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WORKING PAPER SERIES

Pay for What Performance? Lessons From Firms Using the Role-Based Performance Scale

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Pay for Performance

Companies strive for it; they spend incredible resources to achieve it, but in many cases, they fall short. Why is the relationship so important, why does it seem to be beyond the reach of so many organizations, and how can the relationship between pay and performance be improved? Those are the questions investigated in this paper. The method for exploring this question involves introduction of a new measure of performance and some preliminary evidence based on two different research studies. Although this work is at an early stage, the findings help contribute to important issues surrounding the pay-for-performance relationship.

Most executives agree that employee perceptions of the pay-for-performance relationship are likely to influence their behavior. Organizations spend millions of dollars perfecting their strategies (and changing them), but they rarely diagnose whether the current or new compensation system rewards the types of behaviors that are critical for the success of their firms' goals. The result has been, and continues to be, that most organizations are not achieving pay for performance. Perhaps one reason for this dilemma stems from the fact that we have not had a succinct way to communicate the types of behaviors that are important for individual, team, business unit, and/or organizational success. If organizations cannot easily identify and communicate what type of performance is needed and if accurate measures are not available, then the relationship between pay and performance will undoubtedly be difficult to achieve.

The goal of this paper is to introduce a new measure of individual performance that views performance measurement in terms of roles that are enacted at work. The paper also demonstrates how this measure can help organizations diagnose the degree to which their current compensation system is paying for the type of performance that is critical for their current and future success. The measure that I will discuss was recently validated in several organizations¹. The results of two different studies that supplement the initial validation study will be discussed and presented in this paper.

I contend that the relationship between pay and performance has not been well understood because individual performance has not been measured adequately. The measure that I introduce allows me to study the types of behaviors that various organizations are rewarding and the types of behaviors that are encouraged when new pay systems are introduced. As a result, studies using this measure have implications for diagnosing the

¹ The paper that describes the validation study is Welbourne, T.M., Johnson, D.E., & Erez, A., 1997. The role-based performance scale: Validity analysis of a theory-based measure. Working paper, CAHRS, Cornell University.

relationship between pay and performance and for understanding the effect of various organizational interventions, including pay, on performance.

The first study that I discuss involves a comparison of the pay-for-performance relationship in four different companies that represent two different types of organizations. Two of the businesses are large, Fortune 500, established firms. The other two businesses are young, entrepreneurial, fast growth organizations. The hypothesis tested in this study is that larger, established organizations and smaller, entrepreneurial firms differ in which behaviors are emphasized as important for their employees. Subsequently, they should differ in the types of behaviors that are rewarded.

The second study that I summarize considers the relationship between satisfaction with gainsharing (a group-based incentive system) and employee performance. Although the data are preliminary, the study shows which types of behaviors are encouraged when a gainsharing plan is implemented. After reviewing the overall results of both studies, suggestions for improvement of performance measurement and linking rewards to organizational goals are discussed.

The Role-Based Performance Scale

I developed the role-based performance scale as part of a large-scale research initiative designed to study the effectiveness of a variety of pay plans (e.g. gainsharing, profit sharing, skill-based pay, etc.) on performance (individual, team, business unit, and firm performance). The study focus is on how pay influences individual behavior and then how those changes in individual behavior affect team, business unit, and firm performance. But the first step of the study (the pay for individual performance relationship) could not be conducted with existing measures of performance. If a company's customized performance appraisal were used, we could not compare results from multiple firms, and because we wanted to understand how pay influences behavior at multiple organizations, a measure of behavior that could be used at each company was needed.

Because an adequate measure did not exist (and by adequate I mean one that was theoretically sound, generalizable to numerous jobs and firms, and of a reasonable length so that managers would not be overly burdened by the process), we developed a theory-based measure that captured overall "person" performance at work. The measure is not task specific; it is something that can be used to evaluate the performance of any person in any company, and it was developed based on two theories: role theory and identity theory.

Role theory suggests that by knowing the roles that one occupies, you can better understand what encompasses total performance². In addition, role theory states that if a role is emphasized as important within a given context (such as work), then the role is more likely to be enacted. Identity theory then states that the degree to which the role is internalized by an individual worker (or the degree to which the role is salient to someone) will predict performance in that role. Therefore, role theory is used to suggest that if a role is emphasized as important at work, it is more likely to be enacted. Identity theory suggests that if the role is salient to the individual, it will not only be enacted but it will performed well.

