

**A UTILIZATION ASSESSMENT OF THE TEXAS
PERFORMANCE MEASUREMENT SYSTEM**

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Table of Contents

Abstract	3
Chapter One: Introduction	4
Chapter Two: Literature Review	8
Introduction.....	8
History of Performance Measurement.....	8
Utilization of Performance Measures.....	15
Performance Measurement Development.....	16
Communication.....	17
Information.....	20
Resources.....	22
Performance Measurement Implementation.....	27
Disposition.....	28
Bureaucratic Structure.....	36
Decision-making.....	41
Summary of Conceptual Framework.....	43
Chapter Three: Setting	48
Introduction.....	48
Performance Measurement in Texas.....	48
Summary.....	53
Chapter Four: Methodology	54
Introduction.....	54
Research Technique.....	54
Operationalization of Conceptual Framework.....	55
Sample.....	58
Statistics.....	59
Summary.....	60
Chapter Five: Results	61
Introduction.....	61
Working Hypothesis One: Effective Communication.....	61
Working Hypothesis Two: Information.....	62
Working Hypothesis Three: Resources.....	63
Working Hypothesis Four: Disposition.....	64
Working Hypothesis Five: Bureaucratic Structure.....	68
Working Hypothesis Six: Decision-making.....	70
Summary.....	71
Chapter Six: Conclusion	75
Introduction.....	75
Conclusions.....	75
Limitations.....	81
Recommendations.....	81
Bibliography	83
Appendix A	87
Survey Letter.....	88
Survey Instrument.....	89

A Utilization Assessment Of The Texas Performance Measurement System

ABSTRACT

Developing and implementing effective performance measurement systems is difficult. The myriad of people and bureaucracy that must be navigated can be daunting. Texas state government, however, is committed to charting forward with utilization of the performance measurement system it devised over a decade ago. Scholarly literature underscores utilization factors that influence the development and implementation of an effective performance measurement system. The present research explores the attitudes and perceptions of state agency executive directors regarding the use of the current Texas performance measurement system. The factors of communication, information, resources, disposition and bureaucratic structure were derived from the literature and developed into five hypotheses that comprised the research framework. A sixth overarching hypothesis explored the use of performance measurement for critical decision-making. This study reports results of a survey that queried state agency directors on their assessment of the Texas performance measurement system. Evidence was found that the Texas performance measurement system is developed with effective communication and good information. Proper resources are invested in the system. Furthermore, evidence was found that agency directors believe stakeholders have a disposition favorable towards implementation of the performance measurement system. It was also found that agency directors believe the bureaucratic structure of government only moderately hinders performance measurement implementation. Finally, evidence was found that agency directors believe the performance measures are not adequately utilized for critical decision-making in Texas government.

Chapter 1: Introduction

Introduction

Budgeting is possibly the most critical function governments perform. The public budget operationalizes policies and mandates created for a government to provide public services. It is a daunting task. For the past century governments have grappled with the task of improving this function and increasing public sector accountability (Gianakis, 2002, p. 37). Public administrators experimented with and heralded numerous budget reforms through the years resulting in, with differing levels of success, various budgeting processes (2002, p. 37). Through these experiments, administrators developed performance measurement systems to increase governmental accountability (2002, p. 41). Today, performance measurement continues to capture the interest and support of public administration researchers (Coplin et al., 2002, p. 699). As budget processes come and go, performance measurement as a means of improving and monitoring performance remains a key to public budgeting and management.

Utilization, however, of performance measurement systems and the performance measures that comprise them, varies significantly among public organizations (2002, p. 699). This stokes the need for further research. What are the critical factors that influence performance measurement utilization? Understanding these factors can aid in promoting effective performance measurement in the public sector. After all, performance measures

reveal important information on organizational performance and behavior. Promoting performance measurement utilization can only improve the governmental process.

Today, performance measurement is not only a process for budgeting, it is also seen as a means to guide and manage policy (Coplin et al., 2002, p. 699). Performance measurement improves accountability and makes government more competitive and responsive (Wholey & Hatry, 1992, 605). Additionally, measuring performance adds transparency to government functions, making the process easier to understand by the public (Coplin et al., 2002, p. 700). Organizational barriers, however, can impede the effective development and implementation of performance measurement systems. Consequently, organizational leaders are responsible for overcoming the barriers that hinder successful implementation (2002, p. 702). Effective performance measurement involves using the information, incorporating performance information into the organizational culture, and linking information from performance data to program and budget decisions (2002, p. 702). Understanding the utilization factors can promote successful performance measurement usage.

