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A Ten Year Follow-up

Of a Quality Initiative

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A Ten Year Follow-up of a Quality Initiative

Abstract

Many industries have embraced total quality to achieve a competitive edge in the international marketplace. What is not always understood in the beginning, however, is that implementing a total quality program introduces considerable and often drastic cultural change into the organization. It would be beneficial for any company considering such change to look at a few case studies to anticipate what might happen over time, and avoid unintended consequences. Implementing cultural change within an organization is always challenging, but in the case of quality, it should be a win-win proposition. Unfortunately, outcomes are not always as anticipated. In this real case study, critical mistakes in communication at the planning stage, and failure to foresee potential problem areas almost blocked the change before it could be fully implemented and did reduce its' eventual effect. Process improvements, however, though modest by original intent, have been well worth the efforts. Lessons learned from this case should be helpful to others considering or planning a major cultural change. For this qualitative research all data were obtained through direct observation in the plant and through confidential conversations with both hourly (union) and salaried (management) personnel at regular intervals over the period of the study. Observations and conversations were recorded in writing after each visit was concluded. Full confidentiality was observed, and no individual was directly identified, nor was any data vetted by union or management. All descriptions are real, but locations and identities have been carefully obscured.

The Need for Change

A major manufacturer opened an assembly plant in a midwestern state in the late 1960s to produce automobiles. Business boomed and the plant ran seven days per week with two shifts of twelve hours each. By 1981, however, the automotive industry in the United States, and in that plant in particular, was struggling to survive. Business at the plant was down and operations were reduced to one shift with lack of orders still forcing weeks of temporary lay-offs.

By the early 1990's both local company management and United Auto Workers (UAW) officials realized that they needed to bring in a new product if they were to insure the future of the plant. Fortunately, the plant was the newest facility in the company's collection and there was room for expansion because they also owned the surrounding property. Therefore, the plant was selected when the decision was made to increase the production of a new line of vehicles.

With the expanded production facility, local company and UAW officials expressed interest in a less adversarial relationship. The company decided to explore a team concept; after all, the Japanese were having fabulous success with it.

When local company management approached union leadership, the union leaders realized that a cooperative relationship was also in their best interest; and necessary for the survival of the plant and the jobs that it provided. After much negotiation, and with much fanfare, the new operating agreement emphasizing total quality initiatives was born.

The team concept, as encompassed by the new operating agreement, allowed the work group more autonomy to make daily decisions dealing with meeting work group tasks. Rather than allowing the production supervisor to make all the manpower decisions, the team now had an equal vote in decision making, and the supervisor began to function as a coordinator for the team, providing it with assistance in resolving issues. The team elected a team leader; and the team leader was responsible for determining operation coverage, defect containment within the zone, scheduled days off, and training.

Union leaders saw the new team initiative as a way for the hourly employees to have more power and input into production decisions. The company saw it as a way to force accountability down to hourly workers and pull them into a mutually beneficial relationship instead of an adversarial one, as had been the history. In short, the change should have been a win-win agreement.

A Case of Miscommunication

After the agreement was made, some job duty changes took place. The senior hourly employees from the old production division became the product specialists in the new division, managers from the old division filled the newly available senior manage positions, and for the most part, people hired from outside the company became the new frontline supervisors to help avoid any preconceptions associated with the previous method of management.

All product specialists and new supervisors were given extensive training on the team concept, and all new hourly employees were given extensive testing before being offered a job. This process of screening was known as “best in class”. After employees were hired, they were then given a additional 40 hours of training. It was assumed that these practices would insure the success of the new operating agreement, but one crucial element was overlooked: middle and upper management. They did not understand nor accept the new team concept. Most senior managers had spent their entire careers under the old regime and saw no incentive to accept the new system.

When the new supervisors started turning decisions over to the teams, they were belittled by their managers and dismissed as weak. The Product Specialists also had difficulty accepting the new method of operating and were often reluctant to make decisions.

Ultimately, most of the original product specialists returned to the traditional operating system already established in the older production division. The team leaders were members of the newly hired group, however, so the new system worked much more smoothly at the lower levels.

Eventually, the demand for production increased, and a new shift and crew were added. Unfortunately, by the time the initial problems involving hiring, training, assigning and managing an entire new shift and crew had been resolved, annual manpower reductions were requested by corporate headquarters. Manpower reductions are losses in time authorization to build the product because of gains in operator efficiencies brought about by doing the same task repeatedly. That resulted in a reduction in the number of operations required to assemble the product, but not the number of employees at the facility. According to the new operating agreement, the teams were expected to take an active role in determining where work previously done at one work station would be moved, or combined with another operation. But, no hourly employees were to lose their jobs; once an operation was reduced, employees would be assigned to another position, or as extra manpower when others have days off.