Thus, role theory and identity theory were used to conceptualize a multidimensional approach to performance measurement that involved roles. Performance measurement, using these theories, is not based on all of the tasks enacted on the job; instead, it is based on the roles that organizations consider important for successful firm performance. One method of identifying what roles are important within an organization is to review the rewards systems that firms have been using. If performance within a role is communicated to employees as important, then employees are more likely to spend time and effort in that role. Therefore, rewards systems provide clues for diagnosing which roles should be included in an overall measure of employee performance.

Rewards and Roles

In the paper that I wrote with Diane Johnson and Amir Erez, we showed that a review of rewards systems used in today's organizations leads to identification of five different work-related roles³. For example, merit pay, piece-rate systems, and sales commission plans all reward the job-holder role. This role includes the basic tasks associated with one's job (those tasks most likely to be included in a traditional job description). Gainsharing systems (which consist of a group-based incentive and suggestion committees) support an organizational member role (doing things that are good for the overall business unit) and an entrepreneurial role (coming up with suggestions that result in cost savings or increased production). Skill-based pay plans tend to emphasize a role we call the career role, which includes behaviors that enhance one's knowledge and/or skills. Team incentive systems encourage behaviors in the team member role (doing things that help the team, mentoring, helping others, etc.).

² Roles are defined as a position in a social framework. Roles are defined as a position in a social framework.

³ Readers interested in detail about how rewards systems were used to identify the five roles should see the Welbourne, Johnson, and Erez (1997) paper.

Design of the Instrument

Thus, we proposed five different roles at work (job holder, career, entrepreneur, team member, and organizational member) as the basis for the role-based performance scale (Table 1 includes all items used in the final scale). The first step in writing the items for the survey involved a review of performance appraisal instruments currently being used and a review of the related literatures. Based on these data, a series of pilot items were developed. These items were presented to and discussed with a group of human resource management professionals and general managers who were involved in the compensation study. We discussed the adequacy, representativeness, and reasonableness of the items suggested for each role-based measure. After the initial meetings, a preliminary survey was administered to employees at a company that volunteered for the pilot study. The survey was distributed to employees and managers in a series of meetings, and respondents asked questions and provided us with feedback in person and/or on the survey. The survey data were analyzed, and as a result of the pilot test process, an instrument that included four items per role was finalized.

Thus, the role-based performance scale was not only representative of the roles that were theoretically identified as important for today's organizations, but it was also simple for managers to complete. At 20 items (using a 1 to 5 scale), managers could complete the form in about five minutes per employee⁴. Thus, the measurement tool met the needs of the researchers and practitioners involved in the study. It was theoretically sound and easy to complete (short).

After the pilot test was conducted, we used the measure in a total of seven different companies and tested the validity of the measure. Given the initial support for the validity of the measure, additional studies were conducted to understand the usefulness of the performance measure.

It is important to note how this measure is different from other performance appraisal instruments that are multidimensional. In many cases, organizations use detailed, and certainly multidimensional, measures of performance. But the dimensions are based primarily on one role - the job holder role. The role-based performance scale does not focus on the detailed tasks in one's job; instead, it provides a quick assessment of performance in five work-related roles.

Big vs. Small Firms

Organizational profitability, size, age, and the existence of a formal human resource management function should lead to stronger reliance on formal human resource practices that

emphasize the job-holder role. This is due to the fact that as an organization grows, it adds the administrative functions that implement job-based employment systems (e.g. job analysis, job descriptions, job evaluation). In addition, as organizations grow and seek legal counsel, they are more likely to implement employment systems that are job based in an attempt to minimize employment-related litigation. Thus, the hypothesis tested in the first study is that larger, more established firms will primarily reward employees for performance within the job-holder role. Entrepreneurial firms, on the other hand (due to their size, newness, and culture), are less likely to have formal human resource and administrative systems, and they are more likely to reward the non-job behaviors.

In order to investigate this hypothesis, I conducted a regression analysis on data from four different companies, two that are large, established, Fortune 500 firms, and two that are young, entrepreneurial firms (both with less than 400 employees at the time of the study). Although these firms differed in size, age, and product, they were similar in that all four firms were undergoing major change. The entrepreneurial firms were experiencing fast growth, while the larger firms were in the process of initiating changes (restructuring, team concept, etc.) to look more "entrepreneurial." In addition, the study was conducted with divisions in the larger firm that were similar in size to the smaller organizations.

