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The Center is housed in the Learning Sciences Institute on the campus of Vanderbilt University’s Peabody College. The Center’s management under the Learning Sciences Institute, along with the National Center on School Choice, makes Vanderbilt the only higher education institution to house two federal research and development centers supported by the Institute of Education Services.

This working paper was supported by the National Center on Performance Incentives, which is funded by the United States Department of Education’s Institute of Education Sciences (R30SA06034). The views expressed in this paper do not necessarily reflect those of sponsoring agencies or individuals acknowledged.

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Pay-for-Performance: New Developments and Issues

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Abstract

Intense competitive pressure and the need for continual improvements have led to a burgeoning interest in and use of pay-for-performance programs. This paper explores the increased use of pay-for-performance, drawing examples from healthcare, education, and the government. Suggestions are made as to how best to implement pay-for-performance programs, while drawing attention to key implementation problems. The author suggests that pay-for-performance programs will be enhanced by greater research and experimentation, as well as an increased emphasis on initial design. Specifically, practitioners need to wary of common design problems, including difficulty in measuring performance, limited funds for payouts, and perceptions of unfairness.
Intense competitive pressures and the need for continual improvements have increasingly led organizations to turn to financial incentives to boost employee performance. As a result, the use of various types of pay-for-performance programs and the interest in understanding how to make these programs most effective is at a record high. Pay-for-performance programs are designed to accurately measure employee performance while aligning pay such that it rises and falls in accordance with variations in performance. More corporations have adopted pay-for-performance programs now than at any other time in history, and these plans involve a greater percentage of workers than ever before. Even more dramatic has been the growth of pay-for-performance programs in new areas of application. In particular, pay-for-performance programs have expanded into healthcare, schools, and, to some extent, government. However, the burgeoning enthusiasm for pay-for-performance has not always been paralleled by the achievement of desired results from such programs (Beer & Cannon, 2004). This has led to an increasing recognition of the need to better evaluate and understand the complex dynamics of these programs in order to make them more effective.

In this chapter, we first examine the recent developments in pay-for-performance with a focus on the explosive growth of programs in new areas of application. Next, we identify a number of challenges that organizations must meet in order to maximize the benefits of these programs. Specifically, we identify and explore the challenges associated with learning from experience and identifying the best practices, design, implementation, and adoption of a strategic perspective. We also provide suggestions for meeting these challenges successfully.
Current Trends in the Use of Pay-for-Performance

Hewitt Associates’ 2007 annual survey reveals the use of variable pay programs among companies has reached an historic high. Their survey indicates 90 percent of companies are using some kind of broad-based pay-for-performance program, a 10 percent increase from 2006 and a leap from only 51 percent of companies in 1991 (Kanter & MacKenzie, 2007). Not only does research show more companies using pay-for-performance than ever before, but also that these plans are reaching a larger proportion of the employees within the companies. Between 1976 and 1998, the proportion of jobs covered by pay-for-performance plans rose from 30 percent to 45 percent (Lemieux, MacLeod & Parent, 2006), reflecting a general trend away from providing across-the-board raises and towards performance-related bonuses. By focusing on bonuses, corporations hope to motivate workers, lower fixed costs, and reduce the sense of entitlement among the workforce (White, 2006). Three areas where pay-for-performance programs have become particularly strong include healthcare, schools and the government.

Pay-for-Performance in Healthcare--Providers

The United States spends more on health care per person than any other country, yet the quality and outcomes of care often fall short of where they should be given the expense (Jablow, 2006). The rising cost and variable quality of healthcare have been significant concerns for employees, employers, and practitioners alike (Epstein, 2006). One of the leading causes of personal bankruptcy has been medical bills associated with serious illnesses. Surprisingly, an estimated forty percent of these bankrupt families carried some form of health insurance. Annual increases in healthcare costs have outpaced inflation. In 2002, employers paid an estimated 86 percent of the $1.6 trillion cost of medical insurance (Levit, Smith, et al., 2004). The extensive cost of healthcare and the desire for better quality has resulted in an increased use of
Pay-for-performance in the healthcare industry. Recent research estimates that adoption of pay-for-performance programs in the healthcare sector has almost quadrupled over the last five years (Robezieks, 2007), with over half of health maintenance organizations (HMOs) adopting such programs (Rosenthal, Landon, et.al, 2006).

