Gainsharing: Design And Implementation Answers

Employee involvement is the key to the success of a gainsharing plan.

Michael H. Schuster

P roductivity-sharing plans, more recently called gainsharing, are organizational systems for sharing the benefits of improved productivity, cost reductions, and/or quality in the form of regular cash bonuses. Frequently, gainsharing plans also incorporate mechanisms for employee involvement (EI).¹ In fact, our research with a host of companies strongly suggests that EI is the key to the success of a gainsharing plan.

A recent example is an oil refinery where EI began some years before. The introduction of gainsharing spurred an increase in EI and it was essential to the success of the gainsharing plan. Gainsharing plans are different from individual incentives, because they do not entail the substantial administrative costs for standards development and maintenance, nor the ongoing costs of administration.

But individual incentives are at odds with these approaches. Unlike individual incentives, gainsharing plans encourage employee flexibility and cooperation, as well as enhance standards of quality and workmanship.

Gainsharing plans also differ from profit sharing because they contain greater motivational leverage, do not require disclosure of unduly sensitive information, and within large companies, are more appropriate for facility and business unit application. Companies such as Herman Miller, Don Lemears, Dana, and Steelcase have had gainsharing for many years.

Although many organizations have only recently begun to consider gainsharing an element in their human resource strategy, the concept is not new. The first use of gainsharing, the Scanlon Plan, has been on the American industrial scene since the late 1930s. Rucker Plans first appeared in the early 1940s. Although the first plans were attempts to save companies from financial collapse, by the 1950s, many gainsharing plans reflected a different philosophy of management and a different approach by unions, namely mutual cooperation and greater utilization of human resources.

During the 1960s, interest in productivity-sharing waned, but in the face of declining productivity growth and erosion of position in world markets, the focus on productivity and the quality of work life led to a marked increase in gainsharing plans during the 1970s and 1980s. Although gainsharing was originally considered only applicable to manufacturing environments, it is receiving increased consideration in the service and notfor-profit sectors, including government agencies and health care organizations. Hospitals such as Southern Memorial in California have recently implemented gainsharing plans, and others are studying the concept. One union leader suggests that employees would respond favorably to gainsharing, and that this is a direction unions would support.² Gainsharing is also widely used in non-union environments.

We conducted research at over 100 American and British firms in union and non-union settings.³ We looked at the benefits of gainsharing, but also knowledge gained from a set of unsuccessful cases. A negative side to gainsharing has largely gone unreported. The negative findings are of particular importance, since from most writings, executives may have been led to believe that there is no down-side risk to gainsharing. This is not the case. We offer a process to managers considering whether an organization is appropriate for gainsharing, and guidelines for implementation that will reduce the risks of failure. ...gainsharing plans encourage employee flexibility and cooperation...

Gainsharing Implementation Process

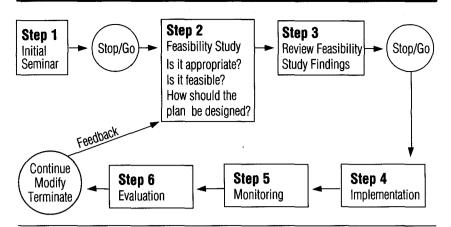


Figure 1. Gainsharing requires preparation, design, assessment, and ongoing monitoring. Source: Michael Schuster, "Gain Sharing: Do It Right the First Time," Sloan Management Review, Winter, 1987, pp. 17-25.

The Strategic Basis For Instituting A Gainsharing Plan

There is little rationale for gainsharing unless one or more important strategic business or human resource objectives can be achieved. In some companies, particularly Scanlon Plan firms, gainsharing is a philosophy of management. Gainsharing is utilized to increase employee identification, commitment, and loyalty to the organization through significant and meaningful employee participation in decision-making and financial participation. Firms such as Dana Corporation and Donnelley Mirrors long ago accepted that each member of the organization could contribute to the success of the business and should share in its success.

In fact, one study has found that employees believe that the Scanlon Plan:

- encouraged people to work harder
- helped the company's financial situation
- was instrumental in assisting employees to do their job better
- increased employee knowledge of the company
- improved trust and confidence in the company.⁴

Interestingly, the managers believed that the plan was more beneficial to the company's financial situation than did supervisors and hourly employees.

