

The Scanlon Plant-wide Incentive Plan — A Case Study

Editor's Note: The following information was excerpted from the report, "A Plant-wide Productivity Plan In Action: Three Years Of Experience With the Scanlon Plan" (May 1975) prepared by Dr. Brian Moore for the National Commission On Productivity and Work Quality

In 1971, a plant-wide incentive system, designed to increase productivity and improve job satisfaction, was put into operation at one of the nine Desoto, Inc. Chemical Coatings plants

Over a three-year period, this incentive plan, better known as the "Scanlon Plant-wide Incentive Plan," produced measurable gains in productivity (as high as 41 per cent) as well as extremely high levels of satisfaction with the plan . . . expressed by both plant management and workers.

Scanlon Plan — Background

The Scanlon Plan is based on the principles developed by the late Joseph N. Scanlon, former union official. The original plan was developed with the concept in mind that the employee, employer and the union had much in common. Scanlon felt . . . "Every employee has a contribution to make concerning improvements on the job and that any improvements that could be made on the job would someday help solidify the company's business in the marketplace and, in turn, would provide increased job security."

Union-management cooperation is the basic philosophy behind the Scanlon Plan, with teamwork promoted in the belief that workers

have information to share with management and management, in turn, has something to share with the workers. This sharing provides workers with the means to collaborate . . . with management leading and labor actively participating.

The Scanlon Plant-wide Incentive Plan is of particular interest since it represents a form of management/labor cooperation built around the many issues of improved productivity practices . . . and it also features a financial reward appearing in the form of a monthly bonus.

In the nonadversary atmosphere of Scanlon committee meetings, workers and management share technical and financial information of value to both. Wages, hours, grievances and other classic union concerns are reserved for the bargaining table and must have no part in the proceedings where the focus is on improving the overall productivity of the organization.

Although the Plan began as a means for "saving" a threatened plant or company, it has more recently been adopted by "healthy" organizations as a means for releasing the productivity potential of a generation of better educated and more sophisticated manage-

ment and labor. Continued success with the Plan in the last 20 years seemed to be confined to small proprietary companies However, in recent years, it has appeared and grown in large, diversified manufacturing concerns with matured policies of decentralization.

In some of the most successful industrial settings, the Scanlon Plan is seen as the first step in a series of continuing innovations that are changing the character of industrial relations and productivity in the most advanced plants of Western Europe, Japan and the United States.

Productivity Measures

A basic formula, relating total personnel or labor costs to the sales value of production is one of the Plan's key elements. This baseline measure is necessary in order to pay out bonuses for increases in productivity levels. The ratio is the relationship between total labor costs and the market value of goods and services produced as a result of labor. (See Figure 1.)

This relationship between the human resources cost and the value of production is the normal ratio of labor to productivity Any increases in the denominator relative to the numerator represent increases in productivity in excess of the base ratio. This increase comes in the form of a financial bonus to be paid to the participating payroll.

Therefore, with the entire organization focusing its attention on this relationship of human resource investment to productivi-

FIGURE 1.

The Formula

$$\text{BASE RATIO} = \frac{\text{total personnel costs of items to be included}}{\text{sales and inventory changes (finished and work in process inventories)}}$$

ty, the formula encourages learning of more productive behavior . . . in order to improve the base ratio.

Productivity Outcome

Figure 2 represents the average bonus per cent of annual pay from 1971 to 1974. The range of average annual bonus was from slightly less than four per cent to almost 11 per cent, with the average of all Desoto plants being six per cent. This bonus is usually paid as a per cent of pay earned in a given month. It should also be remembered that it is *organization-wide* . . . with managers, clerical workers, technicians and hourly employees included.

The monthly bonus range in Desoto plants was 0 to 18 per cent,

which means that one plant, in a highly productive period, was able to provide a bonus of 18 per cent to everyone based on each person's monthly pay plus overtime.

