

**Implementing Performance Management:  
An Empirical Analysis of the Conditions for Successful Implementation of  
Performance Management in U.S. Federal Agencies**

by

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## **Abstract**

Performance management has become a dominant approach to federal management reform. In compliance with various government-wide requirements, federal agencies are currently implementing a variety of performance management activities for their operations. However, studies report that there are huge variations among the federal agencies when it comes to how successfully they are implementing these activities. What factors lead to the variations in the implementation of performance management among the agencies? The notion of strategic fit states that a strategy can work for an organization only when it has a good fit with the organization's external and internal environments, implying that performance management as a reform strategy may require a set of certain conditions for successful implementation. To identify such conditions, we developed an analytical framework and examined how implementation was affected by the factors from the framework. An analysis of the data from 104 sample federal agencies found that performance management can be more successfully implemented in agencies that have the following conditions: strategic planning competency, autonomy/protection from external political influences, and professionalism. Implications of the findings are discussed for performance management in government organizations, and for a broader issue of administrative reform.

Performance management has become one of the most salient topics in the discussion of contemporary federal management reform. Of course, the concept of performance management is nothing new to federal agencies and their managers. The history of administrative reform abounds with examples of experimental attempts to generate performance information and utilize it for administrative or political decisions about the business of the federal government. However, the scope of performance management in the federal agencies as we see today is more comprehensive than those of such efforts in the past. With public pressure for better performance and accountability ever increasing, and the concept of “do more with less” becoming more of a norm across the society, federal reformers have actively embraced the performance management approach as a viable option and created a diverse array of government-wide performance management arrangements. For example, in compliance with the Government Performance and Results Act (GPRA) and the Office of Budget and Management’s (OMB) Performance Assessment and Rating Tool (PART) requirement, federal agencies devote a significant amount of time and energy to setting strategic goals and measuring performance against them. The President’s Management Agenda (PMA) requires agencies to upgrade their employee performance management system in ways that ensure a tight link between performance and rewards. The Congressional enactment of the new Senior Executive Service performance system calls for more rigorous performance monitoring on the part of every federal agencies. As such, performance management requirements for federal agencies are more intensive and comprehensive than ever.

Reformers envision that the successful implementation of these government-wide performance management initiatives will contribute to building a solid foundation for performance enhancement, promoting a performance-culture throughout the federal government.

However, recent government studies report that huge variations exist among federal agencies in the implementation of major performance management activities. For example, studies by the Government Accountability Office (GAO) report that agencies demonstrate different levels of ability to set clear goals and produce valid performance information (Government Accountability Office 1997, 1999, 2005). According to these studies, agencies also differ in the commitment and ability to use performance information for management decision making. The results of the Merit Principles Survey 2005 indicate that agencies vary significantly in the capacity to link employee performance and rewards such as pay and promotion (Merit Systems Protection Board 2007). The same survey reveals that some agencies consistently exhibit high capacity across many different performance management areas, while others suffer in most of these areas. All these observations provide little support to the implicit assumption underlying current government-wide performance management initiatives that this management tool can be successfully applied to all federal agencies.

What explains these variations among federal agencies in the capacity to implement performance management? Why are some agencies more successful than others despite the fact that the same performance management requirements have been uniformly applied to all federal agencies? One basic but critical observation in strategic management provides an important insight to this inquiry: a strategy can work for an organization only when it has a good fit with its external and internal environments (Grant 2008, p. 13). A strategy that works in one organization will not necessarily be appropriate for others. This notion of strategic fit implies that performance management as a reform strategy may require a set of certain conditions for its successful implementation. These conditions may be related to important organizational contingencies such as political and institutional environment, goals and values, resources and

capabilities, structure and system, and culture. Federal agencies vary significantly in these dimensions. Agencies with a more successful track record on the implementation of performance management may be systematically different from those with no such record.

Consistent with the notion of strategic fit, this study seeks to identify conditions that are conducive to the successful implementation of performance management in federal agencies. Knowledge of such conditions has an important implication for a more appropriate use of performance management as a vehicle for administrative reform since it can help reformers design a more relevant implementation strategy that goes beyond the simple, government-wide approach. Building on the broad literature on public bureaucracy, we developed a framework for empirical analysis of such conditions. This framework comprises three major components: organizational characteristics (OC), external environmental influences (EEI), and managerial capacity and leadership (MCL). Drawing on a dataset collected from 104 sample federal agencies, we investigated how factors in each component affect the implementation of a series of performance management activities, including setting and communicating clear goals, performance monitoring and measurement, and linking performance and rewards. Our analysis suggests that a certain set of conditions may exist that affects federal agencies' ability to implement these activities. These conditions include protection or autonomy from external political influences, strategic planning competency, and professionalism.

The remainder of this study proceeds as follows: The next section defines performance management and describes the major characteristics of this management approach. This is followed by the introduction of the analytical framework and the development of hypotheses. A description of the data is then presented, followed by the results. We conclude by discussing the

implications of this study for successful implementation of performance management in government organizations, and more broadly, for the issue of administrative reform.

### **Performance Management**

Defining performance management is not an easy undertaking since it can take many different forms, depending on the scope and target of its application (Pollitt 2001). Various forms of management systems have been developed as “performance management” to direct a diverse array of governmental functions and activities, such as budgeting, management of contractual relationships among different entities, and human resources management. Some are designed for application within individual organizations, while others are for the management of the entire government. For the purpose of this study, we define performance management as a managerial plan or arrangement that involves a series of activities aimed at producing and utilizing performance information to enhance performance and accountability of an organization. The present study focuses on performance management *within* an organization. These activities encompass (1) establishing and communicating clear goals in a manner to provide clear lines of sights to all organizational members, (2) monitoring and measuring performance against these goals on a regular basis, and (3) utilizing performance information for rewards and accountability, and to advance the capacity to perform better.