Other firms have applied gainsharing for entirely different reasons. Gainsharing in some companies is used merely as a management tool to increase productivity. In these cases, the application of gainsharing is most likely to be short-term. There is little concern whether the gainsharing continues beyond an initial one-three year period. Many of these companies are typical, however. A Midwest manufacturer did not fully realize the full potential of gainsharing at the outset, but over time saw that it could be more than just a short-term incentive and found long-term application for gainsharing.

Some firms have utilized gainsharing as a vehicle for organizational change and development. These firms have found that financial rewards can be an effective inducement to change long-standing attitudes and behavior, thus revitalizing older and more mature facilities. We will return to this subject in detail later on, and will present a case study of change.

Still other firms have found that gainsharing is an excellent way to relate employee compensation to organizational performance. In these firms, annual pay increases are more modest, but employees receive sizable bonuses in years when business conditions are good, and little or no bonus in years when the business climate is unfavorable.

One firm that was studied had had gainsharing since 1968. In years when the business did well, bonuses exceeded 20-25 percent, while in poor years there were few, if any, bonuses. This approach is receiving increased attention and support from economists who argue that it would make labor costs more sensitive to economic cycles, thus reducing inflation, and would reduce unemployment during recessionary periods by lowering the cost savings from layoffs.⁵

A note of caution needs to be added, however, to the contemporary situation. In the case of DuPont, the variable pay plan which provided for a six percent down-side, with a 14 percent up-side lower potential, was removed after 18 months of a 36-month experiment. In that particular year, employees were unlikely to receive bonuses and the impact on the culture was so negative that the plan had to be removed.

Yet another application occurred during the recent round of concession bargaining. A number of companies and unions agreed to institute gainsharing plans to offset concessionary reductions of wages and benefits. Higher productivity, cost reductions, and improved quality were used to generate bonuses to compensate employees for reduced wages. Companies that have attempted to utilize gainsharing as part of a concession package have struggled to make the gainsharing successful. A considerable decline in employee morale and the real health of the business have made it difficult for gainsharing to be successful in these environments.

Additionally, firms electing to use gainsharing for this purpose need to insure that there has been equity of

sacrifice among all stakeholders in the organization for a greater likelihood of success from the gainsharing.

A significant number of firms utilize gainsharing as a replacement for, or an alternative to, an individual incentive system. These firms have found that their existing individual incentive systems were costly and produced many dysfunctional results. However, these firms do not believe they can manage their employees without some form of economic incentive. They selected gainsharing in the belief that the group bonus will be easier to administer and will encourage more positive employee work behavior. Companies like Pitney Bowes quickly conclude that these are at odds with world-class approaches and have in recent years eliminated their piecework incentive plan. Gainsharing and pay-for-knowledge systems are the likely replacements. Two recent studies show what many companies with profit-sharing have known for some time: that profit-sharing quickly becomes a fringe benefit and is unlikely to produce performance improvements.

From a strategic perspective, senior executives may be motivated to adopt gainsharing as anything from merely a method of compensation, to a base for a farreaching organizational change program — or anything in between. These distinctions are vital since they affect the successful design and implementation of the gainsharing plan. Organizations that approach gainsharing from a strategic view and incorporate it as a management philosophy are more likely to be successful. Tailoring the plans to the company's environment rather than accepting an off-the-shelf approach also increases the probability of success. The decision process for gainsharing can be roughly separated into the six-step process described next.

The Process Of Instituting Gainsharing

Too many organizations have made serious mistakes by attempting to institute a gainsharing plan without proper study and analysis. A good example would be in a southern motor plant. The plant needed an additional rewards program as part of a pay freeze. It elected to copy the plan of a successful sister plant within the same company. However, the original plan was designed for a small product (primarily assembly) plant. The plant in question made a large and different type of motor, with a different workforce and culture. Needless to say, the plan failed and the company was forced to remove it after three difficult years in which bonuses were unpredictable and uneven when they occurred. Firms can find themselves with plans that do not work. A worse situation is in those firms that pay considerable bonuses to employees without verifiable increases in performance. Managers should expect that it will require from 6-18 months to properly assess, design, approve, and implement a gainsharing plan. Many managers will want to short-cycle the assessment and design process, believing that they can get the job done more quickly. Our experience has been that this often leads to unnecessary problems that are much more difficult and time-consuming to resolve.