Care must be exercised in any measure of productivity since output per work hour can be influenced by many factors. Obviously, the Scanlon Plan is only one factor. Nevertheless, Desoto management believes that the tangible benefits of the Plan are measurable. Unfortunately, productivity also depends on demand . . . Thus, softening consumer markets compounded by rapidly rising prices for raw materials have had an effect on the productivity picture.

Large and rapid changes in the prices for raw materials is a special

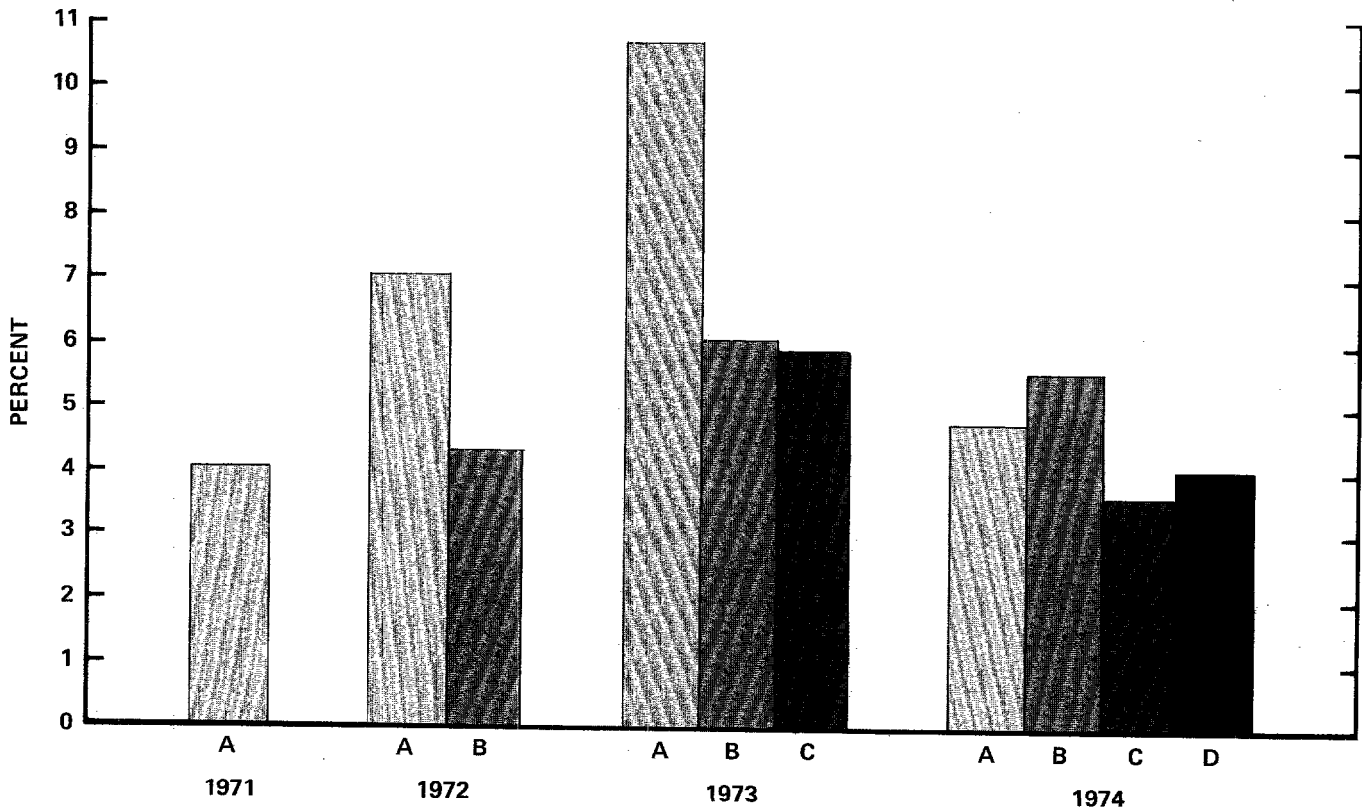
issue associated with the productivity formula . . . equity of the formula is disturbed. Management must adjust the ratio to keep it closely tied to true productivity. However, if the formula is constantly being changed, employee trust will diminish.

