

# Employee Training and Empowerment Improve Business Performance at Baker Hughes, a GE Company

An employee education program based on APICS Certified in Production and Inventory Management (CPIM) training expanded the supply chain knowledge base for the Subsea Production Systems and Services team at Baker Hughes, a GE company (BHGE), enabling significantly enhanced business performance.

## Goals

- Develop supply chain knowledge and employee competencies in the materials organization
- Empower employees to create processes that drive growth and progress
- Improve business performance, particularly on-time delivery and inventory turns

## Approach

- Design and deliver a program of APICS CPIM training to all eligible employees
- Ensure people have access to the knowledge they need to improve performance
- Celebrate accomplishments and convey the vital role the program plays

## Results

- Inventory accuracy reached 99.5 percent, with inventory turns increasing by 2.5 points and overall inventory dropping by 60 percent
- On-time delivery doubled to 70 percent
- The division's logistics footprint decreased by 30 percent

## Developing People Key to Business Performance

Leaders at Baker Hughes, a GE company (BHGE), know that a qualified professional is a key asset to business longevity, competitiveness and success. In working to achieve the goals of its Subsea Production Systems & Services (SPS) division, leaders sought to improve employee competencies through comprehensive training. This, in turn, would empower workers to understand and achieve the business's key performance indicators (KPIs).

Lorenzo Romagnoli, supply chain director for BHGE SPS, and his team aspired to strengthen and unify the knowledge of BHGE's materials organization and improve business performance in terms of on-time delivery performance and inventory turns. The group established specific targets for these enhancements as part of the yearly operating plan.

To heighten success, Romagnoli and his team looked to BHGE SPS's strategic focus on training and competency. The organization's commitment to education and professional growth is designed to propel the company forward in four key areas: category management, supplier integration, business engagement and sustainability. Romagnoli and his team also wanted to offer the training to all eligible employees — from engineering to supply chain — in order to help them evolve professionally in a complex business environment.

Romagnoli was inspired by a successful APICS training initiative that he had managed at the company's Turbomachinery & Process Solutions (TPS) division. That program enabled, among other achievements, a more than 30 percent improvement in on-time delivery. Building on a tried-and-true method, Romagnoli reached out to an APICS channel partner in London. Hilf Supply Chain Solutions and Director and Principal Trainer Lindsay Harding worked with the BHGE SPS team to build a program based on the APICS CPIM designation. Romagnoli knew he wanted the training customized for the SPS team, but still similar to the one he and APICS had created for BHGE's TPS division.

"We selected APICS training because it has been proven that the program gives employees a comprehensive materials planning knowledge that they can use in practice to improve business performance," Romagnoli said. "APICS education gives the team the ability to create better processes that translate into improved results."

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## Maximized Training

BHGE SPS opted for in-house training, preferring the fast pace and convenience of on-site sessions. This also allowed course contents to be customized to give employees a better understanding of production and inventory strategies within the context of BHGE's business. Meanwhile, training in groups paved the way for more consistent learning and cross-functional thinking and collaboration.

Training officially began with BHGE materials management professionals participating in the preliminary round of Basics of Supply Chain Management training. However, the program soon expanded to include employees working in other functions. The company initially focused on training individuals whose job functions could directly benefit from the techniques taught in the program — especially materials leaders, material requirements planning specialists, master schedulers, and those working in production and inventory control.

The educational opportunities have since been extended to include other teams and functions that indirectly benefit from the knowledge. In addition, the program now extends globally across BHGE divisions in the United Kingdom, the United States and Europe. Beyond the in-house training programs, the company uses APICS's new online learning options, which feature extensive educational resources including exam preparation strategies and practice exams in a digital format that can be easily accessed and read on any device. To date, 102 employees have completed the APICS CPIM training, 65 have passed the Basics of Supply Chain Management module, 10 have earned the designation, and 13 more are working toward earning the designation in the coming months.

## Performance and professional development advancements

As the training has progressed, BHGE SPS has been realizing and often exceeding its goals. From 2014 to 2016, as team members completed training and began applying APICS principles, strategies and frameworks to their jobs, BHGE SPS saw dramatic improvements in its KPIs. On-time delivery performance rose by 35 percentage points in 2016. Inventory turns increased twofold between 2015 to 2016, and 2016

inventory levels were 60 percent lower on average than the 2015 levels. In addition, BHGE SPS's logistics footprint shrunk 30 percent, and the company's physical inventory accuracy rose to 99.5 percent across all manufacturing sites. Specifically, by applying APICS knowledge in inventory planning and management, the BHGE SPS manufacturing site in Aberdeen, Scotland, was able to reduce external warehousing costs by 60 percent and reduce warehouse operating costs by 20 percent.

Romagnoli reports that the positive results have not stopped there, noting, "Business results kept improving steadily as the program progressed."

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*— Lorenzo Romagnoli, Supply Chain Director*

One complementary outcome was the speed of the improvements. Typically, such progress happens over the course of four or five years. In this case, BHGE SPS achieved the results in half that time. The APICS training was instrumental in helping employees better understand BHGE SPS's KPIs, enabling the division to achieve important targets and improving business's performance overall.

Individual employees also are realizing the advantages of the APICS CPIM training. Many participants report that the program introduced a valuable common knowledge base, vocabulary and standards. "With APICS, our staff gained a better understanding of how material requirements planning systems and the various supply chain functions are interdependent," explained Sandy Bell, BHGE operations logistics COE leader.

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These knowledge standards enable much more effective communication and collaboration among teams.

In addition, APICS training helped participants see their roles in the business from different points of view. This assisted them in better understanding their roles in BHGE's complex supply chain and illustrated how they contribute to the organization's continuous improvement. As a result, participants report that the formal education benefit boosts their morale and their job satisfaction.

Of course, because BHGE SPS's focus is on the professional development of employees, leaders reward workers for their efforts. When an employee completes all five training modules and attains the CPIM credential, a congratulatory email goes out to the employee and is circulated to the broader team to generate widespread recognition among colleagues. As a result, the APICS CPIM program has become well recognized among employees, and more are eager to participate to advance their careers and help the business continue to grow.

## About ASCM

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