What's Wrong with Pay-for-Performance

BY JEFFREY PFEFFER AND ROBERT I. SUTTON

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EXECUTIVE SUMMARY

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There's a lot of money in financial incentives. Type "compensation" into Amazon.com's search engine and you get more than 47,000 entries. Hoards of people are clearly interested in reading — and writing — about financial incentives. Numerous consulting companies sell advice about designing incentive systems that attract, retain, and motivate employees. Human resource executives devote huge chunks of time to designing pay systems and dealing with complaints about compensation. Compensation committees of boards of directors devote endless hours to incentives for senior executives, allegedly to align the interests of executive officers with the long-term interests of the company's stockholders.

These tremendous efforts to get the pay system right are guided by several deeply held and intertwined beliefs about what motivates people in the workplace. Incentives are seen as the primary tool for aligning individual behavior with organizational objectives because without effective incentives, people would do nothing — the assumption being that people are averse to work and must be bribed to expend effort. Underlying all this is the belief that people work primarily for money, and because motivation is the most important driver of performance, financial incentives are the most important motivators.

This emphasis on financial incentives goes back at least to Frederick Taylor, the founder of scientific management. "What workers want most from their employers beyond anything else is high wages," wrote Taylor in 1911. In his classic pig iron shoveling experiments, financial inducements based on productivity were used to persuade workers to accept scientific management's prescribed methods. Much the same view is seen in modern economics theories, in which it is a given that paying on the basis of output will result in workers who supply more output. In psychology, Skinnerian learning theory argues that behavior is a function of its consequences: If you want more hard work, that behavior needs to be reinforced. And most learning theorists who intervene in organizations treat money as the most potent form of reinforcement.

Decision-making theory makes more complex assumptions about human behavior than reinforcement theory. But it also presumes that people want to choose actions based on the expected probability of obtaining valued outcomes — especially money. In short, the belief that financial incentives are the most powerful drivers of organizational performance is a cornerstone of numerous influential theories.

The problem is that these basic assumptions about financial incentives are just that — assumptions. They are usually taken on faith rather than based on evidence or even subjected to critical thought. The result is that companies build expensive incentive schemes that routinely fail to produce the behavior that leaders want or intend. This article examines the evidence and logic that underlies financial incentive systems to help managers find ways to stop, or at least reduce, the problems that so many incentive systems inflict.

What incentives can do

There are three primary ways that incentives can enhance performance or, if badly misapplied, damage it. First, financial incentives could spark effort — a motivational effect. This is the effect usually sought when companies and consultants recommend pay-for-performance schemes — people are presumed to work harder to get greater financial rewards. Increased motivation can't affect a person's ability (at least in the short run). So interventions that increase effort presume, by definition, that if people just try harder, results will improve. But interventions aimed at increasing motivation through incentives can succeed only if people have enough information to work effectively and if other organizational systems and technologies are not the main roadblocks to performance. Compensation firms and consultants rarely acknowledge these limits.

Interventions that use money to bolster motivation also presume that performance is under the control of people who get the incentives — often a flawed assumption. Take the senior executive from Florida Power and Light who told us that his compensation was based on the utility's profits. In the short run, most of the utility's costs and rates were fixed, so profits depended on how much electricity was sold, which depended mostly on temperature. The hotter it got, the more power was sold and the greater the profits. That summer in Florida was particularly hot, so the executive got a big boost in pay. He noted that this system made no sense — unless you believe he could control Florida's weather. If performance outcomes aren't controllable and employee efforts don't matter, then the motivation from financial incentives can't affect performance.

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Second, financial incentives can turn attention to what the organization values and its priorities, an informational effect. People can't give equal attention to every dimension of their job and companies often send conflicting messages — for example, pay attention to quality or customer service but cut costs and increase efficiency. So people look to the pay system to figure out what matters.

When Continental Airlines undertook a cultural and service trans-

Profit motive drives ethical blindness

Corporations such as Enron that overemphasize outcomes such as profits might make their leaders blind to ethics and limit their abilities to recognize ethical or moral issues when they surface, according to a University of Washington study. Scott Reynolds, an assistant professor of business ethics in the UW Business School, examined why some managers recognize a situation as involving moral issues whiles others do not. His research demonstrates that it is not always obvious when an issue has moral overtones — people can and do disagree about whether an issue involves ethics.

