

APICS EDUCATION ENABLES SUPERIOR EMPLOYEE DEVELOPMENT AT CARLISLE INTERCONNECT TECHNOLOGIES (CIT)

The supply chain team at Carlisle Interconnect Technologies (CIT) experienced a period of rapid growth, and leaders knew a strategic talent development program was needed to drive success.

Using APICS CPIM as a cornerstone, Carlisle created an award-winning employee education program that produced immediate results:

RESULTS

- Employees were enthusiastic about the training and gained confidence in their roles.
- Teamwork and communication across the organization increased, aiding process improvements along the way.
- On-time delivery improved from 87 percent to 96 percent, slow-moving and obsolete inventory was significantly reduced, and cycle counts revealed more precise results.

This case study was originally published as a Corporate Spotlight in the March/April 2016 issue of APICS magazine. The article, written by Managing Editor Elizabeth Rennie, can be found under the title "Emphasis on Talent."

Carlisle Interconnect Technologies (CIT) is a St. Augustine, Florida-based designer and manufacturer of high-performance wire and cable, including optical fiber. Medical, satellite communication, military and defense, industrial, and test and measurement industries use its products. The company also specializes in harsh-environment interconnect contacts, connectors, cable assemblies, installation kits, racks, and shelf assemblies.

A few years ago, the supply chain team at CIT faced rapid growth through acquisition, organic expansion, and the implementation of a new enterprise resources planning system intended to standardize business systems across CIT plants. At the time, supply chain activity was conducted at the local level, with limited training for supply chain associates. Decision makers knew that an improved strategic focus was necessary—specifically one that would center on development programs, enriching and retaining associates, and attracting new talent to the organization.

"Developing the skills and capabilities of your company's supply chain associates is critical to your future success," says Steven Morgan, CPIM, CSCP, director of CIT supply chain operations. "We wanted to make our associates better in order to help drive our business to be better."

CIT's journey began with six sigma define, measure, analyze, improve, control (DMAIC) and plan-do-check-act (PDCA). Then, lean tools were employed to assess the situation; identify needs; and advance, track, and sustain the growth of supply chain employees. The company encouraged staff to take advantage of APICS resources.

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"The fundamental principle is that supply chain leaders own the development and growth of our associates," says Mark Smith, CIT vice president of supply chain and information technology (IT). He also notes that senior leaders were very supportive of the skills-improvement project, with Carlisle Corporate funding employees' APICS enterprise membership fees as well as training books and other materials.

The APICS Certified in Production and Inventory Management (CPIM) program is a cornerstone of the initiative. APICS training is conducted using self study, online study with Fox Valley Technical College, in house training, and local APICS chapter

offerings. CIT class attendance at the start almost entirely consisted of supply chain associates, but more participants now are coming from engineering, sales, customer service, operations, finance, IT, and other areas. Together, they are learning how key concepts link together and how the work they do is integrated into the overall business system.

"It is not uncommon to see employees given five hours a week to study for their exams, take exams during work hours, meet at lunch to study, take practice tests together, and attend quarterly APICS training during work hours," Morgan says, adding that APICS training is hosted at many facilities to maximize participation.

Leaders of the initiative place high value in soft skills, so the program was designed to help associates enhance competencies such as personal development, negotiation aptitude, team building, and more. CIT supply chain associates also attended APICS educational events including the Best of the Best Sales and Operations Planning Conference and the APICS annual conference. In fact, at APICS 2015 in Las Vegas, representatives from CIT were honored on stage when the company received the APICS Corporate Award of Excellence in Education for its noteworthy employee advancement success.

Concepts in action

The following overview explains the specific DMAIC and PDCA processes CIT used.

Define: At CIT's various plants, professionals found a lack of common understanding of and training about key concepts, definitions, and supply chain activities as well as inconsistent or highly variable job titles and duties. In addition, improvement was needed in the overall supply chain strategy for associate development and training.

Measure: Current processes and tools were collected, measured, and examined. This included specific job accountabilities; plant-level supply chain development; organizational training plans; and individual development plans, including the required skills, education, certifications, experience, and training needed for each position. "We explored the opportunities for growth, promotion, progression tracks, and cross training for supply chain associates," Smith explains. "Out of roughly 300 supply chain associates, there were 169 job titles among all plants. Only two people had their CPIM designations, and only four associates had any industry-standard professional certification."

Analyze: Initial analysis showed that quick growth led to an inadequate overall strategy and reduced coordination among plants' supply chains. In addition to the large disparity among job

descriptions, titles, and responsibilities, there was no formal supply chain training conducted at an organizational level. "Supply chain associates were intelligent, hard-working, committed, and wanted to learn more, but they weren't sure how to proceed," Morgan says. "And plants had strong processes and executed well, but they had performed limited work to standardize processes, tools, or training."