There is consensus among experts that the efficacy of a performance management system hinges largely on the proper implementation of these individual activities and their seamless integration with each other. Agencies with a well-functioning performance management arrangement make a significant commitment to developing clear performance goals and objectives and translate them down to specific goals for individual employees and teams. Using these clearly defined goals and targets throughout the hierarchy as a benchmark, managers in

these agencies are constantly engaged in monitoring and measuring the performance of employees, work groups, and organization as a whole. The performance information from this process is used for administrative decisions about rewards and accountability. The same information is also communicated up and down the organizational hierarchy for developmental purposes such as capacity building and strategy/goal reformulation.

As such, each of these activities is critical for a successful application of performance management to an organizational setting. Organizations adopt performance management in the hope that this management tool will bring them positive results such as better employee motivation, performance enhancement, organizational learning, and higher performance culture. Of course, there exists disagreement regarding its actual efficacy, especially in a governmental setting. There is no controversy, however, about the prediction that all these expectations will be difficult to sustain without each activity mentioned above being properly implemented.

### **An Analytical Framework of the Implementation of Performance Management**

What conditions lead to the successful implementation of performance management activities in federal agencies? A proper understanding of public organizations and their management requires an approach that brings together perspectives from different social science disciplines (e.g. Gormley and Balla 2004; Lynn 1996; Lynn, Heinrich, and Hill 2001; Meier 2000; Rainey 2003; Wilson 1989). Our review of the relevant literature suggests that this can be approached from three different perspectives— organizational, political, and managerial. Implementing performance management in a governmental setting can be seen as one of these three processes, depending on the perspective taken. Drawing on a unique body of knowledge, each perspective helps identify the factors that can affect the variations among federal agencies in the implementation of this management tool. Having its roots in organizational theory, the

organizational perspective highlights the importance of organizational dimensions such as size, technology, structure, and culture of an organization, as factors that should be considered in assessing the organization's fit with any managerial strategies. The political perspective sees the political/institutional environment such as political authorities, institutional rules, or public policy processes as a critical constraint that influences the internal workings of government organizations. The managerial perspective underscores the role of managerial capacity and leadership in the process of adopting and executing any managerial plans and strategies.

The analytical framework of the present study is organized around these three perspectives. The framework correspondingly consists of three components: organizational characteristics (OC), external environmental influences (EEI), and managerial capacity and leadership (MCL). Each component includes as its subcomponents the factors that are emphasized by its corresponding perspective. Figure 1 presents this framework.

[Figure 1 about here]

The OC component shows that the implementation of performance management can be affected by a variety of organizational characteristics such as organizational size, professionalism, task nature/technology, policy tools, and organizational culture. Theoretical knowledge of these OC factors helps one figure out how they may relate to the implementation of performance management in an organizational setting. For example, organizational theory suggests that an organization's fit with performance management can be influenced by the nature of its tasks (e.g., Perrow 1967; Wilson 1989). Since outcomes of routine tasks tend to be more predictable and measurable compared to those of non-routine tasks, one can reasonably expect that organizations with routine tasks will have a better chance of successfully implementing a series of performance management activities than organizations with non-routine tasks.

The second component, EEI, indicates that a federal agency does not implement performance management practices in a political vacuum. This component indicates that external political influences can have an important implication for the viability of its performance management activities. EEI also suggests that the agency's structural features (e.g., insulating structures such as fixed term for the agency head) and operational rules (e.g., personnel autonomy) can serve as a predictor of the implementation of these activities. The literature on bureaucratic politics provides insights about these potential relationships. For example, the goals of government organizations tend to be vague, multiple and often conflicting, which is often attributed to the influences of a complex set of external political actors (e.g., Allison 1983; Dahl and Lindblom 1953; Lowi 1979; Lynn 1981; Wildavsky 1979; Wilson 1989). These goal characteristics can constrain an agency's ability to set clear goals, and subsequent activities of generating and utilizing performance information for rewards and accountability.

The MCL component suggests that an organization's ability to implement performance management can be conditioned by its managerial capacity and the competence of its leadership. The track records of performance management in government organizations demonstrate that simple adoption of a performance management program does not guarantee its successful implementation, indicating that performance management is a resource-intensive process and requires commitment of and support from competent leadership. The management literature suggests that an organization's management strategy should have a good fit with the organization's internal resources and capabilities for the strategy to work for the organization. The leadership literature also emphasizes the role of leaders and managers in bringing together these internal resources and capabilities to set the strategy in motion toward desired results. One can develop propositions regarding how these managerial factors can influence the

implementation of performance management by drawing on the broad literature on management and leadership. For example, it is reasonable to expect that the analytical capability of an organization will positively affect its performance management implementation since performance management as an information-intensive process necessitates such capacity (e.g., Ingraham, Joyce, and Donahue 2003).

The framework described above clearly shows that there exist multiple, competing perspectives and factors that should be considered in analyzing the conditions for successful implementation of performance management in federal agencies. As a step toward identifying such conditions, we test a model based on this framework. The model has a total of seven factors, including three OC factors (size, professionalism, and grants as a policy tool), two EEI factors (political influences and structural insulation), and two MCL factors (strategic planning competency and analytical capacity). The hypotheses for these factors are now examined in turn.

## **Hypotheses**

### **Organizational characteristics (OC)**

*Size.* Large organizational size should be negatively related to the implementation of performance management activities in federal agencies. A common characteristic of large organizations is that they heavily rely on rules and regulations as control mechanisms (Daft 2001, p. 290; Scott 1998, p. 11). Compared to small organizations, large organizations have greater problems of communication and coordination. To address these managerial challenges, they tend to rely on extensive use of rules and regulations as a potential solution. This tendency, however, may hamper their successful implementation of performance management activities. One important dimension of how performance management can work in an organization is that this management tool helps the organization shift its focus away from these contextual goals to

clear performance goals and targets that are results-oriented. With more rules and procedures to follow, large organizations will have more difficulty in concentrating on their “real” goals and objectives than small organizations. Large organizations will also have more trouble utilizing performance information to motivate employees. This is because the utility of performance information in making decisions about rewards and disciplinary actions diminishes as the importance of contextual goals increases.