Another kind of problem that Desoto had to overcome was the mix in labor costs. As in many manufacturing concerns, some products are "buy outs" . . . with much or all of the product produced elsewhere and only *handled* by Desoto. Thus, the labor content in buy-out products is lower than produced products.

Clearly, if the object of the formula is to reward cooperative efforts and true productivity, then equity for both management and

FIGURE 2.

AVERAGE BONUS PERCENT OF PAY BY YEAR



NOTE: Monthly Bonus Range = 0 to 18%
Months a bonus earned = 70%

labor is important. Labor must trust management's construction and calculation of the bonus formula! On the other hand, management must not feel that the formula is a "give-away." One of management's concerns about the Plan has been the efficacy of the bonus formula It proves to be an empirical problem . . . answerable when accounting data are assembled.

Suggestion System

At Desoto, a committee structure was superimposed on the organization to facilitate communication, evaluation and disposition of a *suggestion system* . . . another key element of the Scanlon Plan. Two kinds of committees were established: *production committees* which are formed in each working unit or department and consisted of elected workers; and *screening committees* that include management and elected members of production committees.

Each department or functional area elects members to its own production committee. The supervisor automatically becomes a member. Suggestions are solicited, reviewed and evaluated by the production committee, with ground rules established whereby the committee can only accept suggestions and implement them if they (1) do not cost over a certain amount, and (2) do not affect other departments.

The screening committees are made up of 50 per cent management and 50 per cent elected representatives of the production committees, with the purpose being to deal with those suggestions that are beyond the scope of the production committees. Thus, suggestions involving significant expenditures or changes in methods across two or more departments are reviewed by the screening committee.

Production committees meet at least once a month. The screening committee meets monthly to

evaluate suggestions and to discuss the goals and progress of the company. As a part of the discussion, the productivity data are reviewed and the bonus . . . or lack of it . . . is announced. Minutes are kept for both committee meetings, documenting the disposition of each suggestion and the accounting information supporting the productivity formula.

Whatever the organizational climate and managerial style, the process of group suggestion-making involves the entire organization. It is of interest to note that, at Desoto, rates of interaction increased . . . worker to work, worker to supervisor and worker to management. The content of these interactions is assumed to focus on productivity-related suggestions.

One point raised about the structure of the suggestion has been the amount of time spent on committee meetings. All four plants spend one to two hours per month in the screening committee — about 12 to 24 worker hours monthly. Production committees meet formally at least once a month for 10 minutes to one hour. Meetings are scheduled at slow periods — about 24 worker hours each month per plant. However, breaks, lunch periods and even car pools provide opportunities for discussing suggestions. Many suggestions are made by groups . . . culminating after much "pilot testing" behavior.

What, then, is the economic impact of the group suggestion system? From the experience with Desoto, it is clear that many suggestions have modest economic impact. Nevertheless, each plant can point with pride to suggestions which have or may have very high economic impact. Many of these quality suggestions are group authored. This type of behavior rarely happens under individual suggestion systems. Again, the economic measure is perceived by

all to be reflected in the productivity bonus formula.

Intangible Benefits

Whether the tangible benefits of the Plan can be measured to the satisfaction of everyone is debatable. Intangible benefits have been reviewed by management of four Desoto plants. Here is their synopsis after seven years of collective experience:

1. Probably the most important intangible benefit is the feeling all employees have of actively participating in the management of their department and the plant.

2. This gives the employees a mechanism to contribute ideas that are documented and receive consideration of the production committee within their department. Eventually a decision must be made on each suggestion. It cannot be allowed to die by the employee's supervisor. At the same time, the worth of a suggestion is evaluated and often turned down by fellow employees.

3. Because of Scanlon, management receives a greater number of suggestions from all levels of employees. The Plan encourages employees to be more outspoken in advancing ideas.

