A transformative experience for leading a transformation

Giving senior leaders hands-on, digitally enhanced experience with lean management helps kick-start a transformation.

Anika Becker, Alessandro Delfino, Alessandro Faure Ragani, Ulrich Huber, and Cinzia Lacopeta

JUNE 2018 • MCKINSEY OPERATIONS

Picture a global manufacturing company. It could be in any industry—the essential point is that it is very good at what it does. It has a long history of innovative products, and has grown to serve a global customer base.

The company's leaders are increasingly concerned, however. Its longstanding competitive advantages are under threat, as Industry 4.0 technologies enable entirely new levels of product quality, manufacturing agility, and on-time delivery performance. Old competitors are catching up, and new competitors are popping up in all directions. Meanwhile, customer expectations are rising even faster than competitors' performance.

Rather than wait for others to take the lead, the company decides to set new standards for itself, starting now. To do so, the company would need to bring lean management, Six Sigma, and Ops 4.0 together in an ambitious, enterprise-wide transformation. But the leaders foresee a gap. Success would, crucially, depend on the engagement and influence of senior managers—only some of whom had fully embraced the concepts that would make the transformation possible.

Understanding the power of continuous improvement

To its practitioners, the power of lean management and Six Sigma to continuously improve quality and productivity is self-evident. Years of frontline experience have shown how root-cause problem solving, careful testing, and relentless elimination of waste and variability continually improve manufacturing performance year after year. And now, digital tools such as full product traceability, new sensing technologies (e.g., computer vision), and advanced analytics are making traditional lean-management and similar approaches easier and faster to implement at scale across a business.

Away from the shop floor, however, these techniques can be harder to understand. But if senior managers and leaders are to provide the active support and ongoing commitment that a sustained operational transformation requires, they need to see (and feel) exactly how lean-management and related methods so dramatically improve operational efficiency, customer satisfaction, and profitability.

Learning lean and digital by doing lean and digital

Two companies, in different industries and on opposite sides of the world, illustrate what organizations can achieve when their senior leaders commit to immersing themselves in operational excellence. Rather than simply describe operational-excellence concepts in the abstract in a traditional classroom setting, these companies sought hands-on experiential learning in a capability center designed to replicate an actual, digitally enabled working environment. In one of the manufacturing centers, for example, a production line fabricates components for refrigerator compressors, with adjoining facilities for quality-control testing and final assembly.

Over the course of one and a half days, leaders learn about lean management and related continuous-improvement principles and techniques, along with the use of Industry 4.0 technologies to improve product quality. They're then asked to fix a typical operational issue on a real shop floor, such as the final product failing quality tests.

Finding the real reason requires the leaders to apply the techniques they have just learned. The first step is a classic "Gemba walk" (a term from Japanese meaning "to go and see the real place") to assess the operation's initial layout, working methods, culture and management. Next, they use lean-management tools to identify the root causes

of the problems and propose possible solutions. Finally, they test the effectiveness of their ideas with a rapid transformation—reconfiguring work stations, adapting processes, and running further manufacturing tests.

The results? One of the management teams didn't just fix the quality issues—they also doubled the productivity of the compressor manufacturing line.

A second exercise brings the managers through a digital transformation journey, from the diagnostic phase (in which they learn to see additional digital opportunities, starting from their business needs) to the design of the use case and its implementation. Along the way, they learn about innovative digital technologies ranging from 3-D printing and machine-to-machine communication to in-process data collection and adaptive standard operating procedures. A digital dashboard—equipped with a machine-learning engine and connected with the line in real time—shows the participants how proven root-cause problem solving tools can reach an entirely new level of effectiveness. By applying those methods on the production line, the leaders achieve additional quality improvements, and further increases in productivity.

The outcome: Kick-starting a transformation

For executives, a capability-center experience provides a compelling introduction to the impact of transformational change. A senior leader for one of the companies, a medical-products company based in North America, commented after his company's program: "I better understand my role in leading operational excellence—the tools, the projects, and the mind-sets people need in order to succeed." The business-unit head at a European manufacturer, reflecting on what the organization learned from its sessions, observed: "Customer focus and quality are essential for us. Having used the tools and methodologies ourselves, we have much more credibility in helping our teams create a strong quality culture for us."

Executives who attended have been quicker and more at ease than their colleagues in applying their new insights in their own facilities, giving their transformation journeys a running start in defining improvement priorities in their units and training their change leaders. After the initial training sessions, the European manufacturer's managers have already overseen more than 50 improvement projects across their operations, reducing quality problems by more than 25 percent and significantly cutting quality-related costs. At the medical-products company, operational improvements generated more than $40 million in net value, while quality rose from an average of 80% across its locations to more than 90%. ■

Anika Becker is a consultant in McKinsey's Zurich office; **Alessandro Delfino** is a partner in the New Jersey office; **Alessandro Faure Ragani** is a senior expert in the Milan office, where **Cinzia Lacopeta** is the manager of a Digital Capability Center; and **Ulrich Huber** is a senior knowledge expert in the Cologne office.

Copyright © 2018 McKinsey & Company.