Case Study: JCI Supply Chain

The Client

Our client is a global market leader in automotive systems and facility management and control. In the automotive market, it is a major supplier of batteries and seating and interior systems. For nonresidential facilities, it provides building control systems and services, energy management and integrated facility management.

Our client’s battery division is the largest automotive battery manufacturer in North America. Its aftermarket battery customers include AutoZone, Interstate Battery, Sears, Wal-Mart and Costco. They also make original equipment batteries for auto makers including DaimlerChrysler, Ford, Honda, and Nissan. It provides batteries for both the original equipment and replacement automotive battery markets, and its focus on continuous improvement increased battery life with reduced costs.

The Opportunity

Our client’s battery group faced the need to integrate its internal supply chain, beginning with its Joint Venture supplier located in Mexico and its injection molding plants which produce battery components. This group of plants supplies 100% of injection molded Polyethylene battery casings to battery plants throughout North America.

After implementing supplier side EDI with the Mexico JV and centralizing Accounts Receivable in MFG/PRO to meet Year 2000 Legacy system issues, our client embarked on its Polyethylene plant implementation project. This group is a multi-site internal supplier to the 12 battery manufacturing plants in North America. It operated on a multitude of internally developed Legacy systems, requiring separate VAX servers, multiple points of data entry, single site limitations and lack of standardization. Most systems that managed manufacturing, inventory, financials and distribution were not integrated and transaction processing was often managed in batch due to the lack of integration.

Month-end close was handled through a series of manual journal entries in Oracle General Ledger. There was a high complexity to the maintenance of these systems, requiring high levels of internal and external support, reliant on a small group of core experts in Legacy systems with a 35-40% cost of ownership. It was difficult to change systems to allow for changing business requirements, including additional sites, different manufacturing requirements, and detailed inventory management. Data was located on multiple platforms in multiple formats, with excessive amounts of redundant data, leading to data integrity issues. Their DEC operating system and several development tools, as well as their RF equipment, was unsupported. To implement the battery division plants after the injection molding plants, our client needed a complete integrated solution that supported
scalability and growth, allowing for a drive of cost and quality to world benchmark levels. This drive would enable the integration of the North American battery plants to the polyethylene group of plants as part of the integrated Supply Chain.

The Solution

Logan Consulting and our client developed an aggressive timeline for the implementation of the polyethylene facilities. They identified objectives for the project to have uninterrupted productivity at the facilities, with no production problems related to process upon going live. This included a fully trained, self-supporting user staff capable of utilizing all aspects of the QAD solution driving bottom-line business benefits.

Additionally, our client's IT team's objective was to become a fully trained, self-supporting IT staff capable of supporting the QAD solution. To reach this objective there needed to be a thorough documentation of designs, user procedures, training materials, production support documentation (e.g. job schedules, etc...) screen and report manuals. The team set the goal of minimal to no software modifications, and the requirement for definition of project success was to be on time and under budget. In order to meet these objectives and overcome the difficult challenge of migrating from systems used for more than 10 years at the facilities and meeting the aggressive timeline, our client implemented and educated its IT staff on the Logan Consulting Methodology and Toolkit. This Toolkit is Logan's proprietary software tool designed to enable change and manage projects of all kinds.

Using the standard Logan Methodology and Toolkit as they tailored the approach to the internal client product development methodology, Logan Consulting and the IT Staff implemented the following applications and functionality:

- Supplier and Customer Side EDI Processing integrated with Sterling Gentran
- Eagle RF Data Collection
- ERS Functionality with freight charge handling functionality
- MFG/PRO integrated real time validation against Oracle GL Account Code Combinations and integrated posting to Oracle GL from MFG/PRO with drill down capability to MFG/PRO
- The Planner from QSL to gain additional flexibility to schedule production mold operations
- Full QAD Distribution, Manufacturing, and Financial Functionality including Sales Orders and Customer Schedules, Purchase Orders and Supplier Schedules, Multi-Site DRP, Advanced Repetitive, Costing, MRP, CRP, EDI, AP, AR, GL.
The Results

After overcoming significant Change Management issues and needing additional focused integration testing, Poly cut over one month before the Project Team’s initial timeline. The extended integration testing and training resulted in one additional month of timeline, but resulted in a seamless cut over thereby meeting project objectives.

In order to meet the aggressive six month implementation timeline with full implementation of all third party and MFG/PRO functionality, Logan Consulting and our client brought together the right mix of experienced Project Management and MFG/PRO consulting expertise as well as a proven Project Management and Implementation Methodology which allowed the project to hit key project objectives on time and on budget.