*H1: Large agencies will be less successful in implementing performance management activities than small agencies.*

*Professionalism.* A positive relationship can be expected between professionalism and the implementation of performance management activities. Professionals possess a body of “monopolistic” knowledge that is complex and difficult to apprehend (Etzioni 1964, p. 76) and maintain performance standards to guide their own behavior and to evaluate their work outcomes. Having these characteristics, professional employees tend to be delegated “considerable responsibility for defining and implementing the goals, for setting performance standards, and for seeing to it that standards are maintained” (Scott, 1965, p. 66). As mentioned earlier, performance management is a seamless process that integrates these individual activities. One can reasonably think that professionals are better positioned for performance management activities, and thus that organizations with high levels of professionalism will have advantage in implementing such activities.

*H2: Agencies with high levels of professionalism will be more successful in implementing performance management activities.*

*Grants as a policy tool.* The nature of the tools a federal agency relies on for its mission accomplishment can affect its capacity for performance management. A policy tool is defined as

“an identifiable method through which collective action is structured to address a public problem” (Salamon 2002, p. 19). Depending on what its primary policy tool is, the agency can be situated in a wide array of policy implementation environments. These environments vary in the scope of participants, the nature of their roles, and the patterns of relationships among them (Salamon 2002, p. 19-20), all of which can have important implications for an agency’s fit with performance management. Among many types of policy tools, this study focuses on grants, which are a major instrument for federal assistance to achieve national goals.

Reliance on grants should negatively affect the implementation of performance management activities in federal agencies. Grants refer to “payments from a donor government to a recipient organization or an individual” (Beam and Conlan 2002, p. 341). As suggested in this definition, a prominent feature of this policy instrument is that it is very low in terms of directness. According to Salamon (2002, p. 29), directness denotes “the extent to which the entity authorizing, financing, or inaugurating a public activity is involved in carrying it out.” This indirect nature makes it extremely difficult for a performance management system to be properly applied to the management of grant programs. Many grant programs are administered in multi-organizational settings, including intergovernmental arrangements. Such arrangements “complicate virtually all aspects of performance management—agreement on key goals, the development of indicators, the timely collection of pertinent and valid performance data, the interpretation of an incentive system (e.g., rewards for strong performers), and more” since each party participates in the policy process with different purposes, expectations, and strategies (Fossett, Gais and Thompson 2001, p. 208).

All these problems that occur in the process of applying the performance management concept to the management of grant programs can be easily transmitted to performance

management *within* the grant agencies. Having to deal with multiple parties, grant agencies inherently have difficulty in establishing a set of performance goals and targets that are clear and limited in scope. Due to the need for constant negotiation, these agencies often have to change their goals and objectives. Dependence on third parties or interorganizational linkages and consequent lack of control over outcomes lead these agencies to rely heavily on procedural rules as a control mechanism, which can distract their managers from focusing on the organizational and program missions. With many parties and factors affecting the results of the program, performance information contains considerable “noise,” making it difficult to link employee performance and rewards in a proper manner (Marschke 2001, p. 65). Inability to get rid of the noise in the evaluation process can also lead to the difficulty in creating clear accountability relationships within the organizations. Thus,

*H3: Agencies that rely more on grants as a policy tool will be less successful in implementing performance management activities.*

### **External environmental influences (EEI)**

*Influences from political authorities.* Influences from external political authorities should negatively affect the implementation of performance management activities in federal agencies. As a typical rational management approach, performance management is very sensitive to the clarity of goals and their stability. For a performance management system to work, a set of clear performance goals should be established and these goals should stay relatively stable for a certain period of time. However, scholars point out that public agencies tend to have goals that are particularly vague, multiple, often conflicting with each other, and elusive in relation to performance evaluation and many of them attribute these characteristics to influences from the political environments in which governmental organizations operate (e.g., Allison 1983; Dahl

and Lindblom 1953, p. 459; Lowi 1979, p. 125; Lynn 1981, p. 79; Wildavsky 1979, p. 215; Wilson 1989, p. 129-131). A government agency subject to influences from multiple political stakeholders who usually have competing expectations about what the agency should do has strong incentives to avoid specifying performance goals and targets in order to prevent potential conflicts or controversy. A recent study of goals of federal agencies provides empirical support for this (Rainey and Lee 2006). The study found that agencies receiving more attention from external political authorities and influences—i.e., the president, Congress, and the media—tend to have more external goals imposed on them and to focus their evaluation efforts on strict adherence to rules and procedures rather than on the achievement of substantive goals. These findings suggest that external political influences increase the difficulties in maintaining clear, stable goals and in conducting performance-based evaluation. One can also expect that these problems subsequently decrease agency ability to utilize performance information for rewarding employees and taking disciplinary actions. In sum, high levels of external political influences are not a favorable condition for the implementation of performance management activities in federal agencies.

*H4: Agencies with higher levels of external political influences will be less successful in implementing performance management activities.*

*Structural insulation.* There should be a positive relationship between structural insulation and performance management. Structural insulation is defined as a condition of having agency design with characteristics that protect it from external political influences (Rainey and Lee 2006). An agency is considered to have insulating structures when its design has features such as independent agency status and fixed terms for administrator(s) (Lewis 2003, p. 44-9). Structural insulation is closely related to the stability of goal sets of government

agencies since “agency design determines ... the degree to which current and future political actors can change the direction of public policy” (p. 3). Insulating structures can protect the goals of an agency since these structures increase “political transaction costs” for the political actors who seek to change the priorities of a government agency (Wood and Bohte 2004). For example, the president will have more difficulty in influencing the policy direction of a federal agency headed by an executive with a fixed-term as guaranteed by the law than in affecting that of an agency managed by an executive who serves at his or her pleasure. The president has to take greater political risk in removing the agency head protected by the fixed-term requirement than in firing heads with no such protections.

