Success Story: TRS Technologies Realizes High-Impact Efficiencies and Process Improvements

written by admin | February 4, 2015

Located in Central Pennsylvania, TRS Technologies is a world leader in piezoelectric and dielectric materials technology, transforming raw powder into piezoelectric rings, discs and plates. These products are revolutionizing technologies in the medical, sensor, industrial and defense domains. Examples include medical ultrasound systems with higher resolution, reduced package size in sonar systems and new low-temperature instrumentation.

SITUATION

According to TRS president and owner, Wes Hackenberger, the company was struggling with on-time delivery and scheduling inefficiencies when he first connected with IMC. “After working for a period of time without a real tool, we had transitioned into using Microsoft Project, but even that was extremely time-consuming.” Hackenberger, himself, was spending a considerable amount of time with scheduling productive capacity and responding to customer service issues, limiting his time to focus on critical areas of business success such as pursuing new product development, adding new customers and leading the company in the execution of its business vision and mission. That’s when IMC became involved, bringing in the expertise of a third-party resource.

SOLUTION

The project was broken into several key phases: assessing the circumstances, defining current and future needs, securing RFPs from qualified vendors, facilitating software demonstrations and making recommendations on a final, integrated solution that would ultimately allow Hackenberger to delegate scheduling to another member of his team.

At the onset of the project, the resource interviewed TRS leadership and other

personnel to get a full understanding of the process flow for scheduling, from quoting delivery dates through to the completion of production and the closing on the work order into finished goods. He then drafted a business process narrative describing TRS, its current technology, the value proposition for the project and the current state and future state capabilities required from software to support TRS' requirements. The document was finalized with TRS and then circulated to vendors who fit the scope requirements. Those vendors were instructed to reply with an overview of their solution's capability to satisfy the needs of TRS, as well as budgetary pricing.

The proposals were evaluated and TRS was assisted throughout the selection process. This included facilitating a series of software demonstrations by the vendors, who were provided a demonstration guide directing them to present at minimum what the selection team needed to review. Once vendors were narrowed through that process, solutions were discussed and a second round of presentations were convened to provide TRS the opportunity to view the software again, but with their own sample data implemented. The process enabled TRS to evaluate the solutions more thoroughly in order to make the best decisions possible.

RESULTS

Hackenberger noted that the process, itself, produced several positive results for the TRS. The impacts included:

- On-time delivery improvements – from 70-80% to 92%
- Retained sales – $2 million
- Plant/equipment investment – $600,000
- Employees retained – 10
- Employees created – 3

These outcomes were realized as a result of the work accomplished through the project with IMC – even before implementation of a software solution. As of January 2015, TRS had not purchased the solution, but Hackenberger indicated that he would be making the investment.

Success Story: IMC Helps Lewis Lumber Products Reshape its Business through Innovation Engineering

written by Lauri Moon | February 4, 2015

Located in North-Central Pennsylvania, Lewis Lumber Products, Inc. is a quality manufacturer of fine hardwood mouldings, paneling, flooring, component parts and lumber. Selling to both wholesale and retail markets, Lewis Lumber takes great pride in the preservation and enrichment of the timberland environment and their own timberlands are part of the Chain of Custody Certification process for lumber from Pennsylvania State Forest Lands.

SITUATION

“We needed to get out of the foxhole and make a charge of some kind or else bury our heads and die.”

That’s how Lewis Lumber President Keith Atherholt characterized the circumstances when he first connected with IMC. “We recognized that demand in our business would not recover to the degrees of the past.” That fact is what prompted him to meet with IMC. “Discussing things really helped me to understand our situation even more thoroughly,” Atherholt shared, “and it was helpful knowing that we were not the only business or industry with these kinds of challenges.”

SOLUTION

It became clear that Lewis Lumber needed to more effectively generate meaningfully unique or differentiated products and services. Through conversations with IMC, company leadership believed that by more fully leveraging resources

through a systematic innovation approach, they would be able to generate and develop new product and service ideas, as well as identify and develop customers and markets—all leading to increased sales, profitability and growth.

IMC recommended that Lewis Lumber embark on what would be a business-altering journey for the company. They proceeded with two projects: Innovation Engineering (IE) Jump Start and Innovation System Engineering System Development. These highly entrepreneurial experiences were aimed at helping Lewis Lumber to identify at least two product or service ideas and to create the company's own innovation system. The goal was to equip the Lewis Lumber team with significant knowledge of the innovation process and tools, increase their capability to innovate and set them on a path towards developing their own defined and re-finable Innovation Engineering Management System (IEMS).

The work included:

1. Planning — Gain a solid understanding of the inner workings of the company, ensure a collective understanding of the purpose and fundamentals of IEMS, establish clear objectives for next steps, discuss the IE Assessment Tool and identify Stimulus Mining opportunities for the initial Create Session.
2. Create — Apply Innovation Acceleration principles and transform Stimulus Mining insights to create and/or sharpen ideas.
3. Communicate — Using IE Communication tools, apply 3 P (Problem, Promise, Proof) structure to move ideas from more generalized to more focused and to begin validating the potential of the ideas for market success.
4. Commercialize — Apply IE tools to further understand the potential of the ideas by doing fast evaluations of market segments, potential customers, financial potential and various challenges and potential threats including design, manufacturability and cost.
5. Lewis Lumber System Build — Loosely construct a draft model of the Lewis Lumber Innovation System by completing a blank Innovation Funnel.
6. Idea Selection — Decide upon two or three ideas to move into a Discovery Phase and identify Project Leaders and a Management Coach for the projects.

7. Coaching Rapid Plan, Do, Check, Act (PDCA) Cycles — Apply Fail-Fast, Fail-Cheap methodology to swiftly and cheaply learn enough about the idea to either kill it or move it to the Development Phase.
8. Lewis Lumber System Build – Develop a draft of a Lewis Lumber Innovation System.
9. Work, Refinement, Assimilation into Company Culture — Work on current projects while also placing emphasis on the further development of a defined Lewis Lumber Innovation System that can be sustained, taught to all employees and new hires and continually improved and refined with the intent to make Lewis Lumber a highly innovative enterprise.

RESULTS

Atherholt said that he was extremely pleased with the outcomes.

“In fact, we are confident that we can draw direct relationships to improved gross profit margins in product lines identified and altered in the innovation engineering process. Better yet, we developed a new system to process ideas. We’ve named it ‘LEMIS,’ for ‘Lewis Efficiently Managing Ideas Systematically’!”

The approach officially kicked off in 2014 and involved every employee, reinforcing the concept of ideas emanating from the floor-up rather than from management-down. Atherholt admitted, “This is a culture change. We have a small company and even in that small arena, this is taking time. We started in December 2013 with an employee meeting to introduce this concept. It took until March 2014 to put the next step in place of creating an ‘idea session’ with the entire company all at one time.”

“This is taking much longer than I would like, but we have woven in LEAN Continuous Improvements as well. I am confident that we will move forward with forming project groups, and I am sure that we will still depend upon IMC to guide us through building our own LEMIS. The future looks bright and positive! I am confident of profit-generating results!”

Through prompting of IMC, Lewis Lumber embarked on other positive steps too. These included sending the company’s general manager to a LEAN manufacturing class, Atherholt’s participation on an idea-sharing “Manufacturers’ Executive

Forum” and an educational outreach program in which Atherholt and a panel of manufacturers spoke to 50 guidance counselors from local school districts about encouraging students to consider manufacturing as a career.