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GAINSHARING •

Management and employees believe this company's Scanlon plan has enabled it to survive through bad economic times relatively unscathed and stronger than ever.

The Evolutionary Development of a Scanlon Plan

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Many academicians' technique of choice for increasing productivity and employee commitment is gainsharing. Similarly, many articles have reported substantial increases in productivity through so-called gainsharing programs, but close examination of these programs indicates that their design and philosophy vary substantially. Indeed, such success stories often focus on recently developed programs, and they seldom mention the difficulties encountered when management attempts to establish a more open and participative culture through some form of gainsharing.

This article examines one company's attempt to internalize the principles associated with a particular type of gainsharing program—the Scanlon Plan. The prototype of such plans was developed by a union leader named Joe Scanlon and was instrumental in saving a failing steel company in the 1930s. Like other gainsharing programs, the Scanlon Plan uses group incentives to reward employees for reducing labor and other costs associated with delivering a product or service. The Scanlon Plan, however, differs from other gainsharing programs, such as Rucker Plans®, Improshare®, and profit sharing, by its emphasis on empowering employees. Employees' participation is encouraged by involving them in the design of the program, by having a formalized suggestion process to solicit employee input, and by allowing employees to participate in the governance of the ongoing program.

During the past 40 years, Professor Emeritus Carl Frost and the Scanlon Plan Associates (a nonprofit support group for organizations that have Scanlon Plans) have developed and refined the basic Scanlon concept. They have articulated four basic principles that are associated with the successful implementation and use of Scanlon Plans. These principles, described in the box on page 51, capture the essence of the Scanlon Plan.

The reason the Scanlon Plan stresses the importance of these principles, rather than a specific financial formula, is that the adoption of a plan is really a commitment to a value system and management philosophy, not a narrowly defined group incentive program. The commitment to employee involvement and the fundamental changes associated with a Scanlon Plan may explain why this type of gainsharing pro-

SCANLON PLAN PRINCIPLES

1. *Identity.* To focus employee involvement, the organization's mission or purpose must be clearly articulated. To be meaningfully involved in the organization, employees—defined as anyone who works for the organization but does not have a major ownership position—must fundamentally understand how the business operates; what customers demand in terms of price, quality, and service; and what it takes to maintain a competitive advantage in the industry.

2. *Competence.* This principle explicitly recognizes that a Scanlon Plan demands a high level of competence from employees at all levels. Hourly employees must not only competently perform their individual jobs, but they must also be able to identify and implement productivity improvements. Participative management requires increased leadership skills from supervisors and managers. Finally, this principle reminds all employees that a Scanlon Plan requires the highest standards of work behavior and continual commitment to excellence. This principle usually translates into an extensive educational effort designed (1) to make employees more knowledgeable about the business environment, (2) to improve leadership skills, and (3) to ensure that employees understand the Scanlon Plan process.

3. *Participation.* Assuming that knowledgeable employees can indeed increase productivity, a mechanism must be provided for tapping into their ideas and translating these into productivity improvements. To encourage employee input, the Scanlon Plan provides a formal process for making suggestions, as well as access to committees that evaluate and implement suggestions. To create a participative environment within the organization, management often involves employees in the development of the Scanlon Plan and provides employees with a meaningful role in the administration of the program.

4. *Equity.* This principle recognizes that the organization's success is dependent upon a partnership that must be forged among (1) employees who contribute their ideas and labor, (2) customers who purchase the company's product or service, and (3) investors who provide the capital. Thus, it is deemed equitable that these three constituencies share financially in the productivity increases accruing through the program. The vehicle for sharing the productivity increases is a bonus formula. A traditional formula includes factors that can be affected by employees, such as direct and indirect labor costs, scrap and rework, quality, and delivery times. Bonus formulas allow for a share of savings to be distributed to employees and a share to be retained by investors. A portion of the employees' bonus is usually allocated to a reserve fund so that if production costs rise above targeted levels, these additional costs can be reclaimed by the company. Thus, employees also share in some of the down-side risk. The customers' share of the productivity increases is realized through lower prices and better quality.

gram is not frequently used, and why implementing such a program often spans several years. In light of the demands of such a program, we examine the experience of Xaloy, Inc. in implementing a Scanlon Plan over the last six years.

XALOY, INCORPORATED

Holding approximately 45% of the domestic market and 18% of the overseas market, Xaloy is a major manufacturer of bimetallic cylinders, a key component for plastic extrusion machines. These cylinders are essentially steel tubes ranging in length from two to twelve feet. The insides of these tubes are lined with proprietary alloys that resist the corrosive effects of high temperature plastics and resins extruded through them under pressure. The plant also refurbishes worn cylinders from clients around the world.

