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PROMISE AND PERIL IN IMPLEMENTING PAY-FOR-PERFORMANCE

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Why would managers abandon pay-for-performance plans they initiated with great hopes? Why would employees celebrate this decision? This article explores why managers made their decisions in 12 of 13 pay-for-performance "experiments" at Hewlett-Packard in the mid-1990s. We find that managers thought the costs of these programs to be higher than the benefits. Alternative managerial practices such as effective leadership, clear objectives, coaching, or training were thought a better investment. Despite the undisputed instrumentality of pay-for-performance to motivate, little attention has been given to whether the benefits outweigh the costs or the "fit" of these programs with high-commitment cultures like Hewlett-Packard was at the time. © *2004 Wiley Periodicals, Inc.*

Introduction

Immense pressure for higher performance has led corporations to search continually for managerial practices that will enhance competitiveness. An increasingly large number of corporations have explored how rewards, particularly money, could be linked to desired behavior and/or performance outcomes to improve effectiveness (Gerhart & Rynes, 2003; Pfeffer, 1998; Rigby, 2001). This has led to widespread and growing development of pay-for-performance plans (Schuster & Zingheim, 1992). For example, a survey of 1,681 companies indicated that 61% had implemented variable compensation systems (Hein, 1996).

The powerful role that financial incentives can play in influencing behavior has been widely acknowledged since ancient times (Peach & Wren, 1992). Early motivation theories such as expectancy theory (Vroom, 1964) have demonstrated intuitive appeal, and its basic components have received empirical support (Van Eerde & Thierry, 1996). In addition, decades of empirical research in a variety of areas indicate that financial incentives are a potent motivator. An examination of studies of pay-for-performance programs suggests that performance improves in approximately two out of three programs (Heneman, Ledford, & Gresham, 2000). Gibson (1995) reported on a study by Carla O'Dell and Jerry McAdams (sponsored by World at Work and conducted by the Consortium for Alternative Reward Strategies), which suggested that the average net return

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on money invested in pay-for-performance programs was an impressive 134%. Surveys of 500 companies reported in the *Economist* ("Business: Pay Purview," 1998) indicated that those actively using pay-for-performance programs showed twice the shareholder returns as those who were not actively using these programs.

However, despite the breadth and sophistication of topics being examined in research related to pay-for-performance, the crucially important issue of managers' approach to implementation has not received much attention.

Proponents of pay-for-performance assert that traditional compensation systems can be detrimental to efforts to make an organization less hierarchical and more competitive, focused, adaptable, and collaborative (Baker, 1993). For example, traditional pay systems may experience the following problems: pay becomes an entitlement, benefits are given for tenure, base pay is a function of levels and not performance, merit increases do not differentiate performance sufficiently, and even executive bonuses become an entitlement.

Recent research has examined a variety of ways in which pay-for-performance systems impact individuals, groups, and organizations (Stajkovic & Luthans, 2001). There has been a growing interest in group pay-for-performance systems and the conditions under which they are most effective (Gomez-Mejia, Welbourne, & Wiseman, 2000; Hollensbe & Guthrie, 2000). Scholars are also looking not just at motivation, but also at the broader impact of pay-for-performance systems, such as how they affect organizational learning (Arthur & Aiman-Smith, 2001), the type of employees who self-select into and out of the organization (Banker, Lee, Potter, & Srinivasan, 2001), and the managerial turnover within the organization (Bloom & Michel, 2002). In addition, gender differences and their impact on pay satisfaction (Graham & Welbourne, 1999) have been identified, as have the consequences associated with satisfaction with pay systems (Miceli & Mulvey, 2000). The impact of pay dispersion has also been a topic of growing interest (Bloom, 1999; Bloom & Michel, 2002; Shaw, Gupta & Delery, 2002). Furthermore, some attention has been given to particular professions, such as accounting, and the distinctive impact that pay-for-performance systems can have on different professions (Bonner & Sprinkle, 2002).

However, despite the breadth and sophistication of topics being examined in research related to pay-for-performance, the crucially important issue of managers' approach to implementation has not received much attention. Pfeffer (1998) argues that there are significant potential problems with implementing pay-for-performance programs. For example, pay-for-performance systems can have a destructive effect on intrinsic motivation, self-esteem, teamwork, and creativity (Amabile, 1988; Beer & Katz, 2003; Deci & Ryan, 1985; Kohn, 1993; Meyer, 1975; Shaw et al., 2002). Furthermore, other scholars have argued that the real problem is that incentives work too well. Specifically, they motivate employees to focus excessively on doing what they need to do to gain rewards, sometimes at the expense of doing other things that would help the organization.

Pay-for-performance advocates respond that intelligent design of programs is essential to avoid these pitfalls. However, intelligent design alone is insufficient to assure the success of such programs. As Pfeffer and Sutton (2001) note, persistent gaps exist between what managers know (the concepts they can articulate) and what they can actually do. Thus, intelligent design must accompany effective implementation over time in order for pay systems to run effectively. In particular, two significant barriers must be overcome: barriers associated with linking performance to effort, and with linking pay to performance. In addition, these must be overcome in a way that is perceived as fair and equitable by management and employees alike.

Potential barriers to linking performance to effort include difficulties in measuring performance; factors outside the control of individuals and groups being paid for that performance; and that managers and peers are uncomfortable with rating employees differently. Potential barriers to linking pay to performance include the following: employees can come to rely on the additional compensation; employees are biased toward overestimating their own contribution; corporate budgets for bonuses often limit payout; and managers can lose commitment to the pay system if it pays out more than anticipated due to problems in payout standards and if

there are changes in performance standards due to changes in technology and organizational arrangements and unanticipated learning curves. It is changing circumstances that make it difficult for managers to sustain links between pay and performance in a way that will avoid perceptions of unfairness and inequity. Such perceptions can undermine the perceived link between pay and performance so important to sustain its motivational power.