In two separate studies, Reynolds asked 96 senior-level managers to rate five scenarios involving varying degrees of ethical violations designed to measure their moral awareness. Previous research has shown that when facing ethical dilemmas, individuals either focus on the ends (consequences such as happiness, harm, and profits) or the means (such as don't lie, don't cheat, and don't steal) as they search for a solution. The study found that this preference also influences an individual's capacity simply to identify a problem as an ethical issue.

Reynolds found that people who focus primarily on the ends recognize ethical issues when harm is done but are much less sensitive to ethical issues that seem to only involve a violation of the means (someone lied, broke a promise, violated a policy, etc.). When it appears that no harm is done, ends-based decision makers are much less inclined to see the issue as an ethical one. Means-focused people, however, recognize both harmful situations and those situations in which the means used were an ethical issue.

The results are surprising, he said, because they suggest that means-based decision makers are affected by a much broader range of what they consider to be ethical issues.

"For that reason, ends-based decision-makers might be very surprised to know what others call or treat as ethical issues," Reynolds said. "You could say that ends-based decision makers are 'blind' to those kinds of ethical issues."

Reynolds believes former Enron Corp. Chief Executive Officer Kenneth Lay and others at the bankrupt trading and energy company might have been victims of this phenomenon. He speculates that Lay and other Enron executives probably saw no harm in what they did and therefore believed there were no ethical aspects to their business — it was just doing business as usual. Thus, there was an initial sense of surprise or disbelief within the culture once they saw outsiders' reactions to their business practices.

formation in the 1990s, going from worst to first in on-time performance in a year, it paid each employee $65 for every month that Continental ranked in the top half of airlines for on-time performance. Not only did this motivate harder work, it signaled that Continental cared about on-time performance. Indeed, one analysis of airline on-time performance found that whether or not executives seemed to care about flying on time was among the strongest causes of whether airlines actually flew on time.

The third way that differential financial rewards may enhance performance is by attracting the right people and repelling the wrong people — a selection effect. Think of recruits who choose between working for one company that offers performance-based pay and another that offers seniority-based pay. People driven to outdo their peers will choose workplaces where their superior performance will put more money in their pockets. Stanford economist Edward Lazear believes that such selection effects are important because "Pay that is only mildly related to output can be very powerful in sorting workers and providing information."

As you will see, each mechanism operates in every organization. And each has unanticipated effects on the people they are meant to motivate, inform, and attract — which dampens performance with alarming frequency. Even when executives have the best intentions, study best practices, and bring in top consultants, many still get bad pay systems.

The prevalence of incentive or contingent pay has increased markedly over the last 15 years, with schemes such as bonuses becoming particularly pervasive at senior executive levels.

The growth in incentive pay

Incentive pay is ubiquitous and its use has grown in recent decades. Even in the early 1980s, surveys showed that more than 80 percent of employees worked in organizations with merit pay plans, in which at least some employees received raises based on their rated performance. The prevalence of incentive or contingent pay has increased markedly over the last 15 years, with schemes such as bonuses becoming particularly pervasive at senior executive levels. According to Hewitt, in 1991, 51 percent of the companies participating in its salary survey offered at least one pay-for-performance plan. By 2003, the number was 77 percent.

There is also growing use of merit pay in non-corporate settings. In Albuquerque, N.M., garbage truck drivers were put on an incentive pay plan and more than $4 million was paid out to 180 unionized drivers over a six-year period. In Denver, schoolteachers work under a pay system that rewards them for the progress of their students. In Florida, school districts are required to create systems that reward teachers for student performance. In the U.S. government in 2003, the administration proposed having the Office of Personnel Management administer a $500 million human capital performance fund to help federal agencies institute pay-for-performance practices. Incentive pay is seen as a cure for every organizational performance problem. Yet even though they are spreading rapidly, four hazards endemic to performance-based pay systems often cause performance to decrease rather than increase after these systems are implemented.

