# Shure: Cycle Time Reduction

## Description

Shure Brothers, Inc. has been in the business of making microphones and acoustical equipment since 1925, and over the years, they have developed a reputation for durable, reliable products. When they initiated a Total Quality Management (TQM) program in 1990, however, they uncovered some dissatisfaction among their customers. While the customers valued the efficiency and effectiveness of Shure products, they complained that it took the company too much time to get new products out on the market. In fact, the time-to-market for new products from Shure Brothers at this point was three to five years, an exceedingly long time in a technology-driven industry.

While Shure Brothers management considered product development a critical issue, their first phase of TQM used cross-functional quality improvement teams to concentrate on other basic problems. These various efforts were so successful that at one plant, productivity doubled, manufacturing floor space was reduced by 80 percent, working inventories were cut by over 90 percent, and throughput times went from 31 days to two days.

Having gotten their house in order, Shure Brothers now set out to reduce their cycle time for introducing new products. They began by benchmarking other companies, specifically a Hewlett-Packard facility in Colorado and a Motorola plant in Florida. In the course of doing so, Shure discovered that its processes suffered from a lack of cohesion. Rather than working together or even concurrently, the engineers from the various departments—development, design, manufacturing, and quality—performed their tasks separately and sequentially, adding excess time to the process.

Merging the efforts of the various engineers was only part of the solution. Shure Brothers created a Blue Ribbon Team, staffed with experienced members from all involved departments (engineering, manufacturing, quality, sales, and marketing), to re-engineer the new product development process for the company. The team analyzed the decades-old product development process, focusing especially on identifying non-value-added steps in the process. By drawing on the resources of everyone, the team re-engineered the product development process, eliminating unnecessary steps and performing work in parallel, wherever possible.

The results were a resounding success. The new process decreased the total number of steps by 70 percent and reduced the time-to-market for new products from three to five years to just over 14 months. Not coincidentally, Shure Brothers has moved from fifth to second in its industry in market share.

## Learning Points

Cross-functional teams and concurrent engineering together have solved Shure Brothers' time-to-market problem, a problem that originally looked insurmountable. Physically moving together all engineers and affected functional areas so that they work closely and perform their tasks in parallel has been a winning strategy. Shure Brothers reduced their time-to-market by 75 percent, and as a result, their market share and their customers' satisfaction have both dramatically improved.

## Discussion Questions

***Question:*** Do you have any processes in your organization that would be good candidates for re-engineering, i.e., processes that take too much time, cost too much, consume too many resources, generate waste and rework, are too complicated, and so forth?

***Answer:*** Responses will vary. Probe: Over time, the population using a process may grow so large that the process is no longer efficient, or the process may get built up with many steps that are no longer relevant. How does this happen? What can be done about it?

Unfortunately, no one in the organization may have ownership for examining and streamlining the process, and it remains inefficient and ineffective until constant complaints from customers or employees drive the change.

***Question:*** Do you have examples from your own organization where technology and/or creativity have helped to redesign a new process? How was the technology applied? What policies or practices were shattered by creative thinking?

***Answer:*** It is important for the individuals responsible for the redesign to challenge traditions. With an open mind, it is more likely that new technologies or new applications of old technologies can be applied to solving problems.

***Question:*** What are some tools that can be used by a team charged with redesigning a process?

***Answer:*** Some of the responses will include the following.

- Benchmarking can help by showing the team how others approach a related process. We can then adapt and apply these best practices to our own process to make it world class.
- Flow charts can graphically identify areas where rework or redundancy may be occurring. Flow charts may identify users of the process that were never considered when the process was initially designed. Flow charts also help to identify and eliminate those steps that do not add value to the process.
- Activity Based Costing (ABC) can help capture process cost so as to measure cost efficiency of the process as well as to evaluate new design alternatives from a process cost perspective.

Probe: What management changes or new structures were established in your organization to effect process improvement? What cultural impact, if any, was caused as a result of radical changes to your organization's processes?