Step One: Initial Seminar

Ideally, the process should begin with a seminar for senior managers to learn the history and structure of gainsharing, the benefits and risks, and problems of designing and implementing a gainsharing plan. Although the gainsharing concept is not new, it represents a substantial change for many companies. As such, it is best if key decision-makers go into it fully informed. Many companies make the mistake of sending one or two key people to public gainsharing seminars. It is far more cost effective and educationally sound to conduct a smaller in-company program where the full focus of the discussion can be on the particular organization. The outcome of the seminar and subsequent deliberations should be to determine whether or not a full feasibility study is warranted.

Step Two: Feasibility Study

Assuming there is top management interest, a feasibility study will help to determine whether gainsharing can contribute to the achievement of the firm's business objectives and whether or not the organization is a good candidate for gainsharing.

A feasibility study should address three critical issues:

- **1.** Is gainsharing appropriate from a strategic business and human resources perspective?
- **2.** Are the proper structural, human resource, managerial, and financial conditions present to install gainsharing into the organization in question?

If the answers to (1) and (2) are in the affirmative then;

3. What is the appropriate design for the gainsharing plan?

The initial education on gainsharing can be very

...profit-sharing quickly becomes a fringe benefit and is unlikely to produce performance improvements.

Too many organizations have made serious mistakes by attempting to institute a gainsharing plan without proper study and analysis. ...Start gainsbaring at a point during the year when employees have a reasonable chance to achieve a bonus. important in helping companies sort out whether or not the development of this type of program would be viewed as a priority for the organization. In one company, I asked whether gainsharing would make it to the list of the top 12 priorities for next year. When the management team responded that it probably would not, I recommended that gainsharing be deferred until it could be given better attention and be seen as a more critical priority for them. Gainsharing takes a great deal of management time and if management is not in a position to commit that time, gainsharing should be deferred.

Step Three: Review Feasibility Study and Plan Design

Once the feasibility study is completed and a design proposed, senior managers will have the opportunity to implement a gainsharing plan or to terminate further investigation. The information derived from the feasibility study should provide management with all of the data it needs to make this decision.

Step Four: Implementation

Companies often expend considerable effort designing their plans — particularly the bonus formula — but neglect the implementation process. This is unfortunate, since the key to the success of gainsharing is employee understanding and supervisory and management acceptance and leadership. Several companies have become very innovative in their development of training and communications materials. The implementation process should also include addressing the other human resource issues discussed above.

Because the production cycle of many firms is uneven during the year, it is best to start gainsharing at a point during the year when employees have a reasonable chance to achieve a bonus. This will establish the credibility of the plan, build employee confidence and trust, and generate high levels of interest.

Step Five: Monitoring

In the first year, gainsharing plans require oversight on a monthly basis. This insures that all features of the plan are developing as expected and that the formula is being calculated accurately and fairly. During the initial year, many managers and employees have substantial questions that must be answered in order for the organizational change process to take hold. Thereafter, absent unusual circumstances, gainsharing plans require less frequent oversight.

Step Six: Evaluation

Many gainsharing plans die out in the first five years. This is unnecessary. Companies should formally evaluate their gainsharing plans at the end of the first two or three years. Companies need to know whether they have realized any of their objectives through gainsharing. Business conditions may have changed, new managers have come on the scene, new objectives must be incorporated into the gainsharing plan, or the bonus formula may require substantial revision. A revised plan was instituted at one location following an evaluation in which employees other than hourly workers were permitted to participate and a new approach to measurement was instituted. This plan is now more successful.

Determining The Feasibility And Design Of A Gainsharing Plan

Here are the major factors a firm should take into consideration when determining whether a productivity gainsharing plan can effectively be installed in their organization. With the exception of the measurement issue, no single issue should eliminate consideration of gainsharing.

Plant or Facility Size

The best wisdom on plant size is that facilities with under 500 employees are ideally suited for gainsharing, while those over 2000 are not. Gainsharing also can be very effective with 500-1000 employees. With more than 1000 employees it becomes difficult, but not impossible, to manage a gainsharing plan. Here the quality of the management team and its commitment to the concept are the most important factors. Any facility over 2000 employees is a more risky candidate for gainsharing. Nonetheless there are examples of successful plans with more than 3000 employees in multiple facilities. In sites with more than 1000 employees, management needs to be aware that greater resources will be needed to successfully implement the gainsharing plan, that progress may be slower, and that considerable effort may be needed to overcome resistance to change.