Hazard 1: Incentives signal what is important, but the signals may be too blunt. Incentives and measurements provide information, not just motivation, and such effects can be pronounced. A classic demonstration was a study in the early 1970s at Emery Air Freight, a freight forwarder. Before large package companies had their own airplanes, freight forwarders picked up packages and shipped them on airlines. They got a better rate when packages were placed in larger containers that were easier to handle. Emery performance audits indicated that, although managers thought they were using larger containers 90 percent of the times it was feasible, the rate was only 45 percent. The company announced a program that provided rewards such as praise — not financial rewards — for improvement. On the first day, the proportion of packages placed in larger containers increased to 95 percent in about 70 percent of the company's offices. The speed of this massive improvement suggests that the change in performance derived not just from the rewards, but also from information that the current performance level was poor and that consolidating shipments was important to the company.

But what worked at Emery won't work elsewhere. The typical financial incentive system is too blunt and narrow for communicating what matters — few companies have a business model as simple as Emery's. People can keep only a small number of things in their heads at once, so incentive schemes with multiple criteria fail because they are too complex to send straightforward signals that guide behavior.

Consider the challenges faced by Marshall Industries, a $500 million electronics distributor before a major transformation and cultural overhaul turned it into a $2 billion powerhouse. Prior to the transformation, which entailed eliminating sales commissions and other individual bonuses, people looked to the incentive system to learn what mattered and behaved accordingly. Here are some unfortunate results listed by then-CEO Robert Rodin:

- Salespeople shipped ahead of schedule to make a number or win a prize. On the other hand, customers were insisting on delivery in a window of one day early to zero days late.
- The company held customer returns. They had to make sure that the returns coming in did not get counted against sales in the period for which they were trying to hit the numbers. So if a customer returned items, salespeople sometimes put them in the trunks of their cars.
- Bad credit accounts were opened. Any order seen was a good order as far as a salesperson paid on gross profit was concerned.

The simple signals that come from most financial incentive plans work fine in settings in which one or just a few behaviors matter. But simple signals cause damage when there are multiple and interrelated dimensions of performance.

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Hazard 2: Incentives do motivate behavior, but sometimes it's the wrong behavior. There is no question that financial incentives motivate people and, under the right conditions, increase performance. Take Safelite Glass in Columbus, Ohio, a large installer of automobile glass. Stanford economist Ed Lazear studied Safelite over a period of 19 months when, under a new CEO, the company moved from using hourly wages to paying employees based on how many windshields they installed. The company tracked output per employee with a sophisticated computer system, so Lazear obtained precise estimates of the effects of the new system: a 44 percent increase in the number of windshields installed per day per worker. Approximately half of this gain resulted from the same employees doing more work, and additional gains came from retaining and attracting better employees. After the new system was installed, the average new employee had higher productivity than plant veterans, and turnover was high among the least productive people. The average wage went up about 7 percent under the piece-rate system, much less than the increased productivity, so the cost per unit declined from $44.43 to $35.24.

Safelite was especially suitable for a variable pay system. First, the task was readily learned and involved little interdependence with other employees. Individual incentives did not undermine teamwork because there wasn't much teamwork. Second, it was easy to monitor quality, so employees could not simply work faster at the expense of doing a decent job. If a windshield broke, an installer had to reinstall the windshield on his or her own time. Third, employee goals were clear and one-dimensional — to install windshields as quickly as possible while maintaining sufficient quality.

Unfortunately, few organizations that implement incentive systems are as thoughtful about the conditions that assure effectiveness. The literature is littered with disastrous implementations. The problem is rarely that incentives don't work; instead, they work too well. People take incentives seriously and work to obtain goals that earn them financial rewards. But most organizations have complex and multidimensional objectives, so optimizing just one outcome produces other difficulties.

Consider what happened when Albuquerque, N.M., put garbage truck drivers on an incentive system: If drivers finished their routes early, they could go home and still receive pay for their full eight-hour shift. The goal was to cut down on overtime. But an audit discovered numerous problems. Fifteen of the 24 drivers who received the most incentive pay in 2002 consistently went to the landfill in trucks over the legal weight limit. The rush to finish early also led to more preventable traffic accidents and drivers who missed picking up all the garbage on routes. These fudging problems aren't confined to the public sector. An analysis of the overbooking of oil reserves by Royal Dutch Shell — which resulted in the resignation of its chairman, CFO, and head of exploration — pointed the blame at incentives. Shell compensated executives with stock options. One way of maintaining the stock price was to overstate reserves.

