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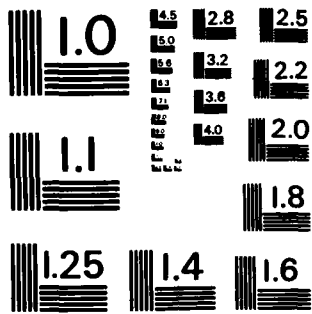
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by

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WHAT EVER HAPPENED TO INCENTIVE PAY?

by

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Fredrick Winslow Taylor correctly identified the important role that pay can play in motivating work performance in organizations. His approach to designing work organizations had as a key building block a strong emphasis on incentive pay. Indeed, he relied almost entirely on incentive pay for producing motivation. His approach to job design made it particularly critical that pay be used effectively as a motivator of performance. As research for the last 20 years has shown, jobs which are simplified, standardized, and tightly specified produce little intrinsic motivation (Hackman and Oldham, 1980). Indeed the job enrichment movement in the United States represents a rejection of the scientific management approach to job design and a call for designing jobs which are intrinsically motivating.

Because Taylor's system depended so heavily upon pay as an incentive, it is hardly surprising that piece-rate pay systems and pay for performance systems are so closely associated with the work of Fredrick Winslow Taylor. It is virtually impossible to separate them from his approach to work design since, in many respects, they require work designed according to the principles of scientific management in order to be installed. Piece-rate systems work best when easily measurable, highly repetitive tasks are to be performed. With this type of work it is possible to set standards and determine incentive pay amounts. Further, as has been noted, work that is designed according to

the principles of scientific management virtually requires incentive pay if employees are to be motivated to perform their jobs effectively.

Historically, the popularity of incentive pay has gone almost hand-in-hand with the popularity of the scientific management approach to work design. The 1920s and 1930s saw a tremendous growth in the installation of piece-rate incentive plans (Lawler, 1971). For several decades, however, the popularity of piece-rate incentive plans has been in a steady decline. Fewer and fewer new ones are put in and those that are in place are being eliminated. In several respects, this is an ironic trend. There has been, and continues to be, considerable evidence that pay can be a particularly powerful incentive (Lawler, 1981; Locke, 1979) and there is an increasing interest in ways to increase productivity. Studies tend to show productivity increases of between 15 and 35 percent when incentive pay systems are put into place, confirming the early writings of Taylor that pointed to the powerful effects pay incentives can have on work performance. Given their effectiveness, the decreasing popularity of incentive pay systems is at first glance hard to understand, particularly in an era when, at least in the United States, national productivity rates are stagnant and there is a desperate need for management approaches that will increase productivity.

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In this paper, I will first consider why piece-rate pay plans are losing popularity and then consider what the future may hold for incentive pay. The analysis will indicate that although at first it may seem that organizations have lost their way with respect to incentive pay, in fact, the abandonment of piece-rate incentive plans is probably

appropriate. However, the slowness to replace them with other kinds of pay for performance plans may not be as appropriate.

Problems with Piece-Rate Pay

The literature on pay incentive plans is full of vivid descriptions of the counterproductive behaviors which piece-rate incentive plans produce (see e.g., Whyte, 1955). In many respects, these behaviors are caused not so much by the concept itself, but by the way it has been operationalized in most organizations. Nevertheless, it is difficult to separate the practical problems with the plan from the general idea of incentive pay. Let us briefly review the major problems with piece-rate incentive plans.

1. Beating the System. Numerous studies have shown that when piece-rate plans are put into place an adversarial relationship develops between system designers and the employees who work on them (Lawler, 1971). Employees engage in numerous behaviors in order to get rates set in such a way that they can maximize their financial gains relative to the amount of work that they have to do. They engage in such behaviors as working at slow rates in order to mislead the time study expert when he or she comes to study their job and they hide new work methods or new procedures from the time study person so the job will not be restudied. In addition, informal norms tend to develop in the organization about how productive people should be and the workers set limits on production. Anyone who goes beyond this limit is often socially ostracized and even physically punished. Unfortunately for the organization, this limit often is set far below what people are capable of producing.

Other forms of gaming include producing at extremely low levels when the rates are set at levels that the employees consider too difficult to reach and using union grievance procedures to eliminate rates that are too difficult. Finally, it is often suggested that in order to gain leverage in negotiating piece-rates, employees will organize unions so that they can deal from a more powerful base. Often, when unions do exist in the work place, they are able to negotiate piece-rate plans which allow workers to work off standard, thus removing themselves from the incentive plan and making it ineffective.

In summary then, piece-rate plans often set up an adversarial relationship between those on the plan and those designing and administering the plan such that both sides engage in practices designed to win the game or war at the cost of organizational effectiveness.