4. Many suggestions result in savings to management that are not directly related to productivity. Examples are:

- (a) Helps develop employees at all levels.
- (b) Identifies employees with potential for work leader or supervisor positions.
- (c) Educates employees of the need to justify capital budget requests.
- (d) Where suggestions result in the addition of a capital item, the employees have a greater interest in getting the unit operating faster or overcoming start-up difficulties.
- (e) Increase knowledge of total plant operations — not just a single depart-

ment. This can contribute to a fresh approach to improving plant safety and housekeeping.

Conclusions

Productivity across four Desoto plants appears to be enhanced by the Plan. The bonus formula, which measures productivity, shows an average payroll bonus of six per cent. When this result is combined with a careful accounting of output labor costs and hours worked, the gains to productivity are as high as 41 per cent.

Construction of the formula raises special problems of employing sufficient techniques to maintain equity and mutual trust. The decision to use a simple, one-ratio formula rather than a complex one depends on the complexity of the organization and how important worker understanding of the formula is to management.

The analysis of the suggestion system reveals that irritants with the working environment can be expected as a common source of suggestions. As learning occurs, productivity-related suggestions dominate . . . especially those focusing on quantity. However, suggestion-making behavior is affected by productivity itself, with slack-period suggestions reflecting ideas not associated with productivity.

Job satisfaction, as measured, increased from already high levels. After nine-months' experience with the Plan, probably as a function of the bonus, feelings about increased responsibilities and involvement with work increased also.

Costs associated with operating the Plan at Desoto, such as time spent in meetings, appear to be outweighed by the benefits, both tangible and intangible. Indeed the benefits of the Plan appear to be the reason it has remained viable through the years. It could be that times are catching up to the Plan. As the quality of the labor force

consistently improves, industrial culture is more conducive to this form of sharing benefits from productivity improvement.

Finally, there are a number of key considerations of which decision-makers should be aware in the installation and maintenance of the Scanlon Plant-wide Incentive Plan in other organizations. Based on available knowledge and the results of this multiplan evaluation, the following recommendations can be made:

- Key people in managerial and working ranks who understand the formula act as filters of trust for others in the organization. Key people must be identified and exposed to the mechanics of the formula very early in its formulation or installation. Good distribution and circulation of these individuals enhance acceptance of the Plan.

- Complaints or dissatisfiers are the most likely type of suggestion to be received. Managers must anticipate these nonproductive suggestions in a way to (a) instruct production committees that the nonproductive suggestions will not influence the bonus and (b) deal with the substance of the nonproductive suggestions by encouraging union leadership to handle them. If there is no union, then management still must deal with the nonproductive suggestions on a basis which is perceived to be *outside of the Plan*. If some of these nonproductive suggestions should be processed as suggestions, i.e., accepted and implemented, they should be reviewed later as nonproductive suggestions and be processed (in terms of policy) outside of the Plan.

- Another related issue is the decline of suggestions over time. All organizational leaders should prepare for this decline. Managers must seek opportunities to "feed the system" and direct efforts toward new areas. *One role in the organization most suited for this*

task is the controller or chief cost accountant. By participating in production committee meetings, he can indicate high costs services or operations, inform the committee of apparent redundancies in services or operations, or point out cyclical costs with the objective of smoothing the production processes.

- Front-line supervisors may feel threatened by new types of participation and high rates of suggestions from their departments (including grievances). Managers and consultants must work with the supervisors by counseling and reassuring them. There may be some turnover at this level of supervision. However, the suggestion system also serves to identify promotable individuals and can assist in solving this problem.

- Information must be provided so that an individual has a clear picture of the relationship between behaviors and rewards.

- Since individuals differ in the ability to process information about a new reward system, it is often necessary to individualize the communication. That is, the communication must be tailored to the ability of the employee to receive the information.

- All too frequently the Plan is presented as a structure or formula which will produce greater cooperation and productivity. This emphasis ignores the process of participation in favor of the structure. Basic human values and attitudes about work, coworkers, the organization, and our economic system are at stake. There is no substitute for organizational policies built on trust and mutual dependence. The process of participation can be enhanced by supportive training in interpersonal skills for all members of the organization. This type of training helps smooth the process of group interaction so central to the Plan's success.