Be careful what you pay for, you may actually get it.

Hazard 3: Incentive systems do affect who joins the organization, but the result can backfire. There is little doubt that the financial incentive system used attracts different people to different organizations. Incentives are a big part of an organization's culture. Some organizations explicitly recruit and select for cultural fit, including the values reflected in the incentive system. Even for those organizations that are less systematic about selecting for fit, prospective employees will try to determine if they can succeed in the company. Candidates use the incentive system to diagnose the organization's culture and values. Lazear's findings that lower-performers left Safelite Glass and high performers joined the company are not anomalous — incentive systems attract different people to different companies.

The question, however, is whether you ought to want people who come to your organization for the financial incentives. Our Stanford colleague James Baron makes this point when he poses the following hypothetical question to his M.B.A. students. If you had a choice, when confronting a serious, life-threatening illness, of going to see one of two doctors, which would you choose: one who entered medicine primarily to make a lot of money or one who entered medicine because he or she was interested in the subject and wanted to serve people? Not surprisingly, students choose the second doctor. The reasons they give are consistent with the sociological concept of "professionalization." The very idea of a profession is that members put their clients' interests first regardless of the professional's own self-interest.

Hazard 4: The use of variable pay increases pay dispersion, which can damage performance. The use of individual incentives nearly always increases the dispersion in rewards. At Safelite Glass, the variation in monthly salary earned by employees was approximately 43 percent higher under the piece-rate plan than the hourly pay system. After all, variable incentives are meant to create wider gaps between what the best and worst performers do. The intention is to get away from the mayonnaise theory of salary administration in which raises are spread equally and thinly across employees and, instead, give bigger rewards to employees that contribute most to performance.

What does the evidence say about the consequences of creating more unequal financial rewards? For starters, most pay-for-performance programs fail to achieve their objectives, and dissatisfaction with such programs is high. A 2004 survey of 350 companies showed that 83 percent of organizations believe their pay-for-performance programs are only somewhat successful or not successful at accomplishing their goals.

To add insult to injury, after first forcing managers to stack their employees from best to worst — which has profound implications for employees' feelings of self-worth and entails a process often fraught with disagreements — most organizations then seriously underfund these pay programs.

There is also mixed evidence about whether people want to be differentiated from their fellow employees. Executives in some companies report that their managers resist pressures to differentiate strongly among the financial rewards given to their subordinates, and such resistance is sometimes wise. One Cisco manager complained to us that he couldn't understand why HR insisted that he give big bonuses to his top people and fire a couple of people at the bottom each year because by carefully hiring the right people and easing out the wrong people, his team was composed of all excellent people.

Controlled experiments also show that participants usually choose to avoid handing out big differences in rewards that mirror the big differences in individual performance seen in groups. People derive satisfaction from their social relationships at work. Differential rewards drive people apart, sorting them into categories such as winners, nothing special, and losers. Given that few organizations adequately fund their financial incentive programs well enough, why should organizations pay the price of damaged social relations, why should people suffer through arguments about relative merit for insignificant financial benefits, and why devote so many hours ranking and rating people?

Individual incentives and highly differentiated reward and recognition distributions make more sense when performance can be objectively assessed and when performance is mostly the result of individual effort.

Individual incentives and highly differentiated reward and recognition distributions make more sense when performance can be objectively assessed and when performance is mostly the result of individual effort rather than the product of interdependent activity. So jockeys, tree planters, and loggers perform better when their pay is contingent on performance. Similarly, evidence on everything from orange pickers to racecar drivers shows that more dispersed rewards increases the performance (particularly of the top performers) when tasks entail little or no interdependence and outcomes are easily measured.

Yet when work settings require even modest interdependence and cooperation, as most do, dispersed rewards have consistently negative consequences. A study showed that the greater the dispersion of pay in academic departments, the lower the job satisfaction, the less collaboration, and the lower the level of faculty research productivity. A study of 67 publicly traded companies found that firms with greater differences between the best- and worst-paid executives in the top management team had weaker financial performance during the next two years, especially in high-technology firms.