**Pay-for-Performance for Healthcare Consumers**

In contrast to offering financial incentives to influence the behavior of healthcare providers, some organizations are now offering financial incentives directly to employees for managing their own health. To both slow the growth in healthcare costs and to encourage good health among employees, some organizations provide incentives to employees who engage in health-conscious practices. For example, a number of companies contribute to the health savings accounts of employees who agree to engage in health-promoting activities. Healthways (2006) has made a business of helping organizations manage healthcare costs by coaching individual employees with health risks and providing them with financial incentives to mitigate their risks. Employees receive a discount in their health insurance premiums through their companies for participating independently in the Healthways program. Healthways monitors and regularly feeds back to employees their scores on eleven lifestyle biomarkers such as nicotine levels, blood pressure, body fat and cholesterol, each of which is associated with chronic disease and financial strain on the healthcare system. Employees who keep these markers within desired ranges are eligible for financial incentives such as reductions in healthcare premiums or contributions to health savings accounts.

**Pay-for-Performance in Schools**

Compared with other industrialized countries, American students score poorly on reading and towards the bottom of standardized tests in mathematics and science. Ironically, a
2005 Organization for Economic Cooperation and Development (OECD) study ranks the United States as tied for first place among industrialized countries in spending per pupil at approximately $11,000 (OECD, 2005). Between 1960 and 1995, per pupil spending in the United States increased 212 percent in real (inflation adjusted) dollars (Bennett, 1999). This dilemma may provide fertile ground for pay-for-performance programs in the field of education.

Presently, teacher pay in the United States is determined by years experience and degrees held, as opposed to any parameters of quality teaching. Under current systems, the worst teacher in a system can be paid exactly the same as the best teacher. Consequently, many have looked to financial incentives as a way to encourage better teaching and improved educational results (Podgursky & Springer, 2007).

A number of states are placing a significant investment into experimenting with pay-for-performance for teachers and schools. Florida, Minnesota, and Texas have taken a leadership role with combined annual funding of $550 million to provide performance incentives for high-quality educators (Jacob & Springer, 2007). The federal government has also made $99 million available to states to fund pay-for-performance programs to enhance education. Chicago, for example was the recipient of a $28 million federal grant to improve its at-risk schools. Chicago schools may receive $500,000 to $750,000 per year to provide annual performance bonuses to teachers in amounts ranging from $1,000 to $8,000 (Dell’Angela, 2007). Other cities involved in developing and implementing new pay-for-performance programs in schools include Denver, Little Rock, and Nashville.

Pay-for-Performance in Government

While the work of state, local and federal governments’ employees may not yet have received the same attention as healthcare and schools, there appears to be a growing interest in
experimenting with such pay-for-performance programs. The General Accountability Office (GAO), for example, moved to a performance-based pay system in 2006. Other federal departments, including the Federal Aviation Administration, the Veterans Health Administration, and the U.S. Department of Labor’s Employment and Training Administration, have also adopted an array of variable pay schemes (Trahant & Yearout, 2006). Legislation has even been proposed to overhaul current pay programs, designed over a half-century ago, for more merit-based plans (Trahant & Yearout, 2006).

**Realizing the Potential of Pay-for-Performance**

While there is record interest in pay-for-performance in business, healthcare, education and the public sector, it is important to note that although these programs are generally associated with positive outcomes, results have been mixed, and the programs often fall short of achieving their potential (Cascio, 2006). In some cases, new programs have even been known to do more harm than good (Bebchuk & Fried, 2004; Pfeffer, 1998). For example, when Hewlett-Packard executives decided to discontinue an experiment with pay-for-performance, the employees threw a party to celebrate (Beer & Cannon, 2004). The program had been seen as a nuisance, and maintaining the program took time away from tasks that employees perceived as more valuable. When employees conceive of pay-for-performance programs (like other new initiatives), they are vulnerable to unreasonable optimism and thus may overestimate the likely benefits and underestimate the efforts required to build and maintain an effective program.