I ran a regression analysis that included the five components of the role-based performance scale as the independent variables, and the company's current performance appraisal outcomes (scores) were entered as the dependent variable. This analysis allowed me to determine which roles were currently being rewarded by the firm's current performance appraisal and merit pay systems. The results of the analysis are found in Table 2.

As can be seen, the hypotheses are supported in that for both large firms, the job-holder role is significant in predicting the firm's current performance appraisal scores. In both larger, established firms, the current performance appraisal system focuses on the job component. Surprisingly, the R^2 for the first large firm is .88. This means that 88 percent of the variance in the performance appraisal scores can be explained primarily with four items that cover the job holder role. Those items are quantity, quality, accuracy, and customer service. Additionally and even more surprising is that the organizational role is significant in this company; however, it predicts in a negative direction. This indicates that employees who spend time doing things to help the company (doing things not in the job description but for the good of the overall company) receive *lower* performance appraisal scores, and subsequently lower pay raises (because merit pay is tied to performance appraisal).

⁴ Appendix A lists the items used in the role-based performance scale.

The results from the entrepreneurial firms support the hypothesis in that the job component is not significant. In fact, the only component that is significant is the organizational member role. This result shows that within these two entrepreneurial firms employees are rewarded for doing things that help the company (conducting the 'above and beyond' the job behaviors).

The results were presented to executives and employees at all four companies. Management at the entrepreneurial firms was not surprised by the outcomes. According to those executives, excellence in job-based behaviors is a minimum requirement expected of all employees. And all employees are expected to be entrepreneurial; however, higher rewards are given to those who go beyond their job. The CEOs at both entrepreneurial firms felt that the ability and willingness of their employees to go "above and beyond" for the corporation provided them with a long-term competitive advantage. Executives in the large firm were surprised by the results; however, the human resource (HR) department personnel were not. The HR professionals noted that, particularly with downsizing, employees were no longer encouraged to do anything but their job. In fact, the negative organizational effect was explained as the natural result of initiatives that focused employees even more on their jobs (at the expense of the non-job roles).

Thus, the overall analysis shows that the large companies in this study used performance appraisal to reward job-oriented behaviors, while entrepreneurial firms utilized their pay system to reward non-job behaviors, in particular, organization-based behaviors. The question left unanswered is: what behaviors are important for firm performance? The second study deals with the effects of gainsharing on employee performance. After reviewing those results, the data from both studies will be reviewed, and implications for the pay-for-performance relationship and the individual performance-firm performance relationship will be discussed.

Gainsharing and Performance Within the Five Roles

Management at many large organizations has become aware that behaviors classified as 'above and beyond' the job are important for firm performance. Evidence of this can be seen by the widespread implementation of innovative pay systems (e.g. gainsharing, skill-based pay, etc.). All of these pay plans are designed to affect non-job behaviors. In order to further investigate the pay-for-performance relationship, I studied several large firms that implemented gainsharing plans. Gainsharing consists of two components: the first is a bonus that pays all employees in a business unit when gains in productivity and reductions in

expenses are realized. The second component is a suggestion system that encourages employees to be entrepreneurial and to come up with ideas that will have a positive impact on the business unit's financial performance. Gainsharing plans are not implemented in order for employees to perform their jobs differently. If a firm wanted to encourage job-based behaviors, a group incentive would be an inefficient way to do so because the group incentive does not reward those who improve their job performance. Group-based pay plans reward teamwork, entrepreneurial behaviors, and organizational-based behaviors. Gainsharing plans have the potential to make large companies look more like entrepreneurial firms because they are implemented at the business unit level, and they encourage the types of behaviors that are rewarded in smaller, entrepreneurial firms.

In order to conduct a preliminary investigation of the effect of gainsharing on performance, I reviewed the correlations between gainsharing satisfaction and performance (as measured with the role-based performance scale) in three firms. In all cases, satisfaction with gainsharing was NOT significantly correlated with the job dimension. See Table 2 for a summary of the correlations. However, in the first company (a traditional manufacturing plant located in the West), a significant correlation existed between gainsharing satisfaction and three dimensions: entrepreneur, team, and organization. In the second company (a service-based division of a Fortune 500 firm), there were significant correlations with career, entrepreneur, and organization. And in the third company (a creative/artistic department in a Fortune 500 firm), significant correlations existed with only team performance.