Research Purpose

The purpose of this research is to investigate the attitudes and perceptions of state agency leaders toward the utilization of the current performance measurement system for the state of Texas. This study complements nationally recognized research by Timothy L. Wilson that explored pragmatism in the utilization of performance measurement in Texas state government.¹ Texas has a solid history of developing and using performance measures which

¹Timothy L. Wilson's "Pragmatism and Performance Measurement: An Exploration of Pragmatic Practices in Texas State Government" won the National Association of Schools of Public Affairs and Administration's Pi Alpha Alpha Manuscript Award in 2002. Wilson is Texas State University - San Marcos MPA program alum.

makes the state fertile terrain for exploration. At the center of this research is the tenet that performance measurement, when utilized appropriately, leads to better decision-making. Literature on performance measurement, budgeting, and organizational behavior is examined in order to gain a historical perspective of the issue and to develop a framework that can be used to collect data. Specifically, this research will analyze the critical utilization factors influencing the adoption and development of performance measures and their implementation in the state budget process. The research will serve to gain a deeper understanding of what is required for the successful use of performance measurement. This understanding can be applied when developing a performance measurement system or fine tuning an existing one.

Furthermore, this research will explore the utilization factors of development and implementation of the measures.² On the one hand, the study will delve into the rational-technical factors which influence the development of performance measures and the cultural-political factors that influence the implementation of performance measures. The literature reveals that in many cases performance measures can be developed well but, ultimately, implemented poorly due to the rational-technical and cultural-political divide.

In 1991, the state of Texas passed legislation creating a performance based budgeting system linking strategic plans to goals and measures (Broom, 1995, p. 3). Within this process, state agencies formulate strategies for achieving goals and the legislature makes budget decisions based on agency performance (1995, p. 3). Performance measures are used to determine agency success in attaining established goals (1995, p.4). Furthermore, performance budgeting involves

² Julnes & Holzer (2001, p. 695) write that utilization is a “behaviorial process with two stages, adoption and implementation.” In their study, adoption represents performance measure development. The author credits their work and the work of Grizzle and Pettijohn (2002) as inspiration for this applied research project.

the cooperation of a significant number of individuals and agencies within the state bureaucracy. Consequently, agency executive directors shoulder the responsibility of fostering cooperation necessary for performance measurement system success.

This study will explore the attitudes and perceptions of state agency executives regarding the utilization of performance measures and provide an assessment of their use in Texas state government. It will also explore their effectiveness as decision-making tools. With the fiscal future of Texas in question, the value of researching these critical budget instruments has never been timelier.

Moreover, the framework developed within the study can be used as a model for applied research to understanding how utilization factors strengthen or weaken a performance measurement system. Ultimately, this research will expand the literature regarding performance measurement and improve the understanding of its utilization in government.

To achieve the research purpose, the following study is divided into five chapters. Chapter Two presents scholarly literature that creates a foundation on which to build the research, and leads to the development of the conceptual framework. Next, Chapter Three describes the setting of Texas state government, the environment in which the research is conducted, and the use of performance measures in state agency management and budgeting. Chapter Four describes the methodology used to operationalize the working hypotheses developed in Chapter Two. The survey instrument is presented along with procedures utilized to gather and analyze research data. In Chapter Five, the survey results are revealed and analyzed by working hypothesis. Finally, Chapter Six synthesizes survey results into an assessment of the current Texas performance measurement system and recommends further research as well as future action for policy improvement.

Chapter 2: Literature Review

Introduction

The purpose of this chapter is to provide an overview of the available literature on performance measurement, budgeting, and organizational behavior. The literature is ripe with accounts of what to measure, how to measure, and why to measure, however, there is a need for more research exploring performance measurement utilization in state government, thus increasing the value of this research. Furthermore, in times of fiscal stress assessing the tools utilized to cope with budget shortfalls becomes more salient.

Throughout most of the last century, performance measurement has been at the core of the public administration lexicon (Lynch & Day, 1996, p. 405). Performance measurement is a language governments speak and performance measures are the steady vocabulary that weaves through each passing budget chapter. The research claims that performance measures will continue communicating information to public administrators in the future (Melkers & Willoughby, 1998, p. 72; Coplin et al., 1998, p. 699; Gianakis, 2002, p.38). Therefore, comprehending and interpreting this complex language can aid in perpetuating its effectiveness and understanding.

History of Performance Measurement

The basis of performance measurement is return on investment (Lynch & Day, 1996, p. 404). Performance measurement is a policy governments utilize to ensure they are getting a

quality product for their tax dollar investment (1996, p. 404). The origins of this policy can be traced back almost a century to the Progressive and the scientific management movements (1996, p. 405).³ In fact, performance measurement ascended along with the modern study of public administration, for example, the New York Bureau of Municipal Research which advocated “for rational, scientific management principles designed to improve community service (1996, p. 405).” Early theorists promoted the ideals of setting performance standards and measuring work that are the foundation for modern performance measurement (1996, p. 405). As far back as 1912, the goal was to use performance measures in the decision-making process (1996, p. 405).