Improve: CIT professionals from all around the organization collaborated to establish an improvement strategy. Ben Draper, CPIM, a master production scheduler, says he immediately saw the organization differently. "I started noticing significant opportunities to improve our processes," he explains. "At the same time, I was able to see several things we did very well. I tried to use my knowledge from working on the floor along with my CPIM to enhance our core competencies and resolve any issues that hinder our performance."

Control: CIT continues to measure progress against targets and key performance indicators. In addition, a supply chain audit measures progress and ensures that individual and organizational development plans are integrated and mutually supportive. Complementary processes and scorecards confirm that CIT brings in new supply chain associates who fit the culture and who are willing to continuously develop personal competencies and skills. In addition, the company has rolled out an internal supply chain leadership development program to provide internships, rotations, and other opportunities for college students or graduates who want to explore career opportunities in supply chain.

Plan: The new development strategy involved forming a conceptual layout of standard supply chain positions, descriptions, and accountabilities. This outline incorporated APICS training for different levels of responsibility in the supply chain organization. Then, the findings, costs, and expected outcomes were shared with leadership in order to gain support. Next, a rough timeline for the program was created, keeping in mind that continuous improvement likely would be needed along the way—something Smith says was "a key point."

Do: In this phase, APICS Career Packs were used to establish standard responsibilities, accountabilities, and requirements in order to reduce titles to 30 initial standard supply chain jobs and their descriptions. Minimum training requirements also were built into the job descriptions. Lastly, career tracks were established that clearly illustrate horizontal and vertical progression pathways so that supply chain associates understand how to grow, learn, and progress all the way to vice president of supply chain, if desired. These documents were shared with leadership and supply chain associates.

Check: Assessments were set to measure and identify gaps for each associate. This helps managers develop training plans and review progress periodically. "At this point, we were able to identify the areas where we could start associate development," Morgan says. "APICS provided key resources and the body of knowledge to meet this need for us."

Act: First, APICS training was employed to help close gaps in conjunction with other initiatives. Then, even more PDCA was used. "We encouraged the use of standard job descriptions for posting available career opportunities, checked assessments and training matrices as we visited the plants, shared examples among the plants, and continued to look for opportunities to improve the usefulness of the tools," Smith explains.

Winning outcomes

Both Morgan and Smith say they are surprised and impressed by the number of associates enthusiastically participating in the training and the range of organizational areas these employees represent. "Our plants got really excited and started seeing immediate value in the education," Smith says. "They really valued the [education] they were receiving, and this has promoted improved internal collaboration and understanding."

Employees who complete the program benefit from new skills, job promotions, and other performance rewards. Friendly competition and recognition by peers, managers, and supply chain leaders are seen more and more with each module test passed. "It is absolutely amazing when all people are speaking the same language and understanding key supply chain concepts," says Chacy Smith, CPIM, a former supply chain manager who recently was promoted to director of operations. "The productivity level and efficiency it creates are powerful. I have seen positive things happen in production control, inventory, demand planning, purchasing, and customer service. It creates teamwork and really boosts employees' self-confidence in the jobs they are doing."

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She adds that the idea of studying at first was a little scary because many CIT employees had been out of school for quite a while. To overcome this, supply chain leaders organized associates into study groups so they could support one another. The groups discovered strengths, offered encouragement, and cheered for each other at exam time. Every six months,

employees received a recognition certificate and \$50 gift card for each module passed. CIT associates say this became a part of the culture—so much so that, as new people join the team, they immediately ask when they can begin the program.

Manny Funderburk, CPIM, a master production scheduler, says that this group education initiative promotes teamwork every day. “The ability of personnel to think as one has a profound impact on productivity,” he explains. “When everyone uses the same vocabulary and understands the same concepts, it makes the business more responsive. Ideas begin to flow more freely, and solutions to problems are more readily apparent.”

In addition to these qualitative results, CIT is showing several measurable benefits. Specifically, on-time delivery has improved from 87 percent to 96 percent, slow-moving and obsolete inventory have been significantly reduced, and cycle counts are revealing more precise results. Working capital also continues to improve each year.

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Morgan says the productivity increases and advancements in on-time-delivery, working capital management, scheduling, customer service, and integration are a direct result of APICS assistance, tools, and knowledge. He adds that CIT employees also are better able to help customers and suppliers drive process and business improvements. In particular, key customers are recognizing the planning, scheduling, and inventory management skills and competencies that CIT supply chain associates have gained.

“Our partners see the value our associates bring across the entire supply chain, and this is promoting better collaboration,” he says. “We pride ourselves on providing services and product when performance matters—which means our people really matter. As our associates gain their APICS education, the light goes on in their eyes as they see the difference the APICS education program is making. And we as a company see the difference too.”

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