2. Divided Work Force. Since many support jobs and nondirect production jobs do not lend themselves to piece-rate pay, the typical organization that has piece-rate pay has part of the work force on it and part of the work force not on it. This often leads to a we/they split in the work force that can be counterproductive and lead to noncooperative work relationships. This split interestingly enough is not a management-worker split, but a worker-worker split. In its most severe case it can lead to piece-rate people complaining about materials handling people, maintenance people, and others who they depend on for their piece-rate, thus causing a significant lack of cooperation within the work force.

3. Maintenance Costs. Because piece-rate plans by themselves are relatively complicated and need to be constantly updated, a significant investment needs to be made in people whose job it is to maintain the

piece-rate system. The problem of maintaining the piece-rate system is further complicated by the adversarial relationship that develops between the employees and the management. Since employees try to hide new work methods and avoid having changes in their piece-rates made, unless of course, it is to their advantage, management needs to be extremely vigilant in determining when new piece-rates are needed. In addition, every time a technological change is made or a new product is introduced, new piece-rates need to be set.

Finally, there is the ongoing cost of computing peoples' wages relative to the amount of work and kind of work they have done during a particular performance period. All this takes engineers, accountants, and payroll clerks. Added together, the support costs of a piece-rate system are significantly greater than those associated with a straight hourly pay or a more traditional pay for performance salary increase plan.

Overall, the above list should make it clear that the installation of incentive pay is, at best, a mixed blessing. Although it may improve work performance, the counterproductive behaviors that it leads to, the maintenance costs, and the splitting of the work force may make it a poor investment. Many organizations have dropped piece-rate pay or decided not to put it in simply because they have decided that the negative effects and maintenance costs outweigh the potential advantages that come from the increases in performance that it typically produces. The decreasing popularity of incentive pay, however, probably cannot be understood solely from this perspective. Some important societal changes have taken place since Frederick Winslow Taylor first wrote

about scientific management that in many ways have led to the declining popularity of piece-rate pay.

Societal Change of Trends

The United States has changed dramatically during the decades which have followed Taylor's early writings. The society, the work force, and nature of the work have all changed in ways that make them less amenable to piece-rate pay. Let us look at how each of these has changed and then see how they relate to piece-rate pay.

1. Nature of the Work. In the early 1900s, many of the jobs in the United States were in the manufacturing and agricultural parts of the economy and they involved the production of relatively simple, high volume products. Today, the United States is moving rapidly toward work which is service sector based, knowledge based, information processing based, or high technology based. Many of the simple repetitive jobs have left the United States for less developed countries or they have been automated. Instead of simple stand-alone jobs that an individual could do by him or herself, many of the jobs involve the operation of complex computers, continuous process plants, or delivering services which require the integrated work of many individuals.

The type of work that exists in the United States today, therefore, is less amenable to individual measurement and to the specification of a normal level of individual production. Instead, performance can only be measured reliably and validly when a group of workers or even an entire plant of workers is viewed. Finally, in many knowledge-based jobs, it is even difficult to specify what the desired product is until it has been produced. Work of this nature simply does not lend itself to piece-rate pay.

Finally, even in those situations where there are simple repetitive jobs that lend themselves to piece-rate pay, the work on individual job enrichment has led organizations to try to make those jobs more complex and to create conditions under which employees will be intrinsically motivated to perform them well. In many cases, the process of enriching them has made them less likely candidates for incentive pay, both because a different kind of motivation is present and because the enrichment process has made the simple, measurable, repetitive nature of the jobs disappear. In summary then, the nature of work at least in the United States, is less and less amenable to individual piece-rates and to the general principles of work design enumerated by Taylor.

2. Nature of the Work force. The work force in the United States when Taylor was doing his research and writing was primarily composed of poorly educated immigrant workers who were for the first time entering factories and manufacturing environments. Today, the work force is much more highly educated and there is evidence to indicate that it has different values and different orientations toward work. For example, today over 20 percent of the work force has a college education and this combined with a number of other changes seems to have produced a work force that is interested in influencing work place decisions, desires challenging and interesting work, and hopes to develop their skills and abilities. Indeed, it is this change in the nature of the work force that is often used to support the call for more enriched jobs and for the elimination of standardized, specialized, highly repetitive work (Hackman and Oldham, 1980).