A case study of organizational change by the Internal Revenue Service (IRS) identified the fixed-term given to the Commissioner as one of the factors that contributed to the organization’s successful change efforts (Rainey and Thompson 2006). According to this study, the fixed-term given to the IRS Commissioner helped him concentrate on his management agendas, providing protection from external political influences. Rainey and Lee’s (2006) analysis of 115 federal agencies also provide empirical evidence that insulating structures do reduce the effect of external influences on the goal settings of federal agencies. All these findings suggest that structural insulation can provide an institutional foundation for the proper implementation of performance management in a federal agency, protecting it from external political influences.

*H5: Agencies with higher levels of structural insulation will be more successful in implementing performance management.*

### **Managerial capacity and leadership (MCL)**

*Strategic planning competency.* An agency's strategic planning competency can contribute to its successful implementation of performance management. According to Bryson (2004, p. 6), strategic planning is broadly defined as an "a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization ... is, what it does, and why it does it." Strategic planning as a management process involves a series of steps including clarifying the reason d'être of an organization, identifying strategic issues facing the organization, formulating strategic decisions to create maximum value, and clearly communicating its intentions to gain support from the stakeholders both inside and outside its organizational boundary. Strategic planning in its ideal practice can contribute to the organization's ability to build broad consensus among both insiders and outsiders and allow it to make more informed decision makings. In other words, this management process can help the organization to enhance both "political intelligence" and rationality (Bryson 2004, p. 17).

These expectations about strategic planning suggest that successful strategic planning can provide solid foundation for the implementation of performance management activities. First of all, enhanced awareness and understanding through strategic planning regarding the mission and vision, strategic problems, and strategic directions can help the organization and its managers set clear performance objectives and targets in accordance with its strategic priorities (Ingraham, Joyce, and Donahue 2003). A close alignment of overall organizational strategies and specific performance goals creates clear lines of sights at all levels in the organization. A clear sense of strategic priorities can also reduce the confusion about which goals should take precedence over others in setting performance goals at the individual and team levels. With performance goals and targets clarified throughout the organizational hierarchy, managers will have less difficulty in producing more valid performance information. Validity of performance information, in turn,

contributes to a tighter linkage between performance and rewards and to better organizational learning. Thus, one can expect that organizational competency in strategic planning can facilitate the implementation of performance management activities in an organizational setting.

*H6: Agencies with higher levels of strategic planning competency will be more successful in the implementation of performance management activities.*

*Analytical capability.* A federal agency's analytical capacity should positively affect the implementation of performance management activities in the agency. Analytical capacity of an organization refers to the extent to which the organization has the resources that can be devoted to obtaining, processing, and interpreting the information that is needed for the management of the organization. Such resources can encompass human resources, management information systems, knowledge management systems, and others. From an information management perspective, performance management can be understood as "the process of knowledge acquisition, information distribution, information interpretation, and organizational retention" (Huber 1991; Schermerhorn, Hunt, Osborne 2005, p. 424). Thus its effective implementation requires competency in collecting, processing, and distributing performance information in a timely fashion. Analytical capacity as defined in this study can help an organization satisfy these requirements (Ingraham, Joyce, and Donahue 2003). For instance, the organization can have an advantage in producing valid performance information when it has managers with adequate education or training in policy analysis or performance measurement across its functional areas and activities. One can expect that the comprehensive knowledge-base an entity maintains for assessing and measuring its program outcomes can help it select and develop pertinent performance indicators that will guide employee behaviors. Studies also indicate that organizations with well-established management information systems can make timely use of

performance information for a variety of management decisions such as incentive applications, employee rewards, and disciplinary actions (e.g., Boston and Pallot 1997; Heeks 2002). Thus,

*H7: Agencies with higher levels of analytical capability will be more successful in the implementation of performance management activities.*

## **Data and Methods**

### **Data collection**

To test the seven hypotheses, we collected data from 108 sample federal agencies. The sample consists of subagencies in cabinet departments and independent agencies in the executive branch of the U.S. federal government. We used the U.S. Office of Personnel Management's (OPM) Federal Human Capital Survey (FHCS) 2006<sup>1</sup> as a building block for the dataset of this study. FHCS 2006 includes question items for assessing employee perceptions of the implementation of performance management practices. This survey is designed to allow not only individual-level analysis but also analysis at the agency level by providing information on each respondent's agency. Using this survey data, we calculated a series of scores that indicate how successfully each agency is implementing performance management activities for its internal management. These scores on the implementation of performance management activities were used as dependent variables in the present study.<sup>2</sup> Data on the independent variables were gathered from a diverse array of archival sources.

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<sup>1</sup> FHCS is a biennial survey that investigates how well the federal government is running its human resources management systems, using a large, representative sample of federal employees. This survey covers various dimensions of organizational management, including performance management practices, strategic management, leadership, work attitudes, pay and benefits, and others. FHCS 2006 used a stratified random sample of 390,657 federal employees across the federal government. Almost 221,479 employees responded to the survey, resulting in a response rate of 57 percent.

<sup>2</sup> These agency scores were available for 299 federal organizations in FHCS 2006, but we decided to retain only scores from 104 agencies. The remaining organizations were excluded for one or more of the following reasons: (1) The organization does not have substantive meaning as an organization (e.g., all other components—Labor); (2) The organization is a subelement of a subagency; and (3) the information on independent variables is not available for the organization.

