

Excellence in Organization-Wide Education at BASF

BASF applies APICS tools and teaching for winning results. In using APICS education and the body of knowledge, BASF was able to drive supply chain improvement while improving cross-functional teamwork and communication.

Results

- Cost savings of approximately \$60 million annually in internal logistics services
- Order fulfillment cycle time reduced by 25 percent; cost of goods sold reduced by 12 percent
- Delivery accuracy increased 25 percent
- Direct labor costs decreased 79 percent over 12 months
- Return on supply chain fixed assets increased 62 percent over one year

This case study was originally published as a Corporate Spotlight in the January/February 2017 issue of APICS magazine. The article, written by Managing Editor Elizabeth Rennie, can be found under the title "On-the-Mark Innovations."

BASF is a global chemical company with more than 112,000 employees serving customers and partners in nearly every country in the world. Offerings include plastics, performance products, crop protection solutions, oil and gas, and more. Through science and innovation, BASF's objective is to enable its customers to meet society's current and future needs. This is realized by balancing economic success, social responsibility, and environmental protection.

Recently, many of the company's key goals have been supported by APICS education—culminating in BASF's selection as the 2014 APICS Corporate Award of Excellence in Education winner.

"APICS is the foundation of the overall supply chain learning solutions program."

— Alan Milliken, CFPIM, CSCP, global APICS coordinator for the BASF Group

"We used APICS education to prepare BASF employees worldwide who work in supply chain management in order to ensure that best practices are implemented throughout the organization, to share knowledge, and to create a sustainable competitive advantage."

The Voyage

BASF has been an APICS corporate partner in North America since the late 1980s. In the fourth quarter of 2011, the company began implementing APICS offerings globally. Since then, BASF has invested substantially in APICS education: specifically, about 100 in-house APICS classes with 1,500 students participating who represent 25 countries. The company sponsors APICS memberships, seminars, certification review classes, chapter meetings, and exams.

More than 400 BASF employees from all supply chain-related functions have participated in the Basics of Supply Chain Management course since the global program began. This includes employees from finance, purchasing, customer service, information technology, and manufacturing.

"The principles, tools, and techniques are recognized best practices, and the course ensures a common understanding of terminology and basic processes," Milliken says. "But knowledge and understanding in your assigned area are not enough; APICS education helps people prepare to consider the bigger picture and collaborate with other functions to achieve the best overall results."

For example, he says employees understand the need to balance service, costs, and inventory objectives across functions. Both cross-functional teamwork and communication have improved as a result of the global education program.

BASF also stresses application of the APICS body of knowledge on the job. For instance, the company uses real-life SAP screen prints to teach students what a schedule looks like in the software program, how planning factors are stored and used by the tool, and so on. Additionally, guest lecturers from the supply chain community augment learning by demonstrating to students the SAP-enabled process while relating it to the APICS body of knowledge.

Proven Professional Success

For employees holding key roles in supply chain management—process experts, educators, and planners—BASF recommends the APICS Certified in Production and Inventory Management (CPIM) designation. Education is delivered by 13 internal APICS instructors in cooperation with APICS affiliates and supported by four regional coordinators and four country coordinators. "Most instructors exceed our minimum requirements, and all have taken the APICS Train the Trainer course," Milliken says.

There are two key performance indicators used to measure success and take action: certification exam performance and certifications achieved. Since the global effort began, approximately 70 people have achieved their CPIM designations, and another 200 are working toward the goal. In all, BASF employees have passed more than 650 APICS certification exams. "APICS certification is a key consideration when reviewing potential job candidates for supply chain roles," Milliken says.

Likewise, the APICS Certified Supply Chain Professional (CSCP) designation is encouraged for both managers in functions related to supply chain and those who already have earned a CPIM designation. "CSCP's focus on the global enterprise and the extended supply chain make it an excellent fit for BASF Group," Milliken says, adding that more than 140 employees have participated in the global classes, of which 35 chose to seek certification. Furthermore, he notes that approximately 80 percent of those participating in the CSCP program are in leadership positions and use the knowledge and skills gained to improve supply chain performance at BASF.

“By achieving certification, an employee demonstrates his or her commitment to lifelong learning and building the best team in supply chain management” Milliken says. “Certification assures that the employee understands integrated supply chain management and is prepared to contribute to improvements.”

Challenges and Lessons Learned

Milliken notes that, by design, APICS education addresses a large variety of business environments and manufacturing strategies. Meanwhile, many of BASF’s participants are focused on one specific segment of industry. “This presents a challenge, as employees must understand which tools and techniques to apply to their particular environment,” he says. “Misapplication of supply chain knowledge can lead to loss of confidence in operations and less support for the education.”

BASF was able to minimize the impact of this issue by highlighting the principles, tools, and techniques that are most applicable to the chemical industry while emphasizing the benefits of the broader body of knowledge.

Another limiting factor with any body of knowledge is ease of accessibility. To address this challenge, BASF has developed a supply chain “Book of Knowledge,” which includes many of the principles, tools, and techniques taught by APICS. The book is available on the company intranet’s Supply Chain Academy. Sales and operations planning (S&OP), demand planning, production scheduling, material requirements planning (MRP), and other core supply chain processes are included. In addition, the BASF knowledge database contains hyperlinks to relevant APICS websites. “BASF took action to ensure that the APICS body of knowledge is readily available for integration into our daily operations,” Milliken says.

Superior Outcomes

BASF is focused on both improved performance and increased integration of supply chain planning and execution processes. Significant investments have been made in both process improvements and advanced software for demand forecasting, S&OP, production scheduling, and MRP—and the APICS

education program has been essential. For example, Milliken says plant schedulers who have earned their CPIM and are mature in their knowledge of integrated supply chain management have more quickly and effectively implemented improved practices enabled by advanced software.

APICS education also helped BASF share knowledge and expertise during the company’s recent acquisition of three businesses. APICS tools were used to prepare employees for supply chain management at BASF using SAP. Specifically, the Basics of Supply Chain Management course was a mandatory part of orientation and early training, and new employees in key supply chain roles were directed to seek their CPIM designations. These endeavors resulted in more efficient and effective mergers and continued high service levels.

Lastly, APICS education was successfully used to prepare for the implementation of SAP’s advanced planning and scheduling tool and to enhance use of the technology after implementation. This system was selected for key processes such as demand planning, S&OP, and production scheduling. APICS education enabled BASF employees to understand the relevant tools, techniques, and definitions and how to apply them in their particular business environments.

Milliken adds that APICS tools helped employees understand how to select resources and configure capacity planning in a given production scenario, know the difference between an aggregate production plan and a detailed production schedule, and many other key questions. He adds that the migration to the new technology was accomplished without any major business disruptions or customer service failures.

“The harmonization of supply chain terminology and definitions globally is a very important APICS benefit,” Milliken says. “In order to standardize processes and work cross-functionally and cross-regionally to improve supply chain management, you need one glossary and dictionary. APICS education is a key enabler of BASF’s sustainable supply chain improvement.”

About ASCM

The Association for Supply Chain Management (ASCM) is the global leader in supply chain organizational transformation, innovation and leadership. As the largest non-profit association for supply chain, ASCM is an unbiased partner, connecting companies around the world to the newest thought leadership on all aspects of supply chain. ASCM is built on a foundation of APICS certification and training spanning 60 years. Now, ASCM is driving innovation in the industry with new products, services and partnerships that enable companies to further optimize their supply chains, secure their competitive advantage and positively impact their bottom lines. For more information, visit ascm.org.

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