Despite the importance of understanding implementation in order to overcome these and other barriers, little research has studied implementation (Fay, Thompson, & Knight, 2001). In a broad review of the theory and evidence on compensation practices, Gerhart and Rynes (2003) detected a number of significant disparities between what is important to know about compensation and what is being researched. In addition to the lack of attention to implementation, the study of managerial decision making related to pay systems has also been neglected. More specifically, Gerhart and Rynes (2003) note that pay practices vary widely and are not simply dictated by market forces and the environment. Instead, managers play an active role in determining whether to initiate, retain, or modify a system of pay-for-performance and what type of system to use. However, very little academic research has investigated how managers make these decisions.

The focus of this article is on the experience of managers in one company in implementing pay-for-performance and how they made sense of and made decisions about their pay-for-performance initiatives. In addition, one other neglected area of research we will deal with in this article has to do with how an organization's particular or distinctive culture might affect its management's ability to effectively implement a particular pay-for-performance system. In other words, rather than assuming that there are universal best practices for pay-for-performance, it may be that what is effective for a particular organization depends on some unique aspects of its culture, and one must, therefore, be cautious in generalizing from one organization to another, even within the same industry (Gerhart & Rynes, 2003). More specifically, Gerhart (2001, p. 235) has argued that a pay-for-performance program might be more easily implemented in an organization that has distinctive characteristics, such as the following: "(1) the culture discourages opportunism, (2) top management reinforces this culture by its example, and (3) employees have long-term careers or professions in which their reputation is a valuable commodity."

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Our goal in this article is to provide case data and share insights that inform these neglected research areas. Specifically, we examine managerial decision making and sense making in the area of designing and implementing five pay-for-performance systems in a high-commitment culture—Hewlett-Packard (HP). This study does not attempt to assess the efficacy of pay-for-performance programs, though the initial experience with pay-for-performance indicated it had a positive impact on motivation and performance.

A case-writing visit to Hewlett-Packard in the mid-1990s presented an unusual opportunity to study the managerial experience of implementing pay-for-performance programs. In the early 1990s, local Hewlett-Packard managers at thirteen different sites established pay-for-performance initiatives to improve their businesses. Hewlett-Packard provided us with the opportunity to review their documents and to interview the managers who sponsored the pay programs. We report here on five of the thirteen pay-for-performance initiatives that we researched. The fact that the events reported here occurred in the early 1990s does not take away from the findings and insights since they represent dilemmas managers would face today in implementing pay-for-performance in a high-commitment culture such as the one HP had during the period in which the pay initiatives took place (it is widely acknowledged that since 1999 HP has moved away from its traditional high-commitment culture).

This novel research opportunity offered several methodological advantages compared to many previous studies. Specifically, many other studies relied on only one or a very limited number of cases, which makes generalizations difficult. Previous studies often covered

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such short time frames that the long-term efficacy of the programs was difficult to assess (Luthans & Stajkovic, 1999). Interviewing local managers, as we did, is also not a typical characteristic of previous studies. Yet, interviews were essential for us to accomplish our goal of better understanding how the managers were making decisions about the introduction of a pay-for-performance system and later how they made sense of various performance and human outcomes and drew conclusions with regard to the success or failure of their pay design.

In order to give fair treatment to the topic of implementation of pay-for-performance, knowledge about the context in which the pay system is being implemented is necessary. That context, the company culture, the measurement and performance management systems in place—the motivation of managers to implement pay-for-performance and their effectiveness as managers—can have an important effect on the success or failure of the pay-for-performance system. We had a lot of information on this context from two cases on HP that had been written by one of the authors in 1982 and again in 1995 (Beer & Rogers, 1995; Beer & von Werssowetz, 1982). Indeed, the Hewlett-Packard cases on which we report here had in place many of the conditions that should lead to success. First, they were the initiatives of local management; thus, local management had a very high level of commitment to their successful implementation. In addition, these initiatives had the approval and full support of higher management. Resources such as consultants were also made available to support these programs. Furthermore, with a reputation as a high-commitment company (Beer & Rogers, 1995; Collins & Porras, 1994) in which trust between management and employees is strong and in which communication is good, we would expect HP to have an advantage in implementing these programs. In fact, Gerhart (2001) specifically hypothesized that pay-for-performance systems introduced in organizations with cultural attributes such as those at HP would experience fewer problems than those introduced in other organizations. Similarly, lack of trust (Pearce, Stevenson & Perry, 1985) and poor communication (Hammer, 1975) has been cited as the cause for the failure of other programs. Thus, this investigation enables a preliminary test of the proposition that high-commitment cultures make it easier to implement pay-for-performance systems.

Furthermore, local managers had significant autonomy and the freedom to continue or discontinue their pay-for-performance programs, depending on how they assessed the costs and benefits. They were not constrained or pressured by outside forces to do either. Therefore, we were able to study not only the challenges these managers encountered in implementing the programs but also the decision-making processes that they used in responding to these challenges over time, as well as their attribution of benefits and costs that guided these decisions. These conditions provided an unusual opportunity to examine the natural evolution of the decision-making and sense-making processes in which these managers engaged as they initiated and then implemented these pay programs in a high-commitment company.

Along with these advantages, we should also acknowledge that our data set has some significant limitations. The fact that these initiatives emerged naturally meant that this research is not a randomized experimental design with control groups, despite the fact that Hewlett-Packard's corporate human resource executives thought of them as "experiments." The "experiments" emerged spontaneously as a result of what was going on with local management. We therefore refer to them in this article as "programs" or "initiatives" rather than "experiments." Given that these initiatives were conceived and implemented by practicing managers, they also lacked some of the measures of satisfaction and other variables that could have been of interest to researchers (Sturman & Short, 2000).