## **Measures of the dependent variables**

This study has three dependent variables. Performance management consists of three main activities including (1) setting and communicating clear organizational goals that can cascade down to each employee, (2) monitoring and measuring performance against these goals, and (3) utilizing performance information for rewards or accountability. To measure how successfully each agency is implementing these performance management activities, we created a series of implementation scores by utilizing its employee responses to the relevant survey items<sup>3</sup>. For the first performance management activity, one item was utilized: *Q19. I know how my work relates to the agency's goals and priorities*. For each agency, we calculated its average score on this item and used this score as the indicator of the first dependent variable, setting clear goals. To assess the implementation of the second activity, one item was selected: *Q40. Managers review and evaluate the organization's progress toward meeting its goals and objectives*. Average scores on this item were calculated for each agency and were used as an indicator of the second dependent variable, performance monitoring and assessment. The implementation of the third activity was assessed using the following items: *Q27. Pay raises depend on how well employees perform their jobs*; *Q28. Awards in my work unit depend on how well employees perform their jobs*; *Q29. In my work unit, differences in performance are recognized in a meaningful way*; *Q23. In my work unit, steps are taken to deal with a poor performer who cannot or will not improve*; and *Q32. I am held accountable for achieving results*. For each agency, average scores on these five items were calculated. These scores were then combined and averaged to create a composite measure of utilization of performance information for rewards and accountability, which is the third dependent variable of this analysis.

## **Measures of independent variables: Organizational characteristics (OC)**

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<sup>3</sup> The survey items are based on a 5-point Likert scale.

*Size.* The size of each federal agency was measured by counting the number of full-time employees. The OPM's FedScope database (as of 2006) was utilized in measuring this variable.

*Professionalism.* Professional staff ratio (PSR), the proportion of professional employees in an agency, was utilized for this variable. The Central Personnel Data File classifies the federal employees into five job categories: professional, administrative, technical, clerical, and wage grade. This measure also draws on the OPM's FedScope database.

*Grants as a policy tool.* To measure the extent to which a federal agency is engaged in using this policy tool, we counted the number of grant programs each agency is currently administering using the U.S. Catalog of Federal Domestic Assistance (CFDA). The CFDA provides the most comprehensive list of federal grant programs and the agencies administering them (Beam and Conlan 2002, p. 344).

### **Measures of independent variables: External environmental influences (EEI)**

*Influences from external political authorities.* To assess the extent to which an agency is exposed to influences from external political authorities we used two proxy measures: (1) the number of political appointees in each agency as reported in the FedScope database and (2) the number of times the agency's name was mentioned in the *Congressional Record* published in 2006. These two measures reflect the influences from the president and Congress, respectively. The number of political appointees in an agency can be a relevant indicator of presidential influence on the agency since the appointment power is one of the major tools that presidents rely on to influence federal agencies (e.g., Hecllo 1977; Light 1995; West 1995). The *Congressional Record* is an excellent archival source for estimating the congressional influences on federal agencies since it covers a wide array of congressional activities that can affect the agencies' policy directions and management. A study reports that these indicators are highly

correlated with other measures of external political influences such as the number of *Weekly Compilation of Presidential Documents* and the Government Accountability Office (GAO) reports, and *New York Times* articles in which the agency name was mentioned (Rainey and Lee 2006). Thus, it is reasonable to regard the number of political appointees in an agency and the times the agency was mentioned in the *Congressional Record* as indicators of the degree exposure to external political influences. These two indicators were standardized into z-scores and then combined into a single measure of external political influences.

*Structural insulation.* An insulation index was created for each agency by checking whether it has an independent agency status (1 for yes, 0 for no) and whether its administrator serves on a fixed term as guaranteed by law (1 for yes, 0 for no). The index score of 2 means the highest level of structural insulation. Whether a federal agency has these characteristics was determined by referring to the 2004 edition of *United States Government Policy and Supporting Positions* and the U.S. Government Manual 2003-2004 edition.

### **Measures of independent variables: Managerial capacity and leadership (MCL)**

*Strategic planning competency.* We measured an agency's strategic planning capacity by drawing on the Program Assessment Rating Tool (PART) data released in early 2007. PART, an analytical tool for performance budgeting developed by the Office of Management and Budget (OMB), assesses the strengths and weaknesses of federal programs for a group of major program management areas, including strategic planning. The PART has a series of questions for assessing the quality of strategic planning of each program. These questions cover critical strategic dimensions such as the availability of long-term and annual outcome goals, the ability to ensure commitment by all the relevant parties toward the achievement of the program goals, and capacity for program evaluation. Application of these questions to a program generates a

PART strategic planning score that can range from 0 to 100. In its fifth year of application, the PART has now assessed nearly all major federal programs. With PART scores available for nearly all programs, the strategic planning scores for the programs housed in an agency can be combined to be utilized as a proxy measure of the agency's overall strategic planning capacity. Drawing on these PART program strategic planning scores, we calculated the average strategic planning score for each agency and used it as a measure of the agency's competency in strategic planning.

*Analytical capacity.* To measure this variable, we calculated the number of agency employees whose positions are classified into "Management and Program Analysis Series" as specified in the *Handbook of Occupational Groups and Families*. This handbook, published by the Office of Personnel Management (OPM), states that the positions in this category require knowledge about analytical and evaluative methods, agency missions and program goals, and techniques for long-range planning of programs and objectives, all of which can importantly affect a federal agency's ability to collect, process, and generate valid performance information in a timely fashion. Thus, one can reasonably assume that the number of analysts and advisors with such competencies in the agency indicates its analytical capacity. The OPM's Fedscope database was used to measure this indicator of analytical capacity.

### **Analysis**

Tables 1 and 2 provide descriptive statistics and zero-ordered correlations of the variables employed in the current analysis.

[Tables 1 and 2 about here]

Ordinary least square (OLS) regression was employed to test the hypotheses. Each regression model was checked for violations of the Gauss-Markov assumptions. No major violations were found. Regression results are reported in Tables 3, 4, and 5.