Type of Production

Plants with highly mixed types of production will find it more difficult, but not impossible, to introduce gainsharing. Diverse product lines making measurement more intricate as output shifts from high labor content products to low labor content products can create a

Plants with highly mixed types of production will find it more difficult to introduce gainsbaring. bonus when no bonus should have been earned, and vice-versa. For a firm that seeks to reward employees for productivity increases this is a very important consideration; it is less of a concern for companies that seek to reward employees when the performance of the business warrants additional compensation. These somewhat competing considerations can lead to vastly different approaches to the measurement of a gainsharing plan.

Work Force Interdependence

Highly integrated work forces are good candidates for large group gainsharing plans. In situations where departments and/or shifts work independently, they can be more difficult to install. In these instances, the potential exists for small group or combined group and plant structures.

Work Force Composition

Many work forces either do not need, or may not be motivated by, financial incentives. There is a famous study of secondary workers who did not respond to the monetary incentives and EI offered through gainsharing.⁶ In another case, the work force average age was 53 years. They had very good pay and benefits, and major financial commitments had been met (homes paid for, children through school, etc.); it was not regarded as a good candidate for gainsharing. In these instances, other human resource strategies may offer a higher potential than gainsharing to motivate employees.

Performance and Financial Measures

For gainsharing to succeed, the company and its employees must believe that the gainsharing bonus formula is reasonable, accurate, and equitable. Ideally, this requires good financial and operating reporting systems with a history of validity and stability. It is preferable to have two measures. The first measures the bonus, and the second validates the bonus as an accurate measure of company performance. In the politics of organizations, there will always be someone who will ask, "What are we getting for the bonus dollars we are paying out?" Hard data with which to provide answers to such questions are essential. In one instance that I evaluated, we used an output per hour measure as a check on a gainsharing plan that used a labor-to-sales ratio to determine the bonus. Both measures correlated nicely and it was concluded that bonuses were being paid on the basis of real productivity gains.

If there is not a reasonably good measure upon

which to base gainsharing, then the organization should not move ahead. Occasionally, some managers try to force a gainsharing plan. This is unfortunate, since there are other alternatives. The bottom line is that if you can not measure it in a satisfactory way, you should not attempt to install a gainsharing plan.

Potential to Absorb Additional Output

Most firms that introduce gainsharing experience an initial increase in productivity of from 5-15 percent. (In one of our case studies, the initial increase in productivity was 40 percent). In order to avoid layoffs there must be an ability to capture this productivity gain. Some companies have solid backlogs of orders, others use their attrition plan, and some will reduce scheduled, but not as yet announced, overtime. One firm accurately forecasted that it could acquire a higher volume of business on the basis of expected cost reductions made possible through gainsharing.

However, where increased productivity leads directly to a layoff, gainsharing should be approached with great caution. In survival situations, this is much less of a concern.

Potential for Employee Efforts

When determining the feasibility of gainsharing, consider the degree to which employee efforts can contribute to the success of the business. In some highly automated plants, the ability of the employees to contribute through additional work efforts or ideas may be of only a very limited nature and gainsharing may have minimal impact.

Even with considerable automation, gainsharing may be valuable if employee effort can be expected to result in improved equipment utilization. Managers believe that a substantial employee contribution can come from continuing to operate the capital equipment to the fullest extent. For example, in one case we encountered employees who began to stagger normal and lunch time breaks to keep equipment operating. Thereafter these same employees recommended higher machine speeds, which meant more effort on their part. If management had attempted to do these things in the absence of gainsharing, there would have been overwhelming resistance.

History of the Facility

Many plants have had a long history of unsuccessful human resource programs and gainsharing may be seen by employees as just another short-lived manageMost firms that introduce gainsharing experience an initial increase in productivity of from 5-15 percent.

...where increased productivity leads directly to a layoff, gainsharing should be approached with great caution. ment effort to get more out of the work force. Other facilities have a history of problems and a lack of management credibility. Installing gainsharing in these situations can be a source of friction and considerable credibility building may be needed before a gainsharing plan is considered.