Setting and Method

Beginning in the early 1990s, HP authorized a diverse set of 13 different alternative pay programs (Table I). Most of these in-

volved team- and skill-based pay systems; some involved gain sharing and some cash incentives or bonuses. Half the sites were outside the United States and were spread across five countries. The workers included were mostly involved in various kinds of blue-collar work at the production level, with the exception of one group of engineers. All programs were initiated at the request of local divisional management. In each instance, local management felt it needed to use pay-for-performance as an additional inducement either to achieve particular goals, to reinforce learning and/or team behavior in semi-autonomous teams, and/or to compensate for an increase in span of control due to de-layering.

The Company

These initiatives must be understood in the context of HP's corporate human resource policies and culture at the time. Initiated by its founders, numerous highly consistent and mutually reinforcing policies and practices have developed over HP's 50-year history (Beer & Rogers, 1995; Beer & von Werssowetz, 1982). These include the following: decentralized business units; strong commitment to management by objectives; participative management and delegation of responsibility to the lowest level; extensive communication, such as open-door policies and "management by walking around"; recruitment and hiring practices that screen for interpersonal skills, not just technical competencies; and a career system based on internal promotion and cross-functional and divisional movement.

HP's pay systems included the following at the time of these initiatives: merit pay based on ratings by supervisor (for exempt and nonexempt employees) and performance ranking of employees (exempt employees); a profit-sharing system for all employees that pays out the same percent of salary, regardless of level; no executive bonus system, though total executive compensation was comparable with industry standards; stock options for employees at all levels according to contribution; and incentives used in the sales organization (team and individual).

Research Method

HP's corporate human resource department tracked these programs and learned that all were discontinued within approximately three years. An internal study was commissioned to understand the reasons why each was discontinued so that implications for the future could be drawn. Their methods were interviews, examination of production data, and employee surveys. We reviewed HP documents. We also conducted interviews at five U.S. sites to gather additional data. The interview protocol involved an introduction in which we explained that we were doing follow-up research on their pay-for-performance initiatives, and we assured them that what they said would be confidential. We then asked them to describe the pay-for-performance program they had introduced. Then we probed further to learn the managers' perspectives on these programs: what they had hoped to achieve, the challenges they faced in implementing the pay program, their response to the challenges, their own calculus of the cost and benefits of using pay programs as an active management tool, and the reasoning behind their eventual decision as to whether to continue the program. These interviews provided us with an opportunity to deepen our understanding and to validate HP's own conclusions.

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Given space limitations, we provide brief descriptions and findings from the five sites in which we conducted interviews. The results at these sites are illustrative of results for HP's larger data set of 13 initiatives, but we confine our later discussion to the findings from these five pay initiatives.

Five Case Examples

Case 1: San Diego Site

Description. In an effort to support a transition to self-managed teams and encourage a focus on team rather than individual performance, the San Diego site initiated team pay-for-performance (TPP). Previously, responsibility for implementing HP's

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merit-based pay philosophy and for managing the development of employees was given to individual managers who would divide workgroup objectives into individual assignments and then monitor individual contributions. Under the new self-managing-teams structure, a layer of supervision had been removed, and managers had wider spans of control and less manager\subordinate interaction. Teams themselves divided up the work and were managed to a set of business objectives. Consequently, managers were not as well positioned to make merit-increase decisions or to manage the development of individual employees. Therefore, management put together a TPP plan to focus employees on team performance and to encourage them to manage their own development and acquire the broader set of skills that would be required by workteam responsibilities.

Team pay-for-performance was established to motivate achievement of specific workteam goals, such as team-process improvement, production, and quality goals. The team-based pay for achieving certain goals was added incrementally to base pay. There was no "takeaway" for failing to meet team goals. Three levels of team performance were possible within the pay structure. Ninety percent of the teams were expected to achieve Level I performance and thus receive a payout. Fifty percent were expected to reach Level II performance, and 10–15% Level III performance, the highest level. For achieving Level III performance, for example, members of a particular work team would receive between $150–$200 additional pay at the end of the following month. Teams also had production coaches to assist them.

San Diego's new pay package also included a skill-based pay system called pay-for-contribution (PFC). Instead of the typical merit system, employees would advance from a starting rate by demonstrating competence to perform additional sets of tasks within the team. The system was intended to motivate employees to learn new skills on an ongoing basis. Possession of a new skills set was measured and certified by "subject matter experts." The rationale was to create a continuously learning workforce capable of adapting to new situations.

Results. During the first six months, team members liked the TPP program and significantly outperformed the performance goals set at the beginning of the experiment, with a majority of the teams reaching Level II and III. However, because the TPP program paid out more than expected, management concluded that they had set the performance standards too low and decided to adjust them. This effort was met with great resistance from team members, who complained bitterly. They had built a lifestyle around the higher monthly pay they had come to expect, and now saw the program as taking something away. Managers also concluded that workers' attention was now focused on their pay instead of their work.

Another drawback of pay-for-performance that managers saw had to do with factors outside of the teams' control that affected team performance. For example, delays in shipment of parts or a mechanical breakdown in the assembly line prevented teams from building the units they needed to meet their goals for that month. This caused serious dissatisfaction with the pay system. Team members felt as though they had very little control over their performance.

Furthermore, high-performing teams often refused to admit anyone to their team who they thought might be below their level of competence. This resulted in self-reinforcing positive and negative spirals in team performance. Some teams had many top performers, while others stagnated with low performers who needed further training. Furthermore, barriers to employee mobility between teams reduced the capacity of the organization to transfer learning from one team to another, a major barrier in a dynamic environment.

Regarding the skill-based PFC pay system, management reported that the majority of employees disliked this system. They did not like the additional pressure of taking tests to increase their pay, some in how to read and write and do math. Because they were afraid it wouldn't leave them enough time to study and test for new work skills, employees would

often refuse new job assignments. Moreover, many of the newly acquired skills were not used on the job. Furthermore, at the beginning of the program, employees had to demonstrate proficiency on skills required in their current job to maintain their skill classification. If they failed, the system called for them to drop to a lower classification and pay level. Managers found it difficult to do this, however. These constituted takeaways from expected levels of pay that had been established in the minds of employees.