Although the particular dimension of performance affected by gainsharing satisfaction varied among firms, in all cases, employee satisfaction with gainsharing was linked to the non-job behaviors. Although this is a preliminary analysis, and due to its being correlational I cannot make conclusions about causality, the results do suggest that employees who are satisfied with gainsharing are more likely to engage in the non-job behaviors. My hypothesis is that as these non-job behaviors increase, business unit performance will also be enhanced. However, that hypothesis has yet to be tested.

Links Between Pay—Individual Performance—and Firm Performance

Pay for performance. Some would argue that the pay-for-performance relationship is not really important at all because people are not motivated by pay. Perhaps people are not 'motivated' by pay, but most executives and employees I meet tell me that they change their behavior as a result of pay. Goal setting theory is a simple and effective way to explain why this is the case. This theory simply states that employees are more likely to engage in behaviors

when goals (specifically difficult but achievable goals) are communicated to them. The application of goal setting theory suggests that pay plans communicate the organization's goals to employees, and compensation systems may be one of the most important communicator of corporate goals and strategies. As employees and executives have said to me, "when they (the firm) put their money where their mouth is, I listen." However, the relationship between pay and performance has been questioned because researchers have been unable to find consistent data to demonstrate that the relationship exists.

I think there is an inherent problem with research on the pay-performance relationship because prior conceptualization and measurement of performance have focused on a narrow view of performance that is not "person based." Thus, researchers have not measured performance in a fashion that permits investigation of the relationship in multiple firms, at least at the individual performance level⁵. To date, most of the individual performance measures used have been job based and organization specific (with some exceptions, including work on organizational citizenship). If I were only including the job dimension in my analysis of the relationship between gainsharing satisfaction and performance, I would conclude that there was no relationship. However, a more in-depth analysis (with the role-based performance scale), found that gainsharing satisfaction was related to performance. But it was related to dimensions of performance that are often not measured.

Improving Performance Measurement in an Entrepreneurial Firm

Executives at entrepreneurial firms seem to know that "above and beyond" behaviors are important for their firms to be successful. But as organizations grow and become more sophisticated, the methods that they use for performance measurement become job-based and narrow. Performance measurement sends important messages to employees. It tells them what will be rewarded. If you want your organization to be ready for the many changes that are occurring and that will occur, your employees need to perform their jobs, but they also need to look toward the future. Employees should be encouraged to be entrepreneurial, to improve their career skills, to work with other members of their team, and lastly to do what it takes to help the overall company be successful. That may mean helping out another team, getting information to the right person (even if it takes much persistence and takes someone away from doing their

⁵ There have been numerous studies that study executive pay and examine the effect on firm performance, using similar measures across organizations. However, this is not an individual performance measure; it is an organizational measure of performance.

job), mentoring others, and doing all the things that make a company more than just a group of people doing 'jobs.'

Performance measurement should include the roles that are important for your organization's success. I am working with one company that recently changed its performance appraisal system to reflect the five roles. The company is an entrepreneurial firm that has been experiencing rapid growth. They felt that as a result of their growth, employees were becoming too focused on only their jobs. When they were small and employees felt the company was more like a family, the environment naturally fostered teamwork, entrepreneurship, career-oriented behaviors (often obtained through challenging, new assignments), and organization-based behaviors. However, growth in number of employees resulted in employees being more geographically dispersed. The result was a reduction in the "family like" culture. Employees at this firm were beginning to be less patient in answering the questions of newcomers, mentoring was not considered something that was rewarded, people started staying within their own groups or teams, and helping out another team was not expected. The company wanted the non-job behaviors to "count." Therefore, they changed their performance appraisal system so that employees could include non-job activities in their accomplishments. The performance appraisal process and rewards system (which is tied to performance appraisal) communicated that non-job behaviors were important to the company.

Using the Five Roles Concept as a Diagnostic Tool

As employees within this firm began to think about their accomplishments in the five roles, it became clear that many employees did not feel management recognized non-job activities as positive. For instance, employees mentioned that they had many ideas they would like to implement, but if they took time away from their jobs to do so, they would be penalized. The same story came through for all the other non-job behaviors. It seemed that the issue was not necessarily "how well" employees did these various activities, but the communication with one's manager about what activities really were important for the firm's success. And this discussion was not occurring between employees and their managers.