[Table 3 about here]

Table 3 presents the results of the regression of the first dependent variable, *setting and communicating clear goals*, on seven factors from the three components of the analytical framework of this study. The table shows that three factors—two from the EEI component (i.e., influences from external political authorities and structural insulation) and one from the MCL component (i.e., strategic planning capacity) of the framework—are significantly, and in predicted directions, associated with this performance management activity. The positive and significant coefficient for strategic planning competency (beta = .276,  $p < .01$ ) provides empirical evidence that an agency can establish goals in a manner to help its employees see clear lines of sight when the agency has the managerial capacity to develop and communicate clear strategic directions and build broad consensus among relevant stakeholders. The findings about the two EEI factors indicate that some protection or autonomy from external political influences is an important condition for successful goal setting within an agency. The negative association between influences from political authorities and the dependent variable shows that such political influences tend to make it difficult for an agency to establish clear performance goals and cascade them down to employees at various levels in the organizational hierarchy (beta =  $-.235$ ,  $p < .05$ ). The positive coefficient for structural insulation shows that agencies with insulating structures have advantage in setting and communicating clear goals across the organization (beta = .273,  $p < .01$ ).

[Table 4 about here]

Table 4 reports regression results about performance monitoring and assessment. The results show that only strategic planning competency is significantly and positively associated with the performance management activity ( $\beta = .196, p < .05$ ). The finding suggests that this MC factor provides an important managerial foundation on which managers of an agency can be committed to reviewing and evaluating the agency's progress toward meeting its performance goals and objectives. The coefficients for the other factors, except for the one for size, had the expected signs of direction but were not significant at the .05 level.

[Table 5 about here]

Table 5 presents regression results about utilization of performance information for rewards and accountability. Three factors were found to significantly affect performance management activity, including professionalism, structural insulation, and strategic planning competency. The positive and significant coefficient for professionalism ( $\beta = .175, p < .05$ ) indicates that this OC factor serves as a favorable condition for implementing performance-based rewards and accountability practices within an agency. Structural insulation was also found to have a positive and significant coefficient ( $\beta = .225, p < .05$ ). This result shows that agencies with insulating structures are better able to link performance and rewards than agencies with no such structures. The positive coefficient for strategic planning competency ( $\beta = .294, p < .01$ ) implies that a federal agency can better utilize performance information for rewards or disciplinary actions when it has ability to develop awareness and understanding of its strategic directions and priorities across the organization.

[Table 6 about here]

The results from the three regression models are summarized in Table 6. The table shows that strategic planning competency has statistically significant and positive relationships with all

of the three performance management activities, providing strong support for Hypothesis 6. This consistent pattern of relationships suggests that this dimension of management capacity may be the most important predictor in the successful implementation of performance management in a federal agency. Table 6 also shows that structural insulation has positive and statistically significant relationships with two of the three performance management activities, providing relatively strong support to Hypothesis 5 that this EEI factor will help federal agencies to successfully implement performance management. Two factors—professionalism and influences from external political authorities—were found to have significant relationships with one of the three performance management activities. The findings about these two factors, along with the fact that both factors showed expected signs of direction across the three regression models, provide some support for Hypotheses 3 and 4, respectively. Table 6 indicates that the other hypotheses were not supported in this analysis.

### **Discussion and Conclusion**

The present analysis advances our understanding of the factors that affect the implementation of performance management in federal agencies. Despite the salience of performance management in both practice and theory of public management, few studies have explored such factors drawing on data from a large sample of government organizations and considering many variables simultaneously. Building on diverse social science literatures, we developed a framework for empirical analysis of the subject. From this framework, a total of seven hypotheses were advanced for empirical testing. The results of the present study suggest that there may be a certain set of conditions that are conducive to successful implementation of performance management in federal agencies.

This analysis showed that an agency's strategic planning competency is an important factor that can significantly affect its ability to successfully implement a series of performance activities, including setting and communicating clear goals, performance monitoring and assessment, and utilization of performance information for rewards and accountability. Our analysis provides empirical evidence that these performance activities can be more successfully implemented in an agency that is better able to develop clear strategic directions and to build consensus among stakeholders in and outside of the organization, than in agencies that lack such capacity. This finding suggests that the strategic planning competency of an agency should be an important consideration in making decisions about the adoption and implementation of performance management practices for internal workings of the agency. Federal agencies vary significantly in this capacity (GAO 1997, 1999). The literature suggests that differences among agencies can be related to various factors such as resource munificence, task complexity, leadership competency or commitment, complexity of the policy process, and conflicts about missions and activities (e.g., Bryson 2004; Boyne *et al.* 2004; Ingraham, Joyce, and Donahue 2003; Roberts 1993, 2000) . Our analysis indicates that a careful assessment of an agency's strategic planning capacity in relation to these internal and external factors can enhance the chance of successful implementation of a performance management system in the agency.

The findings about the EEI factors suggest that the political context in which an agency operates should also be seriously considered for decisions about whether to implement a performance management system in an agency, as already alluded to in the literature (e.g., Radin 2000; Pollitt 2006). This study showed that federal agencies exposed to more influence from the president and Congress tend to have greater difficulty in setting goals in a manner that provides a clear line of sight for employees than agencies that are less exposed to such influence. Our

analysis also showed that agencies that are protected from external influences by insulating design features are in a better position to implement performance management activities than agencies with no insulating structures. These findings imply that depending on the nature of the political/institutional environment in which an agency is situated, the agency may or may not have a good fit with performance management.

Professionalism also needs to be discussed. It is noteworthy that this OC factor has a significant association with a performance management activity, utilizing performance information for rewards and accountability. This finding suggests that performance-based reward/accountability systems such as pay-for-performance may be better implemented in highly professionalized agencies than in other agencies. Federal agencies vary significantly in the degree to which they need and hire professionals, and these variations seem to be closely related to the differences in task nature—more specifically, task complexity—among different agencies. Agencies charged with highly complex tasks requiring expert or professional knowledge are often given considerable discretion about how to run their programs (Gormley 1989). Autonomy over task decisions, including those regarding means and techniques, may play a key role in relatively more successful implementation of performance-based reward systems in more professionalized agencies (Scott 1998, p. 254). In a similar context, such performance management plans may be better applied to federal employees in the professional category in the federal job classification scheme, considering that the professionalism measure as employed in the present study reflects the professional staff ration of the agencies.