Despite the rapid adoption of pay-for-performance programs in healthcare, research reveals some cause for concern (Romano, 2007). A 2006 report from Price Waterhouse Coopers’ Health Research Institute was fairly critical of current pay-for-performance programs for healthcare practitioners, finding that though many had done a good job of involving physicians,
they “would barely receive a passing grade” on many measures (p. 6). Another study of the effectiveness of pay-for-performance programs in healthcare found that four out of the 17 programs studied produced unintended and undesirable consequences (Petersen, Woodard, et al., 2006). Some critics have charged that these programs can encourage physicians to avoid minority patients and patients with complex medical needs (Fisher, 2006). Pay-for-performance programs in healthcare have also been critiqued for being burdensome to manage and producing only limited results, leading many to question their value (Chien & Dudley, 2007).

Though one could argue that healthcare institutions are still scaling the learning curve and these difficulties will be overcome as organizations learn from experience, pay-for-performance programs in industry have also had difficulty producing desired results and may even deteriorate over time. Gerhart and Rynes (2000) conclude variable pay plans enhance performance only 2/3 of the time. This figure suggests that in approximately 1/3 of cases, the time and effort put into developing such plans either does not pay off or perhaps may even be damaging in some cases. Thus, there appears to be room for improvement.

Consider the recent critiques being made of top executive compensation. Although many have argued that high pay for executives is justifiable as long as it is based on performance, recent research has questioned the relationship between executive pay and performance. Law professors Lucian A. Bebchuk and Jesse M. Fried’s book, Pay Without Performance: The Unfulfilled Promise of Executive Compensation, has received a great deal of attention. In it, the authors argue that executive pay is often not aligned with performance nor with shareholder interests. In fact, they assert that executive power can be used to produce weak or even perverse incentives (Bebchuk & Fried, 2004). Dramatic examples of misalignment, such as Bob Nardelli at Home Depot, are often cited in the popular press. Nardelli walked away with approximately
$250 million despite the fact that the company’s stock dropped slightly during his tenure and he managed to alienate a number of organizational stakeholders and embarrass the company through his mishandling of their annual shareholders meeting (Kirklans & Burke, 2006).

The history of pay-for-performance is characterized by both dramatic successes and resounding failures (Bebchuk & Fried, 2004; Pfeffer, 1998). The ability of our society to make the most constructive use of financial incentives depends upon our ability to understand and meet a distinct set of challenges that create vulnerabilities for pay-for-performance programs. Next, we identify and explore these challenges and what can be done to overcome them.

The Challenge of Learning from Experience and Identifying Best Practices

Despite decades of interest in study on financial incentives, we lack specific, definitive conclusions about the conditions under which different kinds of financial incentives are or will be most effective and what their impact will be. Reports on the efficacy of financial incentives are often anecdotal and lacking in scientific rigor. There is insufficient longitudinal research, and not enough rigorously designed experiments (Dudley, 2005). Current research has not done an adequate job of assessing the impact of different types of pay-for-performance programs that are used in combination with each other (Gerhart & Rynes, 2003). Research has also done an inadequate job of assessing the costs versus the benefits of pay-for-performance programs and how they compare with other types of interventions that are designed to enhance performance, such as coaching, mentoring, and other types of professional development (Beer & Cannon, 2004).

As the popularity of pay-for-performance grows, the importance of learning from experience and identifying best practices increases in importance. With more sophisticated methodological and analytic tools available than ever before, our ability to answer questions
about the effectiveness of various types of pay-for-performance arrangements will be determined by whether we invest the effort to gather data in ways that enable us to answer those questions.

The National Center on Performance Incentives (NCPI) provides an excellent example of how this can be done. Supported through a $10 million grant from the U.S. Department of Education’s Institute of Education Sciences awarded to Vanderbilt University professors James W. Guthrie and Matthew G. Springer, NCPI is dedicated to the scientific study of how financial incentives for teachers, administrators, and schools affect the quality of teaching and learning. The motivation for the center grew out of the recognition that policy makers and educational leaders have little reliable information on the impact of financial incentives in education and how they should or should not be used. Without such information, they are stuck being guided more by intuition than by science as they work to develop constructive policies and practices.