By 1985 Xaloy, Inc. had finished relocating its headquarters from New Jersey to a manufacturing facility in Pulaski, Virginia, which had been in continuous operation since the 1960s under a number of owners. When Xaloy took over, the plant employed approximately 180 employees across two shifts. The company's ma-

chine shop operation requires skilled employees to work within very fine tolerances. Although Xaloy's wages were relatively high for hourly employees in the region, employment was uncertain because its customers were cyclical, durable goods manufacturers. When past recessions hit the plastics equipment industry, the company's machine tool orders dried up, and the employment levels at the plant were cut as much as 50%.

Because the firm had been privately held, business information was secret and provided only on a need-to-know basis. Employees perceived management decisions as arbitrary, often based on politics rather than merit. The production demands were low, making Xaloy a very comfortable place to work but hampering the organization's ability to compete. In many respects, the lack of managerial competence in the plant ran counter to the need to increase productivity and improve quality for the company to survive. Severe financial difficulties in the early 1980s forced the owners and the management team to reassess their management practices. It was at this point that they began to lay the foundation for a Scanlon-type gainsharing program. The following sections describe this six-year evolutionary development of the company's Scanlon Plan and draw some observations from the experience.

The Evolution of Xaloy's Scanlon Plan

Laying the Foundation (1984–1985)

In response to the financial difficulties facing the company, management undertook a number of initiatives to identify and correct organization problems. The company hired a consultant to develop and implement a just-in-time (JIT) manufacturing system and retained another consultant to evaluate the pay system. When the compensation consultant found a great number of internal and external pay inequities, the company decided to develop a new compensation system. An employee attitude survey also indicated that many organizational policies and management practices were perceived as unfair. As more information was uncovered it became evident that the management team had neither the capability nor the will to make the changes necessary to save the company. As a result, the board of directors replaced the president with the chief financial officer and reorganized the management team.

Accepting the challenge to turn the company around, the reconstituted management team was faced with a host of problems including antiquated machinery and production methods, inadequate computer support, poor manufacturing discipline, large work-in-process inventories, and low employee morale.

The new team's first steps were to tighten production and quality standards, implement the proposed compensation programs for production and office employees, initiate training to upgrade the skills of supervision and management, and establish a performance appraisal program. In addition, the team dropped the tradition of an annual fixed percentage pay increase for managers, professionals, supervisors, and office employees and set up a merit pay plan tied to individual performance.

Although these initiatives were able to stabilize the company during the first year, the new president recognized that unless management and employee capabilities were substantially improved, the company would have difficulty competing in world markets. During this period, the management team began to formulate a vision for the company's future that included these principles:

1. Customers should perceive Xaloy as the premiere producer of bimetallic cylinders.
2. Xaloy should reenter world markets and become globally competitive.
3. Xaloy should reduce the cyclical impact of the business to stabilize market demands and employment.
4. Xaloy should develop a workforce capable of producing quality products for world markets.

Exploration and Development of a Scanlon Plan (1985–1986)

Top management recognized that to become a world-class competitor, it would have to create an organizational culture that demanded excel-

lence. Xaloy would need a workforce made up of people who were not only very competent, but also self-motivated and willing to commit themselves to continuous productivity improvement. During 1985, management searched for a program that could focus organizational efforts toward becoming this type of a world-class competitor. One strategy that emerged was the use of financial incentives to reward excellent performance. Unfortunately, a variety of bonus packages had been tried in the past with only limited success. In fact, the old management regime had eliminated an experimental bonus program because it had paid "out too much money." This move had not fostered employee trust. Needless to say, instituting another bonus program would not be well received, and it might jeopardize the trust that was being developed by the new management team.

Against this backdrop, an ad hoc team of employees and managers, with the help of consultants, systematically examined a number of management systems and financial incentives. The Scanlon Plan was selected because it tied together productivity increases, financial rewards, and employee involvement. It was also selected because the hourly employees were attracted to the historical fact that Joe Scanlon had first been a union leader and only later in his career had he become an academician. The management team particularly liked the idea of involving employees in the design of the program. Having become convinced that the success of a Scanlon Plan would require substantial commitment from employees at all levels, management presented the concept to the employees (in small groups) and asked them to indicate on a secret ballot if a design team, made up of managerial and hourly employees, should be created to develop a Scanlon Plan. The overwhelming majority of employees (more than 80%) committed themselves to the development of such a plan.

A Scanlon Plan Design Committee was then set up with three subcommittees: (1) the Equity Subcommittee to develop a formula to fairly reward employees and investors for productivity improvements resulting from the program, (2) the Participation Subcommittee to design the structure and procedures to encourage and use employee input, and (3) the Education Subcommittee to ensure that all employees understood the Scanlon Plan that was being developed and why such a program was necessary for Xaloy's future success.

