

# GE OIL & GAS IMPROVES CUSTOMER SERVICE AND ENHANCES OPERATIONAL EFFICIENCY

With materials management a strategic lever, GE aligns with APICS partner JPS to develop a team that improves on-time delivery by over 30 points—the highest performance in business unit history.

# **GOALS**

- Position materials management organization as a strategic lever for the business
- Increase operational performance and customer satisfaction
- Strengthen pipeline of materials management professionals
- Choose a supply chain authority with capability to support the company in every region

# **APPROACH**

- Create a high-performing multinational materials management team across 11 plants, by deploying a consistent work approach
- Implement standardized best practices to drive synergies worldwide
- Partner with a solution provider with proven capability to deploy a standard work approach worldwide
- Create benchmarks to measure program performance

#### RESULTS

- 30+ percent increase in on-time delivery
- 30 percent reduction in slotting lead time
- 50 percent increase in capacity utilization
- Say/do ratio greater than 95 percent
- Highest inventory turns ever
- 150 employees engaged in APICS CPIM training

# Building excellence from within

It's no secret: GE aspires to attract top talent. It's also no secret that GE's talented professionals are entrusted to solve some of the world's greatest challenges, such as enabling access to resources to meet the world's rapidly growing energy demands. GE is also known for engineering, and rightly so. But recognizing the value of great product design can be realized only if customers get what they need, when they need it. GE Oil & Gas called on its Florence, Italy-based turbomachinery supply chain—specifically the materials management organization—to be a strategic lever for the business's overall performance.

GE Oil & Gas initiated a five-year multi-generational program with a specific focus on its Turbomachinery Solutions business. The program focused on materials management, identifying the key people, processes and tools that were central to the supply chain organization's ability to hit key performance indicators (KPIs.) Company leaders—including the newly appointed materials management and logistics leader, Lorenzo Romagnoli—quickly saw an opportunity to bridge the three main dimensions of the program: people, processes and tools. Developing and strengthening the pipeline of supply chain professionals focused on materials management through the application of standard, industry-proven best practices across the organization would be the link holding all three dimensions of the improvement strategy together (see figure 1.)

# A legacy of continuous advancement

When Romagnoli took the reins of the materials management organization, he had a big job to do. He had to demonstrate the strategic impact of the organization, while at the same time improving the customer experience as measured by KPIs. He was also leading a team that historically had not made investment in training and professional development a priority.

He knew that GE's strong legacy of investing in employee development was just as important as the company's commitment to applying proven best practices to achieve business results. In order to elevate the importance of materials management to that of engineering, GE would need to build a multinational team of professionals connected through a consistent approach. This approach would foster a standard mind-set using universal terminology and practices based on a validated body of knowledge.

"In order to declare success, we needed a program that was truly scalable—able to span cultures, languages and regions. We had to align with a partner that could help us deploy industry standards that could deliver repeatable results," said Romagnoli.

Figure 1
A Common Link to all Dimensions of the Multi-generational Program

People, processes and tools—the glue that holds them together is standardized best practices deployed across all three.



#### All on board with APICS standards

To position the materials management organization to drive measurable business outcomes, GE Oil & Gas needed to select a supply chain and operations management authority with documented standards and best practices. These standards would serve as the training foundation across the multigenerational change program. The APICS Operations Management Body of Knowledge and APICS training and certification were identified by an internal committee of operations leaders as the vehicle that would enable the company to achieve its goals—detailed in Figure 2.

Figure 2
GE Oil & Gas Multi-generational Program Targets

APICS body of knowledge, training and certification served as the foundation that enabled the GE Oil & Gas Turbomachinery Solutions business to achieve its goals.

MEASURABLE BUSINESS OUTCOMES			
Build	Use	Partner	Establish
<b>O</b>	6	<b>O</b>	<b>O</b>
Consistent work approach	Best practices to drive synergies	With supply chain authority across regions	Trusted benchmark internally & externally

**APICS Operations Management Body of Knowledge** 

# Implementing training and certification

Over 14,000 participants from GE or customer companies come to learn each year at the GE Florence Learning Center, the company's largest training center in Europe. It fosters a spirit of excellence and continuous improvement—a perfect site for the APICS training program. GE Oil & Gas leaders selected the APICS Certified in Production and Inventory Management (CPIM) path for selected professionals with the greatest impact to the materials management organization—including professionals from the projects group, the function overseeing customer requirements. Together with APICS channel partner JPS, they built a training program to address some of the organization's most complex challenges.