Although there was a period (the late 1960s and early '70s) when people placed less emphasis on money as an important reward, recent

evidence suggests that it has become more important (Lawler 1981). In any case, there is no evidence that it has ceased to be a potential motivator in the work place. Quite to the contrary, there continues to be evidence that it can be a powerful incentive. The problem seems to be that piece-rate plans because of their top-down nature and the kind of work they are typically associated with do not fit people's values about the kind of work they should do or the kind of relationship they should have to their work organization and their management. Interestingly, there have been some successful experiments in the United States in which employees and management have jointly worked to define pay incentive systems and these have proved to be successful (Lawler, 1981). It has required training workers in work study and incentive pay rate setting and allowing them to have a significant voice in the ultimate development of their incentive plan. Where this is possible, and where the nature of the work does not lend itself to enrichment, piece-rate plans would still seem to have an important place in the United States.

3. Nature of the Society. The rate of societal change in the United States has been accelerating during the last decades. Particularly in the last ten years, the United States has seen an expansion in employee rights, employee entitlements, and the kind of legal avenues that are open to employees when they feel unfairly treated in the work place. In addition, the society has seen increased international competition and the loss of jobs to other countries. The net effect of these and other changes seems to have been to push the society toward pay practices that are more egalitarian and which have less money at risk. Today we have high fringe benefits and high base

wages. In many respects, this does not fit with the increasing national awareness that the U.S. needs to be more productive, but it does fit with the idea of increased entitlements.

Overall, the United States is a society in which the profits of companies are at risk as a function of performance, but the pay of individuals is affected only at the extremes of performance. That is, an employee only loses when the company is in such poor shape that it has to lay the individual off and the employee only gains when growth is such that the employee has the opportunity to be promoted. The society seems to have evolved to a state where individuals consider that they are entitled to a fair wage and extensive fringe benefits simply because they are employed by the organization. This kind of thinking is represented in the union contracts that have eliminated piece-rate pay and in many companies that in order to stay nonunion have not installed piece-rate incentive plans but have given high base wages.

In summary, the gradual demise of piece-rate incentive plans in the United States over the last 20 to 30 years seems to be due to a combination of factors. The negative features of them have become well-known and in many people's minds tend to offset the positive impact that they typically have on productivity. Changes in the nature of the work force and the work itself have tended to make them less appropriate for the bulk of the work situations which currently exist in the U.S.

Future Developments

Looking to the future, there are no indications that changes in the United States are occurring which are likely to tip the scales in favor of more incentive pay situations. Indeed, if anything, the trends which have lead to the abandonment of piece-rate pay seem to be continuing

such that if anything, the next ten years will probably see a continuing decline in the use of incentive pay plans. There is, however, one important trend which seems to call for the increased use of pay as a motivator--the lack of growth in national productivity and the strong international competitive situation with respect to productivity and economic growth.

Given the competitive situation, it seems foolish for any organization to abandon such a potentially powerful incentive for performance as pay. On the other hand, our analysis so far has suggested that at least piece-rate pay plans are not a good answer at the present point in history. Elsewhere I have argued that the typical merit increase plan is not in any way, shape, or form an adequate substitute for a piece-rate or bonus incentive plan (Lawler, 1981a). It falls short on a number of criteria, including the ability to relate performance to pay on an ongoing immediate basis. What then is the answer? There probably is no one answer, but for some, one good alternative is the use of some form of gainsharing plan. Not surprisingly, the use of these plans is showing a dramatic increase in the United States and every indication is that they will continue to grow in popularity. Let us therefore turn to a brief discussion of them and a consideration of why they seem to be an appropriate method at this point in time.

Gainsharing Plans

The Scanlon Plan is perhaps the oldest and best known gainsharing plan (Moore and Ross, 1978). More recently, a number of companies have adopted the Improshare plan while still others have developed their own plans. The idea in all of these plans is to define a business unit,

typically a plant, or major department and to relate pay to the overall performance of that business unit. Bonuses are paid out to all employees in that unit on a monthly basis. A formula is used to decide the size of the bonus. Typically, bonuses are paid when the formula indicates a decrease in such costs as labor, materials, and supplies.

The Scanlon Plan has in fact been around in the United States for decades. It was first formulated by Joe Scanlon, a union leader in the 1930s and has been in place in some companies for over 30 years. Until recently, it was used primarily in small family-owned manufacturing organizations. During the 1970s, however, an interesting and important trend developed. Such large companies as General Electric, TRW, Dana, and Owens-Illinois began installing gainsharing plans in some of their manufacturing plants. This tendency of large corporations to define organizational units which have their own bonus plans seems to be spreading. The reasons for this are many and relate directly to the kinds of changes which have been going on in the work force in the society in general. In many respects, the work situation in the United States today is more in tune with the idea of plantwide or organizationwide bonuses such as those that are typically generated by gainsharing plans than they are in tune with the idea of piece-rate pay. Let us briefly review why gainsharing plans seem to fit better in the current situation than piece-rate plans.