Present Organizational Climate

Gainsharing can be used to improve the climate and culture of an organization. However, some minimally acceptable level of trust must be present at the outset. Employees develop positive attitudes toward gainsharing plans when there is organizational trust, group attitudes supportive of the concept, and supervisory acceptance.⁷ A lack of trust suggests that gainsharing should be postponed until the trust level is improved. In one unsuccessful case, management found that it was unable to properly communicate the goals and objectives of the plan, because its communication lacked credibility and was distrusted. The plan never got off the ground.

Union-Management Relations

It is easier to install gainsharing in a non-union environment. In most installations of gainsharing in union environments, the union has been an active partner in the installation of the program. In difficult union environments, it might be advisable to pursue other strategies to improve union-management relations prior to consideration of gainsharing. However, where there is a reasonable relationship between the company and the union, union involvement in gainsharing gives the program greater credibility.

The presence of a union is not the key factor, but the attitude of management and union leaders toward cooperative efforts is a critical factor. The general parameters of the plan are excellent topics for problemsolving negotiations and there are many issues in which union input can be very useful. However, the gainsharing formula is best arrived at through the use of thirdparty experts.

Capital Investment Plans

It is not advisable to install gainsharing in an environment where unusually large capital investments are planned. Most gainsharing formulas are capable of capturing incremental capital improvements. They become part of the historical relationships upon which most gainsharing plans are based. Unusually high investments change the capital labor ratio and make gainsharing measurement unreliable. Substantial new investments should be made prior to the installation of gainsharing, particularly if they involve work force reductions.

Facility Management

It takes a good management team to make gainsharing successful. Well managed operations usually are prepared for EI and have taken many of the management initiatives needed to make steady productivity improvements. If site management is having difficulty managing the business, adding gainsharing is not likely to make the situation any better. It requires at least one key effective manager on site to act as the gainsharing catalyst.

Higher Management Support

Managers who introduce gainsharing take a risk, particularly when there is continuous turnover of higher management personnel. Organizational support for the concept is needed to make it work most effectively. Continuity of management or at least management philosophy is a basic requirement.

A careful analysis of the factors cited above will allow a company to determine if gainsharing offers sufficient potential to move to the design stage. It is not necessary for the organization to qualify on all factors. With the exception of the measurement factor, none of the others should be considered knock-out factors. However, if several fail to support gainsharing or if the measurement factor can not be met, gainsharing should not be attempted.

Designing The Gainsharing Plan

Gainsharing plans have very different philosophies, structure, and productivity measurement systems. Managers should avoid standard applications of these programs and instead, adopt plans tailored to their own situation. In this way, they can utilize the best features of each program. Considering the following issues will help managers to adapt gainsharing to their organization.

Among gainsharing plans, three major distinctions involving philosophy, measurement of productivity, and provisions for EI can be found. Managers need to take into account these differences when evaluating the applicability of gainsharing to their own business and the specific design of the gainsharing plan. Some of the key issues are:

- **1.** Which groups of employees should participate in the gainsharing plan?
- **2.** How much EI should there be and under what ground rules? How should the EI best be structured?

- **3.** How should the bonus be measured?
- 4. How often should the gainsharing be measured?
- **5.** What other human resource strategies should be employed to effectively complement the gainsharing and maximize its effectiveness?
- 6. When should the gainsharing plans begin?

Employee Participants

Among those managers willing to share productivity improvements, many become concerned when the gainsharing includes personnel outside the factory, for example, clerical and professional employees. This is a philosophical question. One view is that gainsharing should be applied only to factory employees with a measure of productivity reflective of factory efforts only. Another view suggests that the efforts by all employees are required to make a business unit successful and therefore, a measurement system must be designed to reflect the performance of the larger group. A third view is that some form of financial participation by all employees would make organizations more effective.

There is no correct answer to this question, but senior executives must be comfortable with one of these approaches. One company whose bonus program was designed to include all hourly and salaried employees in order to promote a philosophy of organizational cohesion abruptly changed its philosophy and took all white collar employees out of the formula. Thereafter, no bonuses were earned and the factory employees, believing management had manipulated the bonus formula, gave notice through the union to the company to terminate the plan. A residue of ill will continues.

Those firms seeking to achieve major cultural change will include all employees since the message from that strategy is that all employees must work together to achieve the organization's goals and objectives and therefore all participate in the gainsharing. At a minimum, when designing a plan for factory employees only, I believe it is a mistake to exclude first level supervision, since this "divides the team" and creates an issue of whether it is in the interests of the supervisor to support the gainsharing.