The design committee spent more than six months developing its customized version of the Scanlon Plan. Carl Frost, members of Scanlon Plan Associates, the authors, and others were consulted, and their ideas were incorporated into the plan. The design committee's final product was a 26-page document that outlined in considerable detail a proposed Scanlon Plan named the PRO Plan (PRO = People Recognizing Opportunity). Employees were asked to review the plan features and to approve it for a one-year trial period. Some 83% of the employees approved the plan by secret ballot on June 1, 1986. And because only 80% employee approval was required, the plan was launched in July 1986.

Management undertook a number of initiatives to identify and correct organization problems.

The Trial Period (1986–1987)

To bring the plan in line with Xaloy's fiscal calendar, the first period of operation for the PRO plan ran for 15 months rather than one year. This was a difficult period for the company. A major recession hit the industry, and the first four months of the period passed without a bonus being paid. Not only was morale low, but employees were very upset because they felt they had been "snookered." The question they asked was, "Where is the money that had been promised us for voting in this plan?"

This incipient revolt made life uncomfortable for the new personnel manager, whose primary job responsibility was to coordinate the plan. Working with a group of employees who had no exposure to accounting, she had to explain a very complex bonus formula that contained 17 factors ranging from direct and indirect labor to operating materials, office supplies, telephone use, and vacation time. Each factor was compared with a three-year historical average

that represented the average percentage of the factor's cost necessary to produce a fixed amount of product. The plan also had a reserve clause that pulled 25% of any month's bonus into a holding account to be used during months with a "negative bonus." If this account was positive at the end of the year, the amount in it was divided among the employees. If it was negative at year end, the company absorbed the loss so that the plan could restart with a zero balance.

With the aid of the authors, the company arranged for five days of training at a nearby university to increase the business literacy and group process skills of the 30 employees in key leadership positions. A few months later, in groups of 20 to 25, every employee in the plant went through a one-day condensed version of the initial training program.

During the 15-month trial period, bonuses for productivity increases were paid only twice, and they averaged less than 1% of the total payroll. Other factors, however, indicated that a change in culture was beginning to take place. As part of the participation subcommittee's task, a suggestion system had been installed. All employees were members of these teams, and they were encouraged to submit suggestions. Each team had a monthly budget of $500 with which to make changes. There was a central steering committee that reviewed major suggestions that either cut across team boundaries or required major financing. During the first year, more than 400 suggestions were submitted. More than 90% of the employees offered at least one suggestion that year. This level of participation was very encouraging to top management. The administration of this suggestion system, however, was not easy. A major problem was that many of these first-year suggestions were offered either to test management's sincerity, or to take care of some aggravation on the plant floor. Thus, the average net savings per suggestion was later calculated to be only about $300. The high number of suggestions also caused a major problem because there were far too many to process, especially by the very lean industrial engineering staff. As a result, many of these suggestions were not implemented until the following year. This experience highlighted the need to explicitly track and give feedback on every suggestion as a simple matter of courtesy to the person who proposed it. This detailed tracking was also needed because employees were reluctant to give further suggestions if they felt that their past ones had been disregarded, dismissed, or lost.

While not evident to the employees at the time, perhaps the true success of the plan could be measured by job security. Even though Xaloy experienced a significant reduction in business because of the cyclical downturn in the industry, the company was able to retain almost all 180 employees. Another measure of success was the fact that employees were more knowledgeable about company operations and more committed to developing an organization that could compete in world markets. The trial period, however, did show significant shortcomings in the PRO Plan. On the basis of what was learned during the trial period, the plan was revised and employees voted for another trial period to test the revised plan, which was approved by 85% of the employees.

Trial Period for the Revised Program (1988–1989)

Given a second chance, the PRO plan was dramatically modified. The structure of the teams and their titles were changed so that there were team captains and cocaptains rather than committee chairmen. Steering committee meetings were improved so that what were 4-hour meetings were cut to 2 hours. (They were ultimately reduced to 90 minutes. Furthermore, by 1990, these meetings were videotaped and viewed by all employees within 24 hours.) The bonus formula was reduced from 17 factors to 6, and the reserve clause was eliminated.

The revision in the program had a positive effect. A bonus, averaging about 3%, was paid for 7 of 12 months. Morale was much higher. While there were far fewer suggestions, about 100, they were of much higher quality. The past year's backlog of suggestions was resolved. Whether the suggestion was implemented or turned down, the employee was always notified and given reasons for the resolution. Another cycle of plantwide training by outside consultants ensured that all of these changes were understood and agreed upon. In fact, hourly oper-

ations workers began to ask for more detailed information about machinery and labor performance to better identify ways to improve production processes.