The findings reported in this study are encouraging overall, contributing to the knowledge on implementation of performance management in federal agencies. However, this study has much room for improvement. As indicated in the  $R^2$  statistics of the regression models,

the explanatory power of this study needs to be enhanced. The models included a total of seven factors, which clearly is an underrepresentation of factors within the analytical framework as advanced in this study. The framework suggests that a better understanding of the conditions for successful implementation of performance management requires inclusion of additional factors such as task complexity, managerial autonomy (financial or personnel), leadership quality, and others. Future studies need to use more complete models by broadening the scope of the factors to be included in the analysis. It should also be noted that better ways to measure dependent variables need to be developed. This study used a dataset from a survey that has a limited set of question items on performance management. For this limitation, two of the three indicators of performance management activities had to be created from only one survey item. A better understanding of the implementation of performance management requires developing and using more valid indicators of performance management activities.

Despite these improvement needs, however, the findings of this exploratory study still have value, providing implications for the discussion on administrative reform. This study identified a set of potential conditions that can influence performance management, which is one of the most widely embraced New Public Management (NPM) reform ideas. One important implication of this study is that any administrative reform effort needs to take a sophisticated approach that goes beyond treating all administrative agencies as if they are equal in all important aspects. As emphasized throughout this study, government organizations do differ in many respects and the differences that exist among them should not be ignored.

Unfortunately, reformers often do not take one simple fact into account: one size doesn't fit all. A recent pay-for-performance initiative by the Bush administration is a good example. Pay-for-performance, a typical management idea that attempts to control the behavior of

organizational members through a tight linkage between performance and monetary rewards, requires a seamless integration of performance management activities such as goal setting, performance monitoring and measurement, and analysis and application of performance information. As a part of the President's Management Agenda (PMA), the idea of using pay-for-performance practices for better performance and accountability in the federal government has been strongly promoted by reformers within the administration. They are seeking to extend this performance-based pay practice to almost all federal agencies and to the majority of federal employees. The findings of this study, however, imply that not many federal agencies have a good fit with this performance management idea. The current administration's active pursuit of pay-for-performance seems to be a result of poor consideration of the agency differences, which may have a critical implication for the successful implementation of this management tool.

We believe that the same observation can also be extended to other performance management initiatives currently implemented in federal agencies, and to the ones pursued by many state and local governments. A careful analysis of past performance management reform efforts shows that reformers tend not to take agency differences into account and assume that all agencies could successfully implement a series of performance management activities. This study highlights the importance of the notion of strategic fit and its implication for performance management initiatives: performance management as a management strategy can work for an organization only when it has a good fit with its external and internal environments. The findings of the present study bring "needed realism to the hard job of pursuing management reform," emphasizing the importance of taking a contingency approach to management reform (Nathan 2001, p. 16).

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Table 1 Descriptive Statistics

	Mean	Std. Dev.	Min.	Max.
<u>Performance Management (Dependent Variables)</u>				
Setting and communicating goals	3.79	0.18	3.27	4.42
Performance monitoring and assessment	3.55	0.23	2.85	4.11
Utilization of performance information	3.14	0.19	2.71	3.70
<u>Organizational Characteristics</u>				
Size (log)	7.86	1.67	3.09	11.29
Professionalism	0.25	0.21	0.00	0.76
Grant as a policy tool	7.71	16.09	0.00	94.00
<u>External Environmental Influences</u>				
Political influences	0.05	1.10	-0.97	5.66
Structural insulation	0.39	0.69	0.00	2.00
<u>Managerial Capacity</u>				
Strategic planning competency	79.21	14.30	37.15	100.10
Analytical capability	221.15	409.33	0.00	2887.0

Table 2 Correlation Matrix

	1	2	3	4	5	6	7	8	9
1. Setting goals									
2. Perform. assessment	.91**								
3. Utilization of P. info.	.78**	.71**							
4. Size (log)	.17	.19	-.05						
5. Professionalism	.03	.00	.17	-.03					
6. Grant	-.16	-.17	-.13	.06	.22*				
7. Political influence	-.02	.01	-.04	.45**	.14	.39**			
8. Structural insulation	.14	.09	.24*	-.24*	.07	-.14	.17		
9. Strategic planning	.31**	.26**	.33**	.06	.03	-.30**	-.02	.07	
10. Analytical capacity	.20*	.21*	.06	.55**	-.07	.16	.46**	.03	.08

\*\* Significant at the 0.01 level; \* Significant at the 0.05 level.

Table 3 Regression Results for Setting and Communicating Clear Goals

	Coefficients	Std. Error	Beta
<b>Organizational Characteristics</b>			
Size (log)	.023*	.014	.220
Professionalism	.052	.082	.061
Grant	.000	.001	-.029
<b>External Environmental Influences</b>			
Political influences	-.035*	.020	-.217
Structural insulation	.051	.028	.200
<b>Managerial Capacity</b>			
Strategic planning competency	.003**	.001	.252
Analytical capacity	.000	.000	.156
Note: R2 = .184; Adjusted R2 = .125; F-value = 3.10**; Sample size = 104			
* Significant at .05 level; ** Significant at .01 level; ***Significant at .001 level.			