With the exception of the Scanlon Plan, most other plans are used almost exclusively with hourly employees. The Scanlon Plan generally includes all employees, except for those who already participate in some other corporate bonus opportunity.

Employee Involvement

EI also differs in many gainsharing plans. Some plans contain no provision for EI. Others contain provisions for departmental level committees as well as a high level employee-management steering committee. Those firms with active EI teams or quality circles that have added gainsharing would certainly fall into the category of considerable EI. Although there are some distinctions, those firms with active and meaningful quality circles programs that add gainsharing look very much like firms with the Scanlon Plan.

Although much has been written about the Scanlon Plan, its uniqueness lies in the fact that it represents a highly developed philosophy of management. Many of the Scanlon Plans that are unsuccessful fail because management does not recognize that the plan is something more than a committee structure and a bonus-sharing plan. Firms with successful Scanlon Plans share a common philosophy and set of values. Scanlon Plans recognize the value and contribution of each member of the organization, encourage decentralized decision-making, and seek to get each employee to identify with the company's goals and objectives. To foster the concept that employees should take more responsibility, Scanlon committees are authorized to spend limited amounts of money to implement each project they work on.

This strategy seems to pay off. At least for the Scanlon Plan, the amount of employee participation is higher in firms that retain the plan than those that do not.⁸ Managers in more traditional environments may find that other forms of gainsharing with less emphasis on EI are philosophically better suited to their situations. Retention of the Scanlon Plan also seems to be related to managers' confidence in the capabilities of their employees and their general attitudes toward participation.⁹ Managers in firms that had dropped the Scanlon Plan perceived rank-and-file employees as demonstrating less dependability, initiative, long-range perspective, and will-ingness to change, as well as possessing less judgment, responsibility, pride in performance, and alertness.

Gainsharing plans can be effective in either context. However, it is important to install a plan that is consistent with the facility's dominant management philosophy, or the philosophical direction senior managers would like to move to. If managers expect to achieve substantial organizational change, they are ...it is a mistake to exclude first level supervision....

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each other.

going to have to design plans with substantial EI. Because the amount of EI differs, so does the role that managers and supervisors play in gainsharing plans. In situations where there is a considerable structure for EI, supervisors play a key leadership role. Managers are expected to be supportive of the process, and also provide their expertise when requested. I have found that the implementation of gainsharing requires considerable management training and development. Those firms that lack confidence in their supervisors, or with managers unwilling or unable to become active in this process, should consider gainsharing plans with less EI.

Although many other standard forms of gainsharing generally contain few or no opportunities for EI, such involvement is not precluded. In some organizations where they are installed, there were existing opportunities for EI such as labor-management committees, quality circles, or ad-hoc employee participation teams. Sometimes, these are added later on. The important thing is to remember that money can be a very powerful motivator (positively and negatively), and that the gainsharing and EI should complement each other.

Two examples illustrate this. One organization installed gainsharing in a quality circles environment. While gainsharing can stimulate EI, the design of the gainsharing plan must complement rather than compete with the quality circles. This gainsharing plan did the opposite, penalizing the group for time used by quality circles meetings, with no immediate or apparent benefits. Within six months, the quality circles program had ceased to function, which was unfortunate since it had been an uphill battle to get it accepted.

Another firm installed gainsharing and structured it with potentially high levels of employee participation. Unfortunately, most decisions in the organization were made in a highly autocratic manner. In this environment, the shop floor level committees were paralyzed because supervisors were unable and unwilling to make decisions. The employees soon became very disenchanted with the process.

Measurement Issues

Gainsharing plans use financial and non-financial measures of productivity. These are most often developed following an analysis of historical data going back over a period of two-five years. Some firms develop historical data on several potential measures to assess the one that will operate the best. Great care must be taken in the design of the measurement for the bonus. If you find you cannot satisfactorily measure it, do not do it. Here's why. One very large company installed four separate gainsharing plans in four operating divisions, all located on the same site. The plans were poorly designed. The company found itself paying small bonuses to some employees, while others averaged 20-30 percent per week. In evaluating the gainsharing programs, I could find no measurable improvement in productivity in spite of the bonus payments. The program was costly to the employer, did not provide the intended results, and also caused difficulties among employees.