One of NCPI’s first initiatives is conducting a set of methodologically sophisticated experiments researching the impact of pay-for-performance on teaching. For example, they are assessing the impact of offering math teachers bonuses of $5,000 to $15,000 based upon student gains on state exams. This and other studies supported by the center probe deeply into the impact of financial incentives, not only on the individual recipient, but also on colleagues and the institution as a whole. They measure both intended and unintended consequences and the comparative efficacy of financial incentives versus other interventions such as professional development opportunities and changes in class size. The Center has also been involved in assessing the effectiveness of certain aspects of the pay-for-performance programs in Texas and Florida. Such evaluations enable states and the Center to learn from their experience, address previously unanswered questions, and identify best practices.
Though NCPI is only one year into its research, initial efforts are showing potentially impressive results. For example, one serious concern and significant unanswered question about using performance incentives in schools is whether they might encourage unconstructive competitiveness and lack of teamwork among teachers. Although there is more data to be gathered, the initial evaluation of the Texas pay-for-performance initiatives appears to suggest that these concerns are not materializing (Springer, Podgursky, et.al, 2007). In fact, the limited data so far suggest that organizational dynamics are fairly positive, teachers’ attitudes toward the program are becoming more positive, and the incentives appear to have a constructive impact on teacher and student performance.

Meeting the challenge of learning from experience and identifying best practices means understanding and taking advantage of what we currently know from research on pay-for-performance practices. It also means tracking the impact of pay-for-performance programs as they are implemented and sustained in order to understand their impact and learn what is or is not working well so that the organization can make adjustments as needed. This next section will address the challenges of designing effective pay-for-performance programs.

**The Challenge of Design**

The challenges associated with effectively designing pay-for-performance programs can be enormous. Plans with flawed designs fail to capture the potential benefits of pay-for-performance and may cause damage if they inadvertently reward counterproductive behavior or produce divisive relationships when cooperation is necessary. Practitioners tend to underestimate the challenges associated with designing effective plans and the intensity of employee reaction to the need to periodically adjust plans. Common design challenges include: difficulties in measuring performance, setting payouts at the correct level, managing factors
outside the control of individuals being paid for performance, discomfort that managers and peers have with rating employees differentially, limited funding for payouts, resistance to adjusting payout levels as technology or market conditions change, and avoiding perceptions of unfairness (Rosenthal & Dudley, 2007). As one example of the challenge of setting payouts at the correct level, British policy makers thought they had set physician pay-for-performance standards at the right level. However, they underestimated how quickly physicians would reach certain levels of performance, and they ended up owing physicians approximately $700 million more than they had budgeted for the program (Galvin, 2006).

Managers also need to balance how simple versus complex to make the programs. Overly simple programs appear to either lack important nuances of performance or encourage employees to focus on just one measure at the expense of others that are also important to organizational performance. By contrast, if plans are too complex, they risk becoming a source of confusion and frustration rather than a source of motivation.

Ineffective design of executive pay-for-performance is at the heart of much of the recent criticism. O’Bryne and Young (2006) concluded from their study of pay packages from 702 publicly traded companies that there was a clear lack of sensitivity between the measures determining executive pay and those contributing to shareholder wealth. They also note that alternative designs which would correct this lack of sensitivity are available.

Pay at the highest managerial levels has its own unique complications that may be difficult to resolve. Fortunately, many of the other potential design problems described above can be managed if designers are realistic and thoughtful about the challenges associated with effective design, involve a variety of employees in the design process, and make time to pilot test and make adjustments prior to full-scale implementation.
The Challenge of Implementation

Design is only part of the problem because the efficacy of a program also depends on the quality of implementation, and managers often underestimate the challenges associated with execution. One continuing challenge has to do with communication about how the program works and what is required to achieve rewards. One survey found that only 29 percent of respondents reported having clarity about the connection between their performance and rewards (Stiffler, 2006). Similarly, NCPI’s examination of pay-for-performance initiatives in Florida schools found less than half of the teachers had a clear understanding of what they would need to do to achieve rewards (Jacob & Springer, 2007). In reflecting upon her experience with pay-for-performance, one human resource executive shared her perception that employees in various companies lack a clear understanding of how their pay-for-performance compensation was determined, leading to suspicion and cynicism rather than motivation. When KeySpan Corporation (a New York gas-and-electricity company with about 9,700 employees) first initiated a pay-for-performance program, workers were “demoralized” by it (White, 2006). KeySpan had not taken the time to communicate and help employees understand the reasons for it and how it was designed to work. Subsequently, KeySpan Corporation managers made the effort to explain and were able to change perceptions of the program.