The union hierarchy, however, decided that in spite of the agreement, that “no union brother would help eliminate the job of another”. This effectively put a halt to the original intent of the new process. Frontline supervisors did not have the support of their managers and the union forbade their ranks to participate. These contradictions between the new operating agreement and UAW directives prevented the team leaders from being successful, and as soon as team leaders started to fulfill their requirements under the agreement, they were labeled "too company" and voted out. What had started out as a win-win situation was rapidly becoming a lose-lose situation.

Shortly after the turmoil caused by the annual manpower reductions had passed, the company introduced a new product line. Everyone had to be trained to build the new vehicles, but the new production managers, none of whom had training or experience in quality systems, the team concept or the new operating agreement, made the decision to eliminate the team trainers from each team as an additional manpower reduction. This change was made with the launch of the new product line, further eroding team autonomy. Now, each operator was skilled in his or her own job, but no others. The team leaders and supervisors had to go to the department manager to make a case for additional training, though this was usually disallowed.

Despite the problems, the launch was considered an enormous success and another shift and crew were added. Employee numbers rose from just under 2,000 to more than 6,000. In spite of the increase in the number of employees, the training system from the original launch was abandoned, and employees were given no training on the new operating agreement or in team concepts. Though not abandoned altogether, the teams were not functioning in the manner originally specified in the operating agreement.

What Went Wrong?

Ultimately, the change was not completely successful because upper management of both the company and union did not accept the change and communicate it to all levels of the organization. Detert (2000) believes that culture has to change for a change initiative to be successful. Another position expressed by Knights (1999) is that hierarchical power structures and capital accumulation impose on total quality management thereby restricting its effectiveness.

Several quality improvements were, however, retained and are now standard operating procedure.

- All team leaders are now sent to basic statistical process control training. Then they, along with the rest of the team, determine their customers' number one problem, and adopt it as their quality issue to solve. They chart the progress over time and present actions and results on a rotating basis at daily quality meetings, which the plant manager attends.
- Relevant external information such as J.D. Powers survey results affecting product quality is summarized in a brief, easy to read format and distributed to all levels of production for review in team meetings.
- When an issue is determined to be critical to quality, operators, the team leader and the supervisor audit the operation process daily to insure compliance.

According to Jusko (1999) part of the change initiative did stick because U.S. manufactures need to continuously improve performance to survive in the marketplace. Though the worker empowerment emphasis of the original agreement has not been kept in its entirety, the motto of "doing it right the first time" has been maintained. This supports Crosby's belief that as quality improves, cost will decrease due to the elimination of rework and scrap (1999). According to Delery (1999) the plant is not alone in its partial adoption of quality management; this practice in common in American owned plants.

Though it is easy to focus on what went wrong and why, it is more productive to focus on lessons learned. The plant faced a lack of support and understanding from the top levels of the company management and union leadership. The only people who really accepted the changes were the new supervisors and the new hourly operators. To be successful, the changes should have been tied to total plant performance. Rather than focusing solely on volume of production, successful implementation should have been a factor in the overall year-end plant scorecard.

Leaderships' single, most obvious oversight was in not retraining midlevel managers in how to operate a business using the team concept. No one showed them how this concept worked, and they weren't held accountable for its success.

Detert (2000) noted that the organizational culture will either support or inhibit change implementation. The production forces, upper levels of management, and union leadership all had a different vision of what the system should look like. Unfortunately, no one brought them all together to form one unified vision.

Another problem arose when all of the trainers for the original operating agreement were employed by the state, not by the company. Once the training was complete, the trainers left, and no one was asked to evaluate what was learned, nor was there any follow-up to review implementation.

So what is the status of the quality initiative 10 years after the beginning of the new operating agreement? The team concept was not completely abandoned; the teams still have some autonomy and the company is trying to work through the teams to accomplish its objectives. The many limitations imposed by both the management and union leadership have, however, prevented the teams from operating as they originally intended.

Quality process improvements, though modest by original intent, have been effective. All team leaders receive basic statistical process control training, then return to work with their teams on quality issues and all issues determined to be critical to quality are audited daily. External information on quality production is summarized in an easy to read format and reviewed in regular work group meetings, and a daily quality meeting is held which the plant manager attends.

Lessons taught by this experience should be helpful to others considering or planning major change. First, for any major change in workplace culture to be successful, upper levels of all stake-holders must clearly embrace the change and communicate that to all levels of their organization.

References

Delery, J. E. (1999, September). After lean production: Evolving practices in the world auto industry. *Administrative Science Quarterly*

Detert, J. R. (200, October). A framework for linking culture and improvement initiatives in organizations. *Academy of Management Review*

Jusko, J. (1999, December, 6). Tried and true. *Industry Week*

Knights, David (1999). Are there no limits to authority? *Organizational Studies.* Spring

Sheridan, J. S. (1999, August, 16). The evolving life of Philip Crosby. *Industry Week*