Local site managers concluded that a team structure together with training would have provided the same benefits as the team structure combined with team- and skill-based pay, but without the additional effort, money, and communications demanded by the team-based pay system.

Managers also concluded that the pay system did not motivate employees to work harder or learn, though it did stimulate them to better understand relevant performance metrics, the manufacturing system as a whole, and its broader goals. This improved understanding may have been used by employees to define their own interests rather than the broader interests of the organization as a whole when TPP stopped paying off.

One of the largest of the San Diego site divisions dropped the pay program after about a year. Managers were tired of having to constantly reengineer the pay system to overcome its numerous problems. Surveys indicated that employees preferred to switch back to HP's standard pay structure. When management of that division announced they would drop the pay program, employees threw a party to show their gratitude.

The rest of the site eventually dropped the program as well, due to a major manufacturing reorganization. The divisions found that team-based pay made it extremely difficult to maintain consistency in the pay system across the whole site.

Case 2: Boise Printer Formatter Shop

Description. The Boise situation was similar to San Diego; they had introduced self-managed teams, and management wanted to implement a complementary team and individual performance incentive plan. The traditional HP merit pay system was replaced with a skill-based pay system. Within a skill level, pay could be increased variably depending on individual and team performance. If a team was among the highest-performing teams for a particular month, it was awarded a bonus. Those who were evaluated as performing above average were allowed to pursue development and advancement to the next skill level with resultant higher pay. Because these teams were intended to be self-managing, the evaluations were to come from peers and management. Those with performance problems could not pursue new training opportunities until their performance was corrected. This system was designed to provide additional pay, not to take any pay away when team performance lagged.

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Results. The results were very much like those at San Diego. It was difficult to establish realistic performance goals. After some months, teams received much more contingent pay than had been expected. Management at this site also found it very difficult to reset goals once they were established. Here, too, teams became very selective about who they wanted on their team. External factors outside of the team's control also affected goal accomplishment and irritated many of the employees.

Peer evaluation of individual performance, also part of the system, was difficult to implement. Team members had a very difficult time judging the work of their respective team members. Tempers flared after employees received negative feedback. Consistent with attribution theory, negative evaluations were attributed to a bad evaluation system and teammates that were not objective. This, of course, led to further problems within teams.

Like San Diego, the pay program was dropped. Long-term results initially hoped for never materialized. Management came to believe that employees were too focused on pay and insufficiently focused on the task.

Case 3: PRCO Loveland

Description. PRCO is a printed circuit fabrication shop that was slow in reaching its targets.

During one quarter, the fabrication shop was behind schedule and wanted to reach at least 95% of its target. With a month left, management offered a $250 cash bonus to all of its employees if they reached the goal.

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Results. The shop didn't reach its goal and the bonus was never paid out. Managers reported that employees were not angry when the bonus did not materialize. On the positive side, managers reported that the bonus did highlight their serious intention to reach the production target. On the negative side, some employees felt insulted by the fact that the company tried to "bribe" them to reach a goal that they were already motivated to reach. In the final analysis, managers felt that a more effective approach would have been to work on coaching employees in how to make manufacturing process improvements.

Case 4: Colorado Memory Systems

Description. Colorado Memory Systems (CMS), which was acquired by HP, had not previously had a profit-sharing system. Prior to being acquired, management thought they would take the company public. Employees were told that they would have a chance to share in the company's success through stock-purchasing plans.

When the company was acquired by HP, the stock-purchasing plan did not materialize. CMS management opted to institute HP's corporate profit-sharing program to engender a feeling that they were becoming a part of the larger HP organization. However, management did not feel they could afford to pay employees at HP levels. Thus, they instituted a local gain-sharing program that they hoped would augment CMS's base salary and provide employees with total compensation that matched or exceeded HP's total compensation package.

The local gain-sharing program was installed by management because they believed it would increase the following desired behaviors: individual initiative and responsibility; willingness to learn; adaptiveness; teaming and collaboration; hustle; willingness to confront conflict; and focus and attentiveness. Managers believed that increasing these behaviors would translate into increased financial success for the company and help to close the "pay gap" between CMS and HP. Management planned to pay out bonuses quarterly based on attainment of certain levels of operating profit.

Results. Management reported that the program had the following positive effects: increased visibility between departments, the effective use of cross-functional teams to achieve goals, a heightened awareness of business fundamentals and financials, clearly defined and communicated quarterly objectives, and a high level of uniform companywide focus.

However, a number of problems soon emerged. For example, many employees wanted their compensation program to be the same as other HP employees. Employees also perceived the program to be promoting short-term behavior.

In addition, the gain-sharing program intended that employees be rewarded on the success of CMS. After integration into HP, it became difficult to determine whether CMS's performance was attributable to its own employees' efforts or to contributions made by other HP departments and employees. Finally, for the program to pay out enough to close the gap with the HP pay scale, CMS managers judged they needed to pay out at least five out of six times (payouts were every two months) and average at least 10% of base salary. The program only paid out four out of six times and averaged 6.13% of base pay. Employees began to question the program, and its credibility was damaged. Due to these and other concerns, management concluded that the benefits of the program did not outweigh the costs.

Case 5: The Workstations Group

Description. HP was having considerable trouble completing their new high-speed UNIX-based workstations in the early 1990s. Because speed to market is so important in the high-technology arena, management made the introduction of this product a very high priority. Local management wanted to complete the project early, with high quality

and with all the standard support services ready and trained. They, therefore, attempted to motivate employees to work more efficiently and effectively by implementing an experiment in pay.