Another problem that often receives insufficient attention is the match between current management skills and the skills necessary to effectively implement a pay-for-performance program (Helgason & Klareskov, 2006). Programs often require that managers rate employees and deliver critical feedback. Often, employees are also asked to rate each other and sometimes to provide feedback. Managers and employees are often uncomfortable with the interpersonal tensions associated with the roles of evaluator and feedback giver and lack the skills necessary to
carry out these roles effectively (Cannon & Witherspoon, 2005). Organizations often fail to assess what new skills will be needed and to provide appropriate training prior to implementing pay-for-performance programs. This was another reason that KeySpan employees were demoralized by their new pay-for-performance program. Supervisors were suddenly required to give critical feedback and manage performance in ways previously not expected, and many were unprepared to do so. Thus, there was a rough implementation and KeySpan had to take corrective action after the fact (White, 2006).

**The Challenge of Adopting a Strategic Perspective**

The drive to use pay-for-performance comes from a simple desire to motivate more constructive behavior. However, compensation is a complex and multi-faceted phenomenon that can impact organizational effectiveness in a variety of ways. Leaders need to be clear on the organization’s purpose, strategy, and core competencies and consider how these might be affected by different types of compensation programs. Pay-for-performance programs should be designed to be consistent with and supportive of the organization’s purpose, strategy, and core competencies. What might be good for one individual, group, or department might not be fitting for the organization as a whole.

Managers should consider the fit of pay-for-performance initiatives with their organization’s culture and preferred management tools. Baron (2004) observed that organizations tend to either cluster around “harder” management tools (i.e. “incentive systems, standardized processes, and use of metrics”) or “softer” management tools (i.e. “enculturation, personal networks, and corporate strategy statements”). Introducing “harder” management tools into a culture that is dominated by the use of “softer” tools may prove to be a poor fit and produce undesirable results (Barron, 2004).
In addition to considering the impact of pay-for-performance on motivation, managers are also advised to consider the impact on selection effects. Compensation systems influence not only motivation, but also the types of prospective employees who are attracted to an organization and the types of employees who are likely to stay versus leave employment in a particular organization. This should also be a factor in determining the appropriate compensation system for an organization.

**Rocky Flats Illustration**

When the challenges listed above are managed effectively, organizations can use financial incentives to achieve incredible feats. Consider the impressive results achieved at the Rocky Flats (one of the nation’s toughest nuclear cleanup sites). Initial estimates were that it would take 70 years and $36 billion to clean the site (McGregor, 2004). However, Kaiser-Hill set a goal for cleaning of roughly 10 years and for less than $7 billion. In addition to the aggressive time frame, the leaders faced an additional challenge: the workers would be working themselves out of their jobs, so they would have a natural incentive to work slowly in order to prolong their employment. Thus, leaders at Kaiser-Hill had to determine how to motivate workers to accelerate the pace at which they would work themselves out of their jobs. Despite the aggressive goal and significant labor obstacles, Kaiser-Hill completed the project within the self-set deadline and at a cost of just over $6 billion (Cameron & Lavine, 2006).

How did they achieve this feat? Leaders at Kaiser-Hill adopted a visionary, strategic perspective that relied heavily on financial incentives while also integrated a number of other changes that were all designed to work in concert with each other. This included interventions designed to change the culture and build a supportive, collaborative working environment with the appropriate balance of structure and freedom. Thus, they encouraged initiative and
innovation. Leaders also applied a number of organizational best practices and were continually adaptive to challenges that unfolded as they journeyed through their task (see Cameron & Lavine, 2006 for a detailed account). The incentives themselves were thoughtfully designed to reward the key strategic outcomes necessary for success—speed, quality, safety, and innovation. In total, $90 million was offered in bonuses. And while this may see like an extremely large bonus pool, one senior executive commented that the incentives more than paid for themselves through its immense impact on worker productivity (Cameron & Lavine, 2006). According to this executive, Kaiser-Hill’s eventual profit was far higher than it would have been without the incentives, despite the considerable expense.

In conclusion, the use of pay-for-performance programs continues to grow both within the traditional arena of the corporation as well as in new areas of application such as healthcare, schools, and governmental institutions. Pay-for-performance programs will be most effective when they successfully address the challenges associated with learning from experience and identifying the best practices, design, implementation, and adopting a strategic perspective. Kaiser-Hill provides an example of the results that are possible when an organization effectively manages each of these challenges.
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