

GE HEALTHCARE LIFE SUPPORT SOLUTIONS (C): POSITIONING FOR QUALITY AND GROWTH

Research Associate Lily Zhang prepared this case under the supervision of Professors Dan Denison and Katherine Xin as a basis for class discussion rather than to illustrate either effective or ineffective handling of a business situation.

In 2006 sales and distribution for both DO and CSW products were covered by several large dealers in the Chinese market. LSS iPerformance sought to increase the number of dealers in key cities and provinces to limit their risks and improve their presence in the marketplace. For CSW in particular, strong emphasis was placed on providing compliance training to all dealers and on developing qualified dealers with good government relationships in order to concentrate on government tender projects.

On the supply side, a different approach was taken. The old Zymed alone had 58 suppliers. Zhang Yukun, global sourcing manager, had set a goal to reduce the number of LSS iPerformance suppliers to 25 with the help of GE's supplier qualification process.

But process integration was easier said than done. There were at least three strong influences on any attempt to create a standard unified process. GE, a process leader, had strong global efforts to create common processes among all of its subsidiaries. DO, a leading brand in the anesthesia business had its own process, which was quite different from the new unified GE process. CSW had few clearly articulated processes, but had a well-established way of doing things, which made it difficult to create a "clean slate" advantage. Kevin Wu, a mechanical engineer who worked with Zymed before the acquisition, commented:

The new [GE] process is developed based on US FDA requirements.
Its level is just too high for our low baseline.

Lucy Jing, engineering manager, admitted that the new GE process slowed down the engineers' working pace, although she insisted the process would be an advantage in the long run.

But the new process frustrated the engineers. Kevin Wu commented:

It seems no one realizes how much a good process means to engineers. My understanding is that a good process is like a signpost on the highway. With a good process, you'll know clearly how to do things...Engineers are people who like to ask "why" and find the answer...But we have neither clear signposts nor people answering the question here...Sometimes you have to spend more than a day doing something that could be done in one hour without the process.

Kevin Meng, a mechanical engineer from DO, echoed Kevin Wu's words:

We can't use the DO process as it doesn't have a supporting system here. But the new process is not clear. When you get lost with the process and ask someone else, it seems no one knows the direction.

Managing Quality and Supporting Product Development

While managing the process integration, the company also had to keep production running at a high rate in order to fill the growing number of customers' orders. This created a major challenge for LSS iPerformance.

The root of this problem was the large installed base of the former Zymed products. LSS iPerformance also continued to produce these products. The former Zymed engineers initially imitated the design of the DO products without understanding all of the underlying design principles. Thus, it was difficult, if not impossible, to trace problems back to the original blueprints. So, whenever the company received a customer complaint, it was referred to the engineering department. The engineers had to figure out what the problem was and develop a solution.

For GE Medical Systems and LSS iPerformance, every customer complaint was a serious issue. This meant that quality issues consumed most of the engineering resources and compromised the engineers' product development efforts. Lucy Jing, engineering manager, commented:

We have to put about 90% of our engineering resources on maintenance. If I could start from scratch and put 90% of the engineering resources on new product development, we could reduce quality issues by 80%.

But LSS iPerformance could not just put aside customer orders and complaints. Neither could it allocate more engineering resources to new product development. Lehtonen applied for more engineering resources and although the company was supportive of the business, actual new headcount approvals were hard to obtain. In addition, hiring talented and experienced engineers in a second-tier city like Wuxi was difficult.

LSS iPerformance had started to develop new products, but the pace was slow because of the lack of engineering resources. Project leader Google Wu noted:

We have milestones for new product design, from M0 to M5. Now our new product is at M0, the stage for collecting information, defining products to meet market needs.

The quality issues were also costly in other ways. If a machine broke down during the one-year warranty period, LSS iPerformance had to fly engineers to the customer's location and pay the expenses. When the warranty expired, LSS iPerformance was able to charge maintenance fees. Kevin Wu observed:

Many anesthesia companies charge high maintenance fees to generate profits. It's like spending only \$50 to buy a mobile phone, but having to pay \$100 to replace a component.

Nonetheless, LSS iPerformance had yet to build maintenance as a profitable line of business.

Facing the New Challenges

Despite of all the struggles, LSS iPerformance had managed to double its sales volume in terms of units installed in hospitals in 2008 compared with 2007. Exports, primarily to India and increasingly also to Brazil, had increased to 40% of the total volume. Yet the organization still faced a formidable set of challenges.

If LSS iPerformance was able to develop a new product to replace the Zymed machines, it could solve its quality problems in the Chinese market, increase its exports to developing countries, and perhaps even begin to prepare for the day when it could export to more mature markets such as Europe and the US. But how could it accelerate new product development while still addressing the existing quality and production challenges?

With such high competition for engineering talent in China, it was also essential to keep the engineers motivated. But they were often frustrated at having to devote so much of their time to solving quality problems as well as dealing with documentation. What kind of measures should Lehtonen and his management team take to boost the morale of engineers and get them motivated?

Like all GE subsidiaries, LSS iPerformance operated in a global matrix organization structure, with many function managers in operations reporting directly to respective global function heads, while China sales and marketing reported directly to Lehtonen. In addition, several of the function managers were not based in Wuxi, making communication within the leadership team more difficult. How could Lehtonen and his management team improve communication and performance within the existing organization structure?