The pay program introduced offered two different bonus packages, one for managers and one for engineers, to be paid at the completion of the project (if accomplished by the target date). Because management realized that the decisions made by managers would be vital to success, they offered a cash and stock program for managers (10% of salary stock grant and 5% of salary in cash). Stock awards were to be given six months after completion of the project to ensure quality of product and customer service. Engineers were to receive cash (between 5–7% of salary). The pay program was intended to motivate effective completion of the project. There was no intention to continue it. The reward amounts depended on a nomination and approval process that determined individual levels of contribution.

Results. The project was completed six months ahead of the target date. While some in the organization saw this as a success story for pay-for-performance, others were quick to point out that the pay program did nothing more than communicate the utmost importance management was placing on this project. Many people, including Pete Peterson, vice president in charge of personnel, believed that the perception of high priority was the most important motivating factor leading to the early completion of the workstation. A local personnel manager validated this view independently. She referred to the pay system as the "great catalyst" in the project. The fact that HP utilized an incentive program that had such high visibility showed, she felt, that the company was willing to try something new to get the workstation finished. That was motivating in itself.

An HP survey showed that 70% of the employees felt they would have worked just as hard on the project without the incentive program. But interestingly enough, 60% of the employees surveyed recommended that incentive programs be used with other projects at HP.

Summary of Hewlett-Packard Conclusions

The local managers who enthusiastically initiated these pay-for-performance programs ran into difficulties in implementation and maintenance and were ready to abandon them so they could allocate their efforts elsewhere.

Hewlett-Packard corporate executives examined the results of these five cases as well as those of the additional eight programs that we do not report on here (see Table 1). Their goal was to learn from these "experiments" and use this data in making decisions as to whether to encourage broader use of pay-for-performance at Hewlett-Packard. The additional eight programs had similar outcomes to those reported here. The local managers who enthusiastically initiated these pay-for-performance programs ran into difficulties in implementation and maintenance and were ready to abandon them so they could allocate their efforts elsewhere. In the calculation of local management, the benefits of most of these programs did not outweigh their costs. In other cases, such as the workstation group described in case 5, though implemented without difficulties, local management and the corporate compensation department were not convinced that the alternative pay program could be credited with performance outcomes. Specifically, they were not clear whether the outcomes were motivated by the rewards themselves or whether they were motivated by the implicit message that Hewlett-Packard's introduction of the reward system was communicating the importance of the goals.

Based on the experiences reported by management at these 13 sites, Hewlett-Packard executives decided to discontinue experimenting with the alternative pay-for-performance programs. The reasoning and conclusions that the local managers shared in our interviews at the five sites were consistent with the reasoning and conclusions shared in Hewlett-Packard's "White Paper." Below are some of final conclusions from this report (White Paper, 1994):

1. "Team-based work environments appear to be producing increasing business results."
2. "Alternative pay systems have not proven necessary to produce positive results."

TABLE I Locations, Programs Elements, and Final Status

Locations (Date Approved)	*Program Elements*	*Final Status*
Workstations Group (7/90)	• Cash • Incentive awards	Implemented; Completed 1992
Puerto Rico (10/90)	• Skill-based pay (with pay-for-performance) • Team bonus	Discontinued
San Diego Site (2/91)	• Skill-based pay (no pay-for-performance, 9/93) Team bonus (6/92)	Discontinued
NCMO (2/91)	• Gain sharing	Cancelled by entity management due to organization change LID (5/91)
	• Division profit sharing (gain sharing)	Cancelled by entity management due to division reorganization
Eastern Sales Parkridge, NJ (12/91)	• Modified skill-based pay (with pay-for-performance) • Transitional reward and incentive plan	Program implemented but cancelled due to reorganization (part of organization moved to Roseville)
Boise Printer Division (12/91)	• Skill-based pay (no pay-for-performance, 2/93) • Team bonus (2/93)	Discontinued
Vancouver Division and ICD (9/92)	• Bonus pay for production operators and supervisors	Discontinued
Colorado Memory Systems (3/93)	• Gain sharing with pay at risk	Program stopped due to reorganization 9/94
Medical Products Group (7/93)	• Team recognition and reward	Discontinued
PRCO Loveland (7/93)	• Bonus program to increase yield to 95% for Q4 FY93	Discontinued
Belgium (10/93)	• Base pay indexed with merit pay as bonus	Not pursued at country's request
Italy Sales (10/93)	• Freeze base pay with bonus for performance	Discontinued

3. "HP's current pay system and other tools are sufficient to support the work team environment."
4. "Even though HP has gained valuable organizational learning from alternative pay experiments, the high resource commitment necessary to design and implement pay system changes, and the limited return so far, indicates that HP does not need additional experiments unless they are markedly different."

Discussion

The five cases we researched provide a number of insights into the dynamics of managerial decision making in implementing pay-for-performance in a high-commitment company. As stated by Gerhart and Rynes (2003), pay programs are not simply determined by forces in the external environment. Instead, managers play a significant role in the adoption, modification, or discontinuation of pay-for-performance

programs. However, current research tells us little about how managers actually make such decisions.

To understand the managerial decision making at Hewlett-Packard, we should first examine how managers were conceptualizing their work with pay-for-performance. We observed that managerial thinking was driven foremost by a pragmatic commitment to finding ways of improving performance. They were not driven primarily by a deep philosophical commitment to pay-for-performance or a desire to apply their newly acquired knowledge about pay-for-performance. Their goal was to improve performance. They conceptualized pay-for-performance as an underutilized tool among a variety of tools in their managerial tool kit they hoped could help them solve problems they were facing. They hypothesized that implementing pay-for-performance programs would be a cost-effective way of boosting results. When their pay initiatives had unintended consequences, the managers retained their pragmatic focus on improving performance and concluded that they could gain more leverage through alternative managerial tools such as good supervision, clear goals, coaching, training, and so forth. This decision does not imply that managers believed that pay did not motivate or that it could not be used effectively in other settings. It does imply that management saw their effort/benefit ratio as more favorable if they focused on the fundamentals of management that had served Hewlett-Packard well in the past.