The most common financial measures of productivity are the relationship between sales value of production and labor costs (Scanlon Plan) and production value (sales value — cost of goods sold) and labor costs (Rucker Plan). These measures can be adapted and modified. Hence one firm using a labor to sales ratio, also used a cost of quality/sales and operating supplies/sales ratio. Gainsharing was thus measured as productivity \pm quality \pm operating supplies.

Another firm that included a large number of engineers and designers in its plan added savings on warranty costs to its added value measure. The financial measures of productivity have great educational value in spurring employee understanding of business fundamentals, but require firms to disclose information which might be considered proprietary and therefore confidential.

Non-financial measures of productivity include output per hour (units/hours of labor), output per hour plus or minus a measure of quality (called Productivity and Waste Bonus Plans), and engineered time standards, absorption of indirect hours, and actual hours worked (Improshare Plans). In Productivity and Waste Bonus Plans, improvements in productivity can be enhanced or reduced by improvements or deterioration in quality.

Another approach combines group/plant concepts. Productivity is measured on a departmental/shift basis. Gains are shared in a formula in which a portion is allocated to the group, with the remainder to a plant bonus pool. The Department of the Army has developed a gainsharing plan to motivate and reward civilian employees. In this plan, performance standards are used to determine "earned hours" of production which is compared to direct labor hours.

Firms need to find the measure of productivity that best conceptualizes their own situation and the goals and objectives they are seeking to achieve through gainsharing. One firm that did not do this instituted gainsharing in two plants that were undergoing substantial price competition at the same time that inflation was causing materials, supplies, and regular labor costs to increase. Although there was a substantial productivity increase, very few bonuses were paid to employees because of these factors. As a result, employees felt aggrieved and both plants later on experienced 16-week strikes.

Time Frame for Measurement

The most commonly used measurement period for gainsharing is a monthly measure. Many firms have recently moved to quarterly measurement because this tends to create more stability in the measurement process and avoids severe month-to-month fluctuations. A small number of firms have used six-month measurement periods, but the longer period will tend to reduce the motivational impact (although the actual bonus payments increase with longer period).

There are many firms that measure weekly, often using a rolling average, relating back to the manner in which individual incentives are calculated and paid. I do not recommend this approach. First, these firms pay the bonus as part of regular pay. It is best to pay the bonus by separate checks to differentiate performance from regular earnings. Second, the rolling average lessens variability in earnings and therefore is less effective from a motivational perspective. Third, many employees do not understand the rolling average concept.

Other Human Resource Strategies

Firms taking a broader view of gainsharing opportunities will use the installation of gainsharing to effectuate substantial changes in human resource programs, policies, and initiatives. Most gainsharing plans require a considerable training and communications effort directed to the installation of the plan. However, some firms go beyond this to capture additional opportunities.

One firm used the introduction of gainsharing as the occasion to put all operating management through an assessment center for diagnostic purposes. The end result was individualized training and development programs to upgrade the quality of management, a feature that is essential to successful installation of gainsharing.

Other firms have used the occasion to end human

resource policies such as individual suggestion programs and attendance reward programs. Attendance is rewarded in gainsharing because the size of an individual employee's bonus is a function of the number of hours worked. Yet another firm used the occasion of their gainsharing start-up to terminate a flex-time program that had been the subject of considerable abuse.

Another example is a group of senior managers who wanted to change the style of management and relations with the union. Other companies have used the occasion to expand skills-based training and to reexamine the design of jobs and manning levels.

The point is that for some firms gainsharing becomes the centerpiece of their overall approach to human resource management. They must therefore place the gainsharing into a context (effective human resource programs) that will make it effective. Less ambitious firms will still find that there may be a need for some compensatory human resource activity to simply meet the minimum conditions to establish a gainsharing plan.

Gainsharing Start Date

It is best to begin gainsharing at a point in the firm's calendar when activity is normally higher. This provides employees with an opportunity to achieve good results. During slower portions of the year, firms often maintain additional employees for those periods when activity returns to normal levels. Many firms that begin their plans in the middle of their financial year have found it useful to operate the first year of a plan as a short year, so that in subsequent years the gainsharing can operate in concert with their financial year.

