graphs to integrate into operational business functions.

"Information is power," said Saj Patel. "That's been the promise of IT for a long time, but it is not delivered systematically very often. Unfortunately companies struggle to provide tools that business users can actually use on their own and allow IT to get out of the way. At Emtec, we take pride in helping our clients create an environment where you can get to the data you need and truly see how the business is doing. We help create a more self-service environment. Information allows for insight, and insight leads to opportunity."

Established in 1964, Emtec, Inc. is a systems integrator that provides IT services and products to the federal, state, local, education and commercial markets. Our market leading value-based management methods, coupled with best-in-class IT technology, consulting and development services, address a wide range of specific client needs, as well as support broader IT transformation initiatives. Emtec's service capabilities span the United States, Canada and countries around the globe.