One of the most prevalent and striking themes in managerial decision-making in these cases is the size of the gap between managers' initial expectations and the subsequent realities. Managers made overly optimistic assumptions about how much time would be required and how difficult it would be to administer and make adjustments in these pay programs. Managers were also overly optimistic about the benefits that would be achieved.

The biggest problem proved to be setting performance standards that would strike the right balance between paying out enough to make incentives motivational without paying out too much. The need to make adjustments or renegotiate standards caused significant problems. Presumably, the unusually high levels of trust and communication at HP should have given them an advantage in working out such problems. However, making adjustments produced major conflict and lost trust, despite the superior levels of communication, trust, and commitment at HP.

This finding runs counter to the hypothesis that a company and culture like Hewlett-Packard's should make implementation of pay-for-performance easier. However, it is supported by findings that executives in high team-oriented cultures, when compared with executives who perceived their cultures as less team-oriented, observed more rather than fewer unintended negative outcomes (damage to teamwork and gaming, etc.) as a result of executive incentive systems employed by their firm (Beer & Katz, 2003). To understand this counterintuitive finding, we draw on prospect theory (Kahneman & Tversky, 1979), which suggests that people tend to be loss-averse and have a peculiarly strong reaction to the potential for loss. At the outset, managers and workers were each focused on the prospects for gain. However, employees came to rely on the extra money and perceived changes in terms of loss or taking away something positive that they had come to expect. Likewise, as workers reacted emotionally to what they perceived as loss, managers also became sensitized to what they had to lose—which were the benefits of the trust the corporation had built over time. So a high-commitment culture may be a double-edged sword. On one hand, greater trust and a better relationship among management and workers, could increase the initial acceptance of and support for new pay initiatives. On the other hand, when complications threaten to undo the benefits of previous managerial work, managers and workers, who have invested more in building trust and have more to lose, may be quicker to reject programs that put at risk the relationships they have invested significant time into cultivating.

The turbulence of the technology industry and the need to adapt continually took its toll on these programs. Workers' aversion to fluctuating payouts, particularly reductions in payout or no payout at all, did not mesh well with the rapid pace of

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change in the technology industry. The efforts by management to change payout standards in response to new technology or simply unanticipated performance improvements and payouts also threatened trust and commitment of employees. This finding is consistent with previous experience with and research on incentive compensation for production employees. Many of the piece-rate systems that were very popular in the 1950s and 1960s disappeared due to similar reactions from employees. Inflexibility on the part of workers can be particularly problematic in the technology industry, where firms need to innovate continually and improve efficiency just to stay competitive. Two of the pay experiments were one-time events, but four out of the eleven programs that, ideally, would have been ongoing were disrupted by reorganizations or other organizational changes. Similarly, disruptions in other areas of the company (outside of the control of the organizational units experimenting with pay) interfered with employees' ability to achieve performance objectives and rewards. This caused major frustrations for the workers. It suggests the importance of the context; in particular, the more rapid the pace of change, the more difficult and time-consuming pay-for-performance programs are likely to be to design and maintain. Future consideration should be given to the rate of change in the environment and its impact on such systems, particularly for lower-level employees whose compensation is lower than that of managers. This may be of particular concern, given the general rate of acceleration in competitive forces and the need to adjust to them.

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The fact that managers had misestimated the potential difficulties and the need to make adjustments in payout standards meant that they were somewhat limited in their ability to communicate clearly about what workers should expect. Nonetheless, in theory, either group could have initiated more explicit sharing of expectations. Both management and employees had hopes and expectations of the pay system. Management hoped to obtain some kind of cost savings or productivity gains while employees hoped for additional pay. Both workers and managers appear to have been overly optimistic about their ability to achieve benefits from the pay systems (Taylor & Brown, 1988), and neither group was particularly explicit in communicating their expectations to the other. It would have been interesting to see what the reaction would have been if both sides had communicated their expectations clearly. Perhaps if their expectations had been voiced and explored, they would have been able to recognize potentially incompatible expectations and could have made more-informed decisions as to how to proceed.

All of this suggests that there is an implicit negotiation going on anytime a pay-for-performance system is introduced. Both parties accept the new pay practice based on unstated and undiscussed expectations. When circumstances change, a "negotiation" about how to alter the pay system to meet these expectations is very difficult. The Hewlett-Packard case suggests that such an explicit ongoing process of discussion and negotiation during the life of the pay system may be necessary to assure a longer life for pay systems than that typically experienced by corporations. It is interesting that management at HP, a firm whose philosophy and values would have made a dialogue about pay-system redesign more possible than in most firms, did not see this as an option. We suspect that this may have something to do with assumptions most managers make about how much participation is possible or advisable about pay systems. The case of Sedalia Engine (disguised name), a high-commitment manufacturing plant, is instructive in this regard (Beer & Spector, 1982). Facing discontent from employees with pay, the plant manager decided to convene a task force of employees, against the advice of higher management, to make recommendations about how the pay system should be redesigned. The view of higher management in that case is clearly the dominant view of most managers. However, the positive outcome at Sedalia (the recommendations were not self-serving and resulted in a practical solution to which employees were

committed) and research by Lawler & Hackman (1969) suggests that participation of employees in pay-system redesign may be possible.

Conclusion

That Hewlett-Packard managers abandoned the pay-for-performance programs they initiated with great hope tells us more about how managers were conceptualizing their options for influencing employees than it does about pay-for-performance programs per se. We do not draw the conclusion that pay-for-performance plans do not motivate. Indeed, the initial performance improvements obtained suggest that pay-for-performance did motivate behavior desired by management.