Another significant milestone for performance measurement occurred in 1949 with the Hoover Commission’s promotion of performance budgeting (Jordan & Hackbart, 1999, p. 68). The commission recommended that the federal budget be based on achievement of “functions, activities, and projects,” in essence, on performance. The advent of the 1960s brought with it Planning-Programming-Budgeting (PPB) that introduced a systems analysis approach to government and incorporated measures (Lee & Johnson, 1977, p.87).⁴ In the 1970s, Management by Objectives (MBO) reigned as a budget management system focusing on objectives in terms of workload measures (1977, p. 115).⁵ Furthermore, increasing government budget deficits in the 1970s lead the Urban Institute and the International City

³See Lynch & Day (1996, p.404-419) and Williams (2003, p. 643-659) for a thorough historical and theoretical analysis of performance measurement.

⁴PPB originated in the Department of Defense in 1961 and based “upon the limited rationality model of decision making in which multi-year plans are established and incremental decisions are used to adjust these plans (Lee & Johnson, 1977, p 107).”

⁵MBO involved all levels of bureaucracy in the establishment of objectives. Participation of lower level personnel in developing objectives was considered important and motivated productivity in staff (Lee & Johnson, 1977, p. 115).

Management Association to respond with initiatives calling for performance measurements and data collection processes (Lynch & Day, 1996, p. 408).

In 1993, the federal government passed the Government Performance and Results Act (GPRA) and since then “performance measurement has been enshrined as the very essence of sound agency management and accountability (Kravchuk & Schack, 1996, p. 348).” In the wake of the GPRA’s passage, numerous professional associations have advocated for governments’ use of performance measurement to promote accountability and efficiency in their budgeting processes (Gianakis, 2002, p. 35).⁶

Today, 47 of the 50 states have performance budgeting requirements and utilize performance measures (Melkers & Willoughby, 2001, p. 54). States have varying degrees of performance budgeting, however, some have more comprehensive and successful performance measurement systems than others.

Performance Measurement Defined

Performance measurement is the monitoring and reporting of program accomplishments in attainment of goals established by an organization (Wholey & Hatry, 1992, p. 604). It is comprised of a network of performance measures that are the units of measure in the system and determine the level of “inputs, workloads or activity levels, outputs or final products, outcomes of products or services, and productivity (Greiner, 1996, p. 12).”⁷ Performance measures are used to capture quantitative and observable data that can be used to assess whether performance

⁶Including: The American Society for Public Administration, National Academy of Public Administration, Government Finance Officers Association, National Advisory Council on State and Local Budgeting (Gianakis, 2002, p. 35).

⁷Nichols (1997, p.411) defines a performance measure as a “unit of measure; time, dollars, and work-units (*e.g.* cases, calls, closures) are typical units of measure in governmental processes.”

targets have been met (Nichols, 1997, p. 415). Performance measurement is usually contained within a larger performance budgeting policy schema.

Rational Theory vs. Political Theory

The conflict between theory and practice is a primary theme in the literature of public administration (Coplin, 2002, p. 708). Similarly, this dichotomy parallels the conflict evident between performance measure development and implementation, the two components of utilization. Performance measure development is founded in rational and technical concepts while implementation is influenced by political and cultural influences. Melkers and Willoughby (2001, p.56) assert that “performance measurement in the U.S. has attempted to inject rational decision tools and a sense of objectivity or economic thinking into a highly political process.” Distinguishing between the influences is helpful when analyzing performance measure utilization.

Performance measurement is premised on the notion that it will improve government resource allocation and administrative decision-making by infusing an analytical and technical dimension into public management (Kravchuk & Schack, 1999, p. 351). According to Julnes and Holzer (2002, p. 695), performance measures are, “deeply rooted in the tradition of scientific management” and give public managers the tools to “replace irrationality with technically rational actions.” Therefore, performance measures have become integral to rational government organizational management (Kravchuk & Schack, 1999, p. 351).

Nevertheless, the shortcomings of performance measures must be understood if their rational value is to be realized. Lynch and Day (1996, p. 414) explain that performance measures, as fixed goals, function in contrast to the governmental process dynamic that relies on

multiple policy objectives and coalition support found in bureaucracies. Furthermore, they propose that, even with the advances of technology, there is no means to determine a “single best measure of performance,” at least not in the public sphere (1996, p. 414). This creates a need to study performance measurement within a political context.

Consequently, Radin