At the end of the second trial period a vote was held to determine if the Scanlon Plan should be permanently installed. The steering committee made it clear to employees that a vote for permanent implementation was really a commitment to the Scanlon philosophy, for they had learned through experience that the details of the administrative structure and financial formula were bound to change. Based on this understanding, the last vote indicated that 87% of the employees approved making the Scanlon Plan a permanent part of Xaloy's management system.

Getting Results and Program Renewal (1990–1991)

Even though Xaloy, like other U.S. companies, has suffered through a major economic downturn, management and employees believe that their Scanlon Plan has enabled them not only to survive relatively unscathed but also to become a much stronger company. First, through an aggressive marketing effort Xaloy has been able to expand its European market to account for 30% of total sales. This success can, in large part, be attributed to the PRO plan's emphasis on quality and price control. In fact, Xaloy has been able to undercut the prices of its European competitors even though it must pay significant shipping charges and import taxes. Second, productivity has increased substantially, resulting in the PRO Plan generating a bonus that averaged 5% for 8 of the 12 months of 1990 and an average 3% for 5 out of 12 months in fiscal 1991. Demand for the product has increased employment at the Pulaski facility to 215. The number of suggestions climbed to 150 in 1990 and 200 in 1991. Far more important, employees learned how to focus on key manufacturing problems, for the average net savings per suggestion increased to more than $2,100 during this period. Finally, the depth of employee business knowledge has increased substantially. Management found that all machine operators could read the full 17-page financial report that is posted each month on the bulletin board.

During the 1990 and 1991 fiscal years, the PRO Plan has been updated and refined in light of changes in the company's business strategy. The formula has been changed to include only three factors: labor performance, operating profitability, and on-time delivery. The on-time delivery factor was included to reflect one of the major concerns to the survival of Xaloy: customer satisfaction. The use of an historical yardstick to measure performance was discarded. Instead, the break-even point for each factor was calculated and performance above the break-even point was converted into a bonus. Interestingly, on some factors, such as labor, most of the earned bonus went to employees, while on others it was split evenly between the company and employees.

Employees have also spearheaded a major organizational renewal effort that started with a three-day retreat in Lexington, Virginia, dedicated to the topic of leadership. Out of this effort, a new sense of organizational commitment has been built. For the first time, employees participated in a decision to reduce staff during the worst part of the recession. By using an early-

HOW LONG IS LONG ENOUGH?

Is six years of Scanlon Plan development enough to guarantee that Xaloy's plan will survive?

While no company can ensure that a Scanlon-type plan will remain permanently intact, especially if the company is sold, the data from the National Gainsharing Study (see January-February *Compensation and Benefits Review*, page 34) suggest that Xaloy is past the critical point. In their research, the authors of the study asked about the longevity of gainsharing plans that had been eliminated. Fifty percent of these 24 plans were discontinued before the end of their second year, and only 25% made it beyond their fourth year. Xaloy has passed these milestones.

Equally important, as a member of the Scanlon Plan Associates, Xaloy is committed to the Scanlon Plan philosophy and to sharing its techniques and advances with other associates.

retirement program, by persuading everyone to reschedule their vacation time to other times of the year, and by six employees' taking voluntary leaves of absences, no layoffs were necessary. Employees are now taking the initiative to make changes in the information systems and in the redesign of the production line to better meet customers' needs.

Discussion and Conclusions

As is evident by this brief review of Xaloy's experience, the design and implementation of a Scanlon Plan is based on incremental improvements. Organizational culture can be changed, but to do so requires a long-term commitment to integrity, trust, patience, and perseverance. On the basis of our experience with other gainsharing programs, the ability of an organization to undergo continuous renewal can only be achieved by making substantial investments in employee development (at all levels) and by involving employees in the design and administration of the program.

Although many factors contributed to Xaloy's success, much of the company's record during the last 5 years can be attributed to its Scanlon Plan. One dramatic indication of the strength and vitality of this company is in comparison with its competitors. In 1985, Xaloy was on par with two domestic competitors that used a similar technology to produce products for the same market. In fact, these companies had been formed by former Xaloy employees in the mid-1970s. At that time, Xaloy and these competitors had about equal shares of the market; production costs and quality were similar. In the interim, Xaloy has become 30% more productive while its competitors have shown no improvements during the same time period. Furthermore, its competitors have had to resort to major layoffs during the last recession. They have not yet returned to previous employment levels.

The Scanlon Plan is certainly not suited to every organization. It requires a major commitment of time, energy, and money. It is through this evolutionary process that the four guiding principles continue to operate to make for an increasingly competitive organization.

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