The case data presented here does suggest that pay-for-performance systems present implementation problems that may be underexamined by researchers and insufficiently acknowledged by practitioners. Part of the problem stems from a fundamental human tendency, to which managers are also subject, to be unrealistically optimistic about what can be accomplished by a management intervention (Rigby, 2001; Taylor & Brown, 1988). Another aspect of these unrealistic assumptions may be attributable to the inherent complications in designing and maintaining effective pay-for-performance programs, particularly in the rapidly changing business circumstances that face many companies today. In these circumstances, the barriers to linking performance with effort and the barriers to linking pay to performance, discussed earlier, are significant and were not apparent to managers at the time they launched the pay programs. Managers may also have been unaware that, unlike other interventions such as training, shortcomings in the design or maintenance of pay-for-performance programs can actually cause significant problems such as bitter feelings and damage to important relationships.

The implementation costs and risks of pay-for-performance systems appear to be higher in high-commitment cultures like HP where trust and employee commitment is perceived by managers to be crucial to long-term success, though more research is needed before conclusions from this case can be generalized. Managers at HP probably weighed the dissatisfaction of employees with incentive programs or their attribution that a one-time bonus "was a bribe" differently than managers in firms without a high-commitment culture. Ironically, Hewlett-Packard's distinctive culture seems to have had an unexpected disadvantage, one that runs counter to prediction in the literature (Gerhart, 2001, p. 235). This may suggest that the conclusions of this study do not apply to low-commitment firms. An alternative conclusion is that monetary incentives in a fast-changing environment may undermine the capacity of a firm to build trust and commitment unless the process of introduction incorporates an honest discussion of mutual expectations.

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The implications for practice we draw from these cases is that managers might best approach the introduction of pay-for-performance systems as a process of "negotiation" with employees if they are to avoid the unintended consequences we observed at HP. They might state clearly their expectations for the program and ask employees (through a representative task force) to clarify theirs. Both sets of expectations would ideally inform the design of the pay program and the process for reexamining and redesigning the pay program should expectations of either side not be met. There is some evidence that this sort of participation works (Lawler & Hackman, 1969) but considerably more action research in a variety of organizational cultures is needed to test this proposition and the contingent situations in which it might apply. Clearly, management's philosophy with regard to employee participation and power sharing will influence its propensity to employ the process of participation and negotiation we are suggesting.

Stress-Testing the Conclusions

All research, particularly a case study like this one, is subject to a variety of interpretations. Are our findings an artifact of circumstances

that may not have been explicated in the case itself? We have discussed the high-commitment culture of HP as an important factor in the decision to abandon pay-for-performance. But was preserving the culture a mistake? Below we will evaluate this question and other situational factors that one could argue undercut our interpretation of the HP cases we discussed above.

Is it possible that the managers in our case were wrong when they abandoned the pay-for-performance system due to concerns about employee trust and commitment?

Hewlett-Packard had exemplary financial performance for nearly six decades (Beer & Rogers, 1995; Collins & Porras, 1994). However, the company's performance suffered in the late 1990s compared to competitors (Beer & Weber, 2003). In response, the board of directors recruited Carly Fiorina, a senior executive from Lucent, to lead the company. She immediately set about changing the culture through a variety of interventions, including the introduction of an extensive pay-for-performance incentive system (stock options and bonus systems) for a substantial number of senior executives (Beer & Weber, 2003). As we discussed above, HP had never used pay-for-performance systems as a primary tool for motivation and was one of the few companies that did not have executive bonus systems. Is it possible that the managers in our case were wrong when they abandoned the pay-for-performance system due to concerns about employee trust and commitment? Could it be that they missed a crucial opportunity to change HP's culture in their organizational unit when they did not persist with the pay-for-performance pay system they had introduced? Such changes are disruptive as was evident when Fiorina's efforts to change the culture roused strong negative employee reactions (Beer & Weber, 2003; Burrows, 2003). Perhaps they should have ignored the reaction of employees and recognized that to change HP's performance a countercultural pay-for-performance system was needed? Indeed, this is precisely the argument for pay-for-performance its advocates espouse. It is a way to change entitlement cultures and improve financial performance dramatically (Baker, 1993). We do not think this interpretation of events at HP is warranted given 1) the performance of the company since Fiorina introduced the incentive system and changed HP's culture and 2) the evidence about the performance of high-commitment cultures that typically do not rely on individual and group pay-for-performance systems to motivate instrumentally, though they use money to recognize performance.

Hewlett-Packard's performance since Carly Fiorina introduced pay-for-performance at the executive level has been less than stellar (Beer & Weber, 2003). The company has not achieved many of the financial results she promised and is continuing to lose market share to Dell. If HP's financial performance in the 1990s is used to argue that the pay-for-performance system, abandoned by the managers in our case, was needed to change the culture and improve lagging performance, then it is equally valid to question the value of pay-for-performance and the new culture introduced by Fiorina in 1999 given the company's performance between 1999 and 2003.

It is our view that financial performance, except over a very long time period (decades), is not a good criterion for evaluating pay-for-performance systems. It is a function of so many factors that to attribute this outcome to pay-for-performance is a vast oversimplification. Behavioral and intermediate operating outcomes seem much more appropriate. We argue that HP's financial performance problems lay in poor strategy and in their inability to redesign the corporate organization to enable the integration of HP's many products into solutions for customers, something that IBM has been able to do. There is much evidence to indicate that these problems were tied to political problems triggered by the CEO succession process at the top that no incentive system would have solved (Beer & Weber, 2003).

One could also argue that HP managers had their eyes on the wrong measure for judging whether the pay system was a success. Pay-for-performance advocates argue that clear and explicit performance goals must be present for a pay-for-performance system to work effectively and these performance goals should be the criterion

for deciding whether a pay system is working. Instead of attending to employee concerns and loss of trust, the managers at HP should have kept their eyes on operating results and ignored employee attitudes. After all the pay-for-performance system had boosted productivity in the months after its introduction. This argument seems to us to ignore decades of evidence that trust and commitment are essential to the capacity of organizations to outperform their competitors. Can increasing distrust and reducing commitment ever improve performance?