First, gainsharing plans do not rely on individual performance measurement. This is important in several respects. First, it fits many work places because performance in them can only be measured in an objective manner at the group or plantwide level. The technology in them does not lend itself to the identification of individual output.

For example, in an oil refinery output occurs only when a number of individuals work in conjunction with each other to produce a product.

Gainsharing plans are also typically participatively developed and administered. That is employees have a say in the design of the plan and are able to participate in the ongoing maintenance and administration of the plan. This tends to significantly decrease the adversarial relationship between employees and management and to fit better with a society in which people want influence on work place discussions and want to be involved in business decisions.

They also affect everyone in the work force: managers, production employees, and support people so they encourage cooperation and teamwork and thus tend to produce an increase in organizational performance. This is in contrast to piece-rate plans which affect only a limited number of employees and motivate competition within organizations.

Finally, to a degree, gainsharing plans meet the needs of organizations for increased productivity. There is considerable evidence that indeed they do produce performance improvements (Lawler, 1981). On the other hand, it is important to note that they may not produce as great an increase in the performance of individual production workers as will piece-rate plans. They produce a much less direct connection between individual performance and reward and, therefore, are a less powerful motivator than are individual piece-rate incentives. Clearly then there is a loss here in comparison to piece-rate incentive plans but the expectation is that the loss will be made up in a number of respects.

First, extra cooperation should lead to better performance particularly in work places where cooperation is key to performance

(e.g., process production technologies). Secondly, the ability to include everyone in a plan can be an important advantage in most work places. Thirdly, gainsharing plans do not seem to produce as many negative side effects because rather than leading to an adversarial relationship, they typically lead to a cooperate problem-solving relationship between management and the workers. After all, managers and employees are on the same incentive plan and the plans are installed jointly in a cooperative mode. Fourthly, most plans include a problem-solving group process which is intended to develop and implement individuals' ideas about how the work process can be improved. Finally, gainsharing plans often take less administrative support than individual piece-rate plans. While they still require administrative support, they do not require setting of individual standards for each job nor the calculation of pay for each individual based upon their performance.

So far, the installation of gainsharing plans has largely been limited to manufacturing situations. Recently some service organizations such as banks and hospitals have begun to experiment with gainsharing plans. A good guess is that over the next five to ten years there will be increased use of gainsharing plans in nonmanufacturing situations. Although a great deal remains to be learned about how they should be installed in nonmanufacturing environments, they are one approach for linking pay to performance that fits the conditions which exist in today's work places. The alternative of essentially abandoning pay as a motivator of performance is always there but it represents the abandonment of a very important potential incentive, something that most organizations cannot afford to do. If anything, it is surprising how slow most organizations have been to move to the use of gainsharing type

plans. Particularly in large organizations, it has been noted for decades that people have lost a sense of the business, a sense of involvement in the ongoing operation of the organization, and have in many cases become bureaucrats routinely carrying out tasks with little appreciation or concern for how their performance relates to the overall success of the business. Indeed, it has often been suggested that it is this type of relationship between individuals and organizations that has led to stagnation in national productivity growth in the United States and in many cases the production of poor quality products.

Gainsharing when combined with a number of other organization design features presents a way of getting people involved in the organizations they work for (Lawler, 1982). Approaches such as self-managing work teams and individual job enrichment can also do this, but in the absence of any relationship between the success of organization and the pay of individuals, an important part of the business experience is missing for the individual. Everything that is known about motivation clearly points out that motivation is going to be greatest when people have both a psychological stake in the organizations' success and a financial stake in its success. Gainsharing represents a way to produce this for a significant number of employees. Those organizations that fail to take advantage of this kind of opportunity are missing an important way of increasing organizational performance.

Conclusion

In many respects then, we are concluding like Frederick Winslow Taylor with a call for the use of pay as an incentive. Taylor correctly recognized that pay can be a powerful motivator of performance and that

organizations can be more effective when their pay system fits with the way work is designed. The same observation seems equally pertinent today as it did decades ago. However, changes in a number of societal and work force conditions often make gainsharing, or some other form of group bonus plan, more appropriate today than the kind of piece-rate plans that Taylor argued for. It remains to be seen whether gainsharing plans will ever enjoy the kind of popularity that piece-rate plans did at one time. There is reason for optimism with respect to their widespread adoption as most of the conditions seem to be in place which are needed for them to be adopted on a wide scale. Indeed, if Taylor were writing today, he might even call for their widespread use and develop an eloquent argument for their usefulness.