GE Oil & Gas committed to the CPIM certification program, covering all five learning modules with multiple course waves running throughout the year. The CPIM program was ideal for three important reasons. First, CPIM courses and tests are based on the industry-proven APICS Operations Management Body of Knowledge, providing employees the knowledge and best practices to understand and evaluate the production and inventory activities associated with GE Oil & Gas's KPIs. Second, the CPIM designation is a highly desirable professional certification and contributes great value to individual professional development—a major achievement and source of pride for employees. Third, the CPIM path provides a benchmark for the organization to measure training effectiveness and, ultimately, return on training investment. There are five tests aligned to the five CPIM learning modules that must be passed, necessary not only to validate the knowledge obtained but also to earn the CPIM designation. Also, because APICS CPIM is globally represented, GE Oil & Gas could measure its employees' testing performance against APICS global averages—another way to benchmark program performance.

To date, GE Oil & Gas has enrolled 150 employees from cross functional teams related to the Turbomachinery Solutions business in the CPIM program. Three employees have achieved the honorable CPIM designation and another five will join them by the end of 2014. Furthermore, pass rates for each module have exceeded published averages, a testament to the program integration and instruction facilitated by JPS. The training program has expanded each year since it launched in 2009 due to employee enthusiasm and direct business results.

"The APICS CPIM program has really stood out at GE—employees are lining up to be a part of it. It is a real pride point to be invited to participate each year," said Romagnoli. "We found a body of knowledge and program that works, and now we intend to replicate it."

Leadership was quick to recognize that building a solid foundation based on industry best practices enables employees to directly and successfully support organizational and strategic initiatives for change. In fact, the success of the APICS program has been widely recognized and now the program is being replicated across the GE Oil & Gas organization. The APICS training and certification model is now expanding to more functions and plants in the U.S., Asia, Latin America and other parts of Europe—a testament to GE's commitment to achieving top results through talent development.

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"The commitment of the project sponsor, and the continuous focus on the quality and excellence of the classroom experience, were crucial for the program's success," said Paolo Napoli, JPS partner and lead APICS CPIM instructor. "When we began working together in 2012, special attention was placed on properly communicating and emphasizing the importance of this training and its direct connection to overall company results, which has created the best conditions for participants to be highly motivated and enthusiastic about being part of the APICS community in GE Oil & Gas Turbo machinery."

# The proof is in the performance

Driven by APICS best practices, program participants shaped a high-performing organization by establishing an understanding of opportunities for improvement and the know-how to achieve performance targets. This result was also central to identifying an information technology gap and designing new solutions and applications to support the business from a performance-focused perspective.

Today, the materials management organization is advancing supply chain performance by delivering unprecedented results. In 2013, it realized a 30 percent reduction in slotting lead time and the highest capacity utilization in the organization's history—a 50 percent increase. Its build plan is now convergent with sales, with a say/do ratio greater than 95 percent. Most notably, materials management has significantly improved its dependability and customer satisfaction by achieving an increase of over 30 percent in on-time delivery compared to 2009. Inventory turns in 2013 also reached their highest level ever—up 30 percent compared to 2010 and up 10 percent over 2012 performance. Figure 3 highlights the notable KPI improvements realized during the Multi-generational Program.

#### Figure 3

# **KPI Improvement**

This graphic reports the improved KPIs during the Multi-generational Program.

+30% ON-TIME DELIVERY
+30% INVENTORY TURNS

-30% SLOTTING LEAD TIME

+50% CAPACITY UTILIZATION

"It is amazing to see the transformation of our organization. It is a totally different pool of people and skill sets. We are so synchronized—we know what to do, when and how to do it, and how it impacts our business," Romagnoli concluded. "At the end of the day, results matter. Today, I can declare results, and I know the one single connector is APICS training and certification."

#### **About APICS**

APICS is the leading professional association for supply chain and operations management and the premier provider of research, education and certification programs that elevate supply chain excellence, innovation and resilience. APICS Certified in Production and Inventory Management (CPIM) and APICS Certified Supply Chain Professional (CSCP) designations set the industry standard. With over 37,000 members and more than 250 international partners, APICS is transforming the way people do business, drive growth and reach global customers. For more information, visit apics.org.

# About APICS Operations Management Body of Knowledge

The APICS Operations Management Body of Knowledge (OMBOK) is a detailed outline of operations management in one comprehensive reference. The OMBOK helps organizations standardize proven best practices and scope core competencies and process in the field. Visit apics.org for more information.