High commitment can only be created if employees develop an emotional attachment to the task, management, and the company. This in turn can only be developed if they feel fairly treated. And, this in turn is a function of how much voice they have in issues that affect task performance and their well-being (Beer, Spector, Lawrence, Mills, & Walton, 1985). To ignore employee discontent with the pay system would have meant undercutting the high-commitment culture that had contributed to HP's nearly six decades of outstanding performance. The high performance of other high-commitment companies like Southwest Airlines and SAS Institute, built on many of the same principles as HP (including modest use of pay systems as a means of motivation and narrower spread between the CEO and the lowest-level employee) demonstrates that paying attention to what employees think and feel pays off (O'Reilly & Pfeffer, 2000).

Given the importance of establishing appropriate performance metrics to the success of pay-for-performance programs, one could question whether the failure of pay-for-performance at HP could have been attributable to limitations in the performance metrics at HP. As we said above, pay-for-performance advocates argue that quantifiable objectives are a key to success. Had HP managers established better metrics, employees might not have been dissatisfied with the pay system. There is no evidence, however, that this was the case in the situations described above. Management by objectives and metrics to measure progress was the cornerstone of Hewlett-Packard's management philosophy for nearly six decades (Beer & Rogers, 1995). Moreover, HP managers did invest what they perceived to be considerable time and money in the design and development of metrics for the team-based pay-for-performance program they were introducing. This was not a quick or lightly considered change initiative.

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Even if one could convincingly argue that the design of metrics was less than ideally required to implement a pay-for-performance system, it is questionable, given the fast-paced and unpredictable changes in high-technology companies such as HP, whether such metrics could have been developed at reasonable cost in time and money. Furthermore, it seems questionable whether managers in this case would have embraced such an increase in cost. After all, they already considered the cost of designing and administering the pay-for-performance system onerous given the benefits, and consequently abandoned the system. Additional effort to develop metrics would have further increased the time that these managers would have had to spend managing the system at the expense of time spent in managing and training their employees. This is what they ultimately decided was more beneficial than the pay-for-performance system.

This is not to say, however, that they were not managing effectively in the first place or that such a deficiency had something to do with the failure in implementing pay-for-performance. Hewlett-Packard had always encouraged and expected managers to lead effectively and institutionalized management by objective and managing by walking around, among many other practices, to establish good management as a norm for all managers (Beer & Rogers, 1995). We found no evidence that this was not also true in the situations described in the cases although we did not focus our investigation on this.

Pay-for-performance advocates argue that the value of a pay-for-performance system lies in the clear differentiation in rewards obtained by high performers compared to low performers. Even if low performers are unhappy with the pay-for-performance

system, high performers are not, the argument goes, and they are the ones who contribute most to organizational performance. Could it be that the pay system introduced at HP did not differentiate sufficiently between high and low performers and/or managers listened to the wrong voices? In fact evidence indicates that the pay-for-performance and skill-based systems were "forcing" differentiation in rewards and that this was an unintended negative outcome. It became very difficult for managers to transfer workers in a low-performing team to a high-performing team (remember that in many cases a team-based pay-for-performance system was introduced). This made redistribution of talent across teams harder (higher-performing teams did not want workers from lower-performing teams) and was one of many reasons HP managers abandoned the system. So while differentiating performance of individuals or teams is desirable to maintain the perception of fairness, it also has unintended consequences when coordination across individuals and teams is essential for performance. We believe the pay system at HP differentiated between high and low performance (a desirable outcome according to pay-for-performance advocates) but that this also contributed to coordination problems that ultimately caused managers to abandon pay-for-performance.

So while differentiating performance of individuals or teams is desirable to maintain the perception of fairness, it also has unintended consequences when coordination across individuals and teams is essential for performance.

Could it be that HP managers abandoned the pay-for-performance system when it ran into difficulties because, like many managers, they had a penchant for the "program du jour"? Perhaps HP managers are no different than managers in so many other U.S. companies who abandon an improvement program when it runs into difficulties in order to move on to the next fad. Indeed, the tendency of human beings to be overly optimistic, cited earlier, might contribute to this penchant. If this played a role in abandoning pay-for-performance, it would render a serious blow to our interpretation that it was implementation problems inherent in the very conception and design of pay-for-performance systems that caused discontinuation of the pay-for-performance system at HP.

To deal with this question we must understand the root causes of the flavor-of-the-month improvement programs so often seen in corporations. Research suggests that the causes of these programs have to do with their top-down nature (Beer, Eisenstat, & Spector, 1990a; Beer, Eisenstat, & Spector, 1990b). Programs fail to be sustained and give way to new programs because top management pushes an improvement initiative through the organization unilaterally, without much involvement or commitment from lower-level managers. They do so to introduce a solution to the organization that they, often with the help of consultants and staff groups (often the HR function), believe to be essential for performance improvement. Because they do not involve lower levels, their overly optimistic evaluation of the potential for success is never challenged. When the improvement program runs into implementation problems in lower-level units, such as the ones experienced by unit managers in the HP cases described here, uncommitted managers do not invest enough energy to overcome the problems. However, the HP cases we report on in this article were not introduced from the top nor were they initiated by the HR function. The initiative came from the unit managers closest to the action. These were programs they, not senior management or the HR function, were committed to and thought would improve their business's performance. Therefore, we do not find that it was HP managers' penchant for the "program du jour" that could possibly be the cause for discontinuing the pay-for-performance system. It seems unlikely that they would easily give up on a program for which they felt real ownership. The HP managers made a business-like cost-benefit analysis, as we have argued.

After consideration of the alternative explanations for the failure of pay-for-performance systems at HP discussed in this section, we continue to see our analysis of the cases as correct. While pay-for-performance systems theoretically promise many motivation and performance benefits, researchers and managers have underappreciated the costs incurred when these systems are implemented, particularly in high-commitment systems.