Guidelines for using incentives

It isn't easy to build pay systems that enhance rather than undermine performance. If you look at the best evidence, you will see that simple palliatives like pay-for-performance aren't likely to fix your performance problems and may instead drive up costs, hamper cooperation, and stifle new ideas. But you do have to pay people. What is a manager to do?

Don't try to solve every problem with financial incentives. The biggest problem with financial incentives is that they are overused. Incentive has emerged as the first answer to almost every problem. Are your schools failing? Bribe teachers with incentive pay. Is the medical system inefficient, with vast differences in treatments for the same disease in different regions? Set up a managed care system that provides financial incentives to doctors, patients, and hospitals. Too much overtime in garbage collection? Pay drivers to finish early. Stock price not high enough? Give senior management financial incentives to get the price up. And on it goes with often-disastrous results.

But incentives often aren't that effective. Beyond all the problems we have enumerated, consider one more: People adapt fairly rapidly to rewards. The result is that bonuses for performance become part of people's total compensation and come to be expected. As David Russo, formerly the head of human resources at SAS Institute once commented, "A raise is only a raise for 30 days. After that, it's just somebody's salary."

To get informational benefits of financial incentives, here's an idea: Instead of using subtle, often misunderstood, financial rewards that people try to game, talk to them about the company's priorities. That's what they do at SAS, the largest privately owned software company, with sales of more than $1.3 billion and a 98 percent customer renewal rate. And they've largely eschewed an emphasis on financial incentives.

Treat your incentive system as an unfinished prototype. If you are going to pay people for doing something, you need to think hard about what will happen if people take the incentives seriously and seek to maximize their performance only along those dimensions that you reward. Think about incentives with the mind of an engineer, analyzing everything that could possibly go wrong. However, it is impossible for anyone to anticipate every eventuality that incentives will produce, so it is crucial to consider such systems as works in progress, not as things to be put in place and left alone regardless of the outcomes.

This recommendation flies in the face of the immense difficulty that companies have in changing their pay systems and how, once implemented, incentive systems become institutionalized. But your pay system is best viewed as a prototype, something that you can and should change when better information is discovered. And managers can also practice evidence-based management if they teach their people — and yes, provide incentives — to accept and help support experimentation.

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Worry about comparisons and distributions, not just individuals or levels. Organizations are social entities and people are social creatures. People compare themselves to others and derive feelings of worth from comparisons. If a colleague makes $1,000 more, that $1,000 permits the person to buy more goods and services. But once people are beyond the point where they need every cent for necessities, small differences in pay still have huge effects on motivation, attitudes toward the company, and turnover. What may seem like trivial differences to a manager — say if a person gets $74,000 a year and a colleague gets $75,000 — may be interpreted by the lower-paid employee that the organization values that other person more. Social comparisons are part of the human condition and are magnified in individualistic and competitive cultures like we have in the United States. Many companies get into trouble by forgetting this simple fact and not considering messages that the distribution of rewards send to everyone.

As we've seen, incentive pay is a domain in which there is little or no evidence to support many deeply held beliefs. Incentive systems also consume massive resources and do much harm when mismanaged. Yet consultants and executives charge ahead with practices that reflect a reckless disregard for the evidence. But this gap between evidence and action provides opportunities for those leaders wise enough to examine their assumptions. If you want to trump the competition, find and face the hard facts about incentive systems and ignore the flawed conventional wisdom. ❖

contributors
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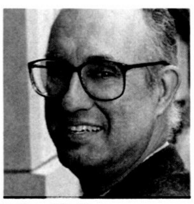
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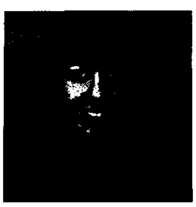
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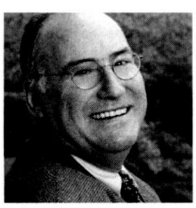
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Correction

The following contributor should have been listed in the January/February issue for his article "Practicing Candor." Our apologies for the oversight.

David Antonioni, Ph.D., is a professor of management in the executive education department of the University of Wisconsin-Madison's School of Business. He is also program director for leadership development, mid-management development, and the master's certificate in project management. Antonioni is an active management consultant, trainer, and coach in the area of leadership development. He has been an *Industrial Management* contributor since 1999.