This led to a new use for the measurement tool. The role-based performance scale was used for something other than performance measurement. A system was developed to use the concepts behind the measure to diagnose strategy proliferation. I have used this method at a number of firms (particularly firms that are attempting to change their compensation system). Executives and managers were asked how important the five behaviors were to individual achievement, team performance, business unit performance, and firm performance. The

resulting analysis of similarities and differences provides a measure of strategy proliferation. If executives think non-job behaviors are critical for firm performance, but first-line managers think only job behaviors are important, communication channels or pay systems are not working. If job behaviors are the only criteria important for individual success, but team behaviors are important for team, business unit, and firm success, then there is not only a problem in communicating firm objectives but also in the rewards system.

Conclusion

I have argued that the pay-for-performance relationship is important because pay communicates organizational goals. In addition, I have suggested that pay is related to individual performance. I also suggested that prior research has had difficulty establishing the relationship between pay and performance because the performance measures have been inadequate. Support for these statements come from a series of studies, two of which are summarized in this paper. The first shows that larger firms create systems that encourage job-based behaviors, while smaller, entrepreneurial firms have an environment that rewards non-job behaviors. In addition, the effect of gainsharing on performance showed that gainsharing satisfaction was related to the non-job components of performance. It seems that entrepreneurial firms and business units have something in common; they are both attempting to encourage non-job behaviors among their employees. Their assumption must be that those non-job behaviors are important for firm performance. However, it seems that not all organizations agree on the importance of non-job behaviors.

In today's work environment, where outsourcing and the use of temporary and contract workers has escalated, the focus seems to be increasingly on the job component of performance. This phenomenon was discussed by human resource professions in the two large firms that were included in the large vs. small firm analysis. They mentioned that as a result of downsizing and becoming "lean and mean," their employees were discouraged from doing anything other than the minimal job requirements.

If non-job behaviors are critical for long-term corporate success, are some firms setting themselves up to become less entrepreneurial and perhaps less able to handle change? The implementation of creative pay schemes (such as gainsharing) to encourage non-job behaviors seems to be one way to become more entrepreneurial. There must be other types of organizational interventions that can encourage non-job behaviors; however, in order to understand what effect those interventions have, a multi-role measure of performance is necessary.

Additional research, using the role-based performance scale or similar measures at multiple firms is needed to further investigate the questions posed in this paper. In addition, an analysis of the effect of the non-job behaviors on team, business unit, and firm performance is essential to further understand the person - firm performance relationship. If the non-job dimensions are critical for performance, which I argue is the case, then we also need to think about developing communications, rewards systems, and measurement tools that focus on those non-job behaviors.

TABLE 1
ITEMS IN THE ROLE-BASED PERFORMANCE SCALE

JOB

1. Quantity of work output.
2. Quality of work output.
3. Accuracy of work.
4. Customer service provided (internal and external).

CAREER

5. Obtaining personal career goals.
6. Developing skills needed for his/her future career.
7. Making progress in his/her career.
8. Seeking out career opportunities.

ENTREPRENEUR

9. Coming up with new ideas.
10. Working to implement new ideas.
11. Finding improved ways to do things.
12. Creating better processes and routines.

TEAM

13. Working as part of a team or work group.
14. Seeking information from others in his/her work group.
15. Making sure his/her work group succeeds.
16. Responding to the needs of others in his/her work group.

ORGANIZATION

17. Doing things that helps others when it's not part of his/her job.
18. Working for the overall good of the company.
19. Doing things to promote the company.
20. Helping so that the company is a good place to be.

** Use of this scale requires written permission from the author of this paper; the scale is copyright protected.*

Table 2
Regression Analysis for Established and Entrepreneurial Firms

Variable	Big #1	Big #2	Ent #1	Ent #2
Career	.00	.08	-.03	.10
Entrepreneur	-.05	.02	.15	-.12
Job	1.01***	.35**	.09	.10
Organization	-.24***	-.08	.44***	.36**
Team	.12	.03	-.02	-.17
R ²	.88***	.14**	.33***	.10**

job significant for big companies only
org. sign. in big company #1, but negative
organization only sign. variable in the entrepreneurial firms

* p ≤ .05

** p ≤ .01

*** p ≤ .001

Table 3
Significant Correlations Between Gainsharing Satisfaction and Role-Based Performance

Company	CAREER	ORGANIZATION	ENTREPRENEUR	TEAM	JOB
1		.42***	.23 *	.26*	
2	.34***	.31**	.20*		
3				.25 ^	

Company #1, n=86. All data are self report.

Company #2, n=95

Company #3, n=48

^ p ≤ .10

* p ≤ .05

** p ≤ .01

*** p ≤ .001