Table 4 Regression Results for Performance Monitoring and Assessment

	Coefficients	Std. Error	Beta
<b>Organizational Characteristics</b>			
Size (log)	.026	.018	.188
Professionalism	.045	.110	.041
Grant	-.001	.002	-.087
<b>External Environmental Influences</b>			
Political influences	-.029	.027	-.137
Structural insulation	.041	.037	.122
<b>Managerial Capacity</b>			
Strategic planning competency	.003*	.002	.196
Analytical capacity	.000	.000	.160
Note: R2 = .144; Adjusted R2 = .082; F-value = 2.31*; Sample size = 104			
* Significant at .05 level; ** Significant at .01 level; ***Significant at .001 level.			

Table 5 Regression Results for Utilization of Performance Information for Rewards and Accountability

	Coefficients	Std. Error	Beta
<b>Organizational Characteristics</b>			
Size (log)	-.000	.015	-.004
Professionalism	.162*	.089	.175
Grant	.000	.001	-.014
<b>External Environmental Influences</b>			
Political influences	-.025	.022	-.144
Structural insulation	.063*	.030	.225
<b>Managerial Capacity</b>			
Strategic planning competency	.004**	.001	.294
Analytical capacity	.000	.000	.111

Note: R2 = .196; Adjusted R2 = .137; F-value = 3.37\*\*; Sample size = 104

\* Significant at .05 level; \*\* Significant at .01 level; \*\*\*Significant at .001 level.

Table 6 A Summary of the Regression Results

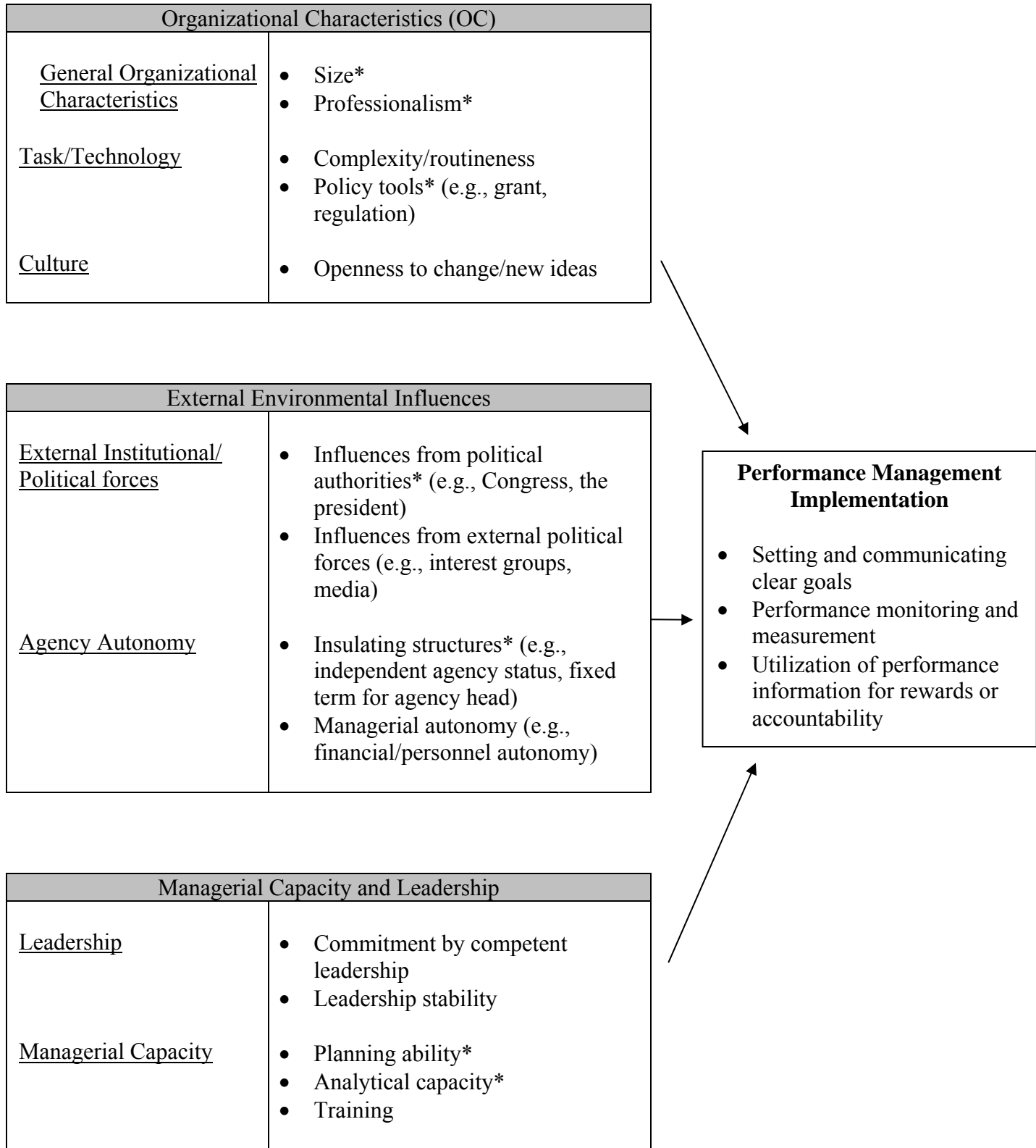
Factors	Hypothesis	Dependent Variables		
		1	2	3
<b>Organizational Characteristics</b>				
Size (–)	H1			Supported
Professionalism (+)	H2			
Grant (–)	H3			
<b>External Environmental Influences</b>				
Political influences (–)	H4	Supported		Supported
Structural insulation (+)	H5	Supported		
<b>Managerial Capacity</b>				
Strategic planning competency (+)	H6	Supported	Supported	Supported
Analytical capacity (+)	H7			

Dependent variable 1 = Setting and Communicating Clear Goals

Dependent variable 2 = Performance Monitoring and Assessment

Dependent variable 3 = Utilization of Performance Information for Rewards and Accountability

+ or – in the parentheses denotes a hypothesis direction.



\* denotes the variables that are included in the current analysis

Figure 1 Factors Affecting Performance Management Implementation in Public Agencies