A Case Study Of Gainsharing Used To Turn Around A Facility

Gainsharing became a critical component of a labor relations and organizational change strategy at a 300-employee machining facility located in the Midwest. The location formerly had 3000 employees working in seven plants. By 1988, following the announcement to close three others, only one facility remained. This facility manufactured two dozen major parts for the appliance industry. Total production of units numbered 50 million in 1990. The plant was represented by two unions. The location had a long history of bitter labor strife. In 1988, relations between the company and the unions were adversarial and the relationship had a high level of mistrust. In 1988, 300 employees wrote approximately 550 grievances.

The workforce was older and highly skilled. Employee pay was frozen at about \$11 per hour. Five hundred employees had recall rights. The management style was traditional. A new division vice president with a human resource background had recently arrived.

There was much corporate skepticism that the remaining facility could not only survive, but meet the company's twin business goals of being the "best cost," "highest quality" supplier. Since the plant supported a much larger assembly plant, on-time delivery was essential. At the time of the study, quality was measured at 1300 ppm rejected.

The gainsharing plan rewarded improvements in productivity, scrap and rework, and savings in manufacturing expenses and tooling. An innovative approach divided the gainsharing bonus improvements between employees and the company on the basis of the quality of the product as determined by the plant's customer. Gainsharing, as well as improved labor-management relations, introduction of teams, and management development, led to the survival of the facility. An early longterm contract was negotiated using win-win techniques.

Conclusions

Favorable publicity in the popular press reflects the fact that firms that utilize gainsharing plans can achieve sizable performance and employee relations benefits. Nonetheless, there are pitfalls, and executives considering gainsharing should move carefully.

Many plans do not survive beyond the first several years or they cause serious problems for organizations. Often these difficulties could be avoided. It is important for firms considering gainsharing to examine their philosophy, goals, and business objectives. Thereafter, a gainsharing plan incorporating a structure and measurement system can be designed that fits the business unit. Firms should avoid utilizing a "canned" program, and instead design one specifically geared to their situation.

Too many firms introduce gainsharing as a separate program rather than as part of an overall strategy of human resource management. Others fail to consider the long-term implications of gainsharing.

Companies should determine whether gainsharing would contribute to realization of their intermediate (three-five year) business objectives. Next, through a feasibility study, firms need to determine whether to install gainsharing into their business. If gainsharing is appropriate, a plan must be structured that is congruent with the organization's dominant values and characteristics. A measurement system that accurately and equitably conceptualizes operations must be formulated. Finally, executives need to get behind gainsharing and identify a member of their staff who can provide the leadership to make gainsharing a success.

- Bullock, R J. and Edward E. Lawler, "Gainsharing: A Few Questions, and Fewer Answers." *Human Resource Management*, 1984, pp. 23-40.
- Majerus, R. E., "Workers Have a Right to a Share of Profits." Harvard Business Review, September-October, 1984, pp. 42-50.

3. Schuster, M., "The Impact of Union-Management Cooperation on Productivity and Employment." *Industrial and Labor Relations Review*, 1983, pp. 415-430.

Schuster, M., "Union-Management Cooperation: Structure, Process and Impact." Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1984.

- Goodman, P. S., J. H. Wakely, and R. H. Ruh, "What Employees Think of the Scanlon Plan." *Personnel*, 1972, pp. 22-29.
- Mitchell, D. J. B., "Gain-sharing: An Anti-Inflation Reform." Challenge, July/August, 1982, pp. 18-25.
- Gilson, T. and M. Lefcowitz, "A Plant Wide Productivity Bonus in a Small Factory: Study of an Unsuccessful Case." *Industrial and Labor Relations Review*, 1957, pp. 284-296.
- Goodman, P. S. and B. E. Moore, "Factors Affecting Acquisition of Beliefs about a New Reward System." *Human Relations*, 1976, pp. 571-588.
- White, J. K., "The Scanlon Plan: Causes and Correlates of Success." Academy of Management Journal, 1979, pp. 292-312.
- Ruh, R. A., R. L. Wallace, and C. F. Frost, "Management Attitudes and the Scanlon Plan." *Industrial Relations*, 1973, pp. 282-288.

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Editor's note: The Scanlon plan was devised by Joseph Scanlon to save the Empire Steel and Tinplate Company in Ohio. It calls for sharing, on a monthly basis, the productivity gains made that month as compared with an accepted historical standard. The more complicated Rucker Plan is broader in scope; this plan rewards employees for improvement in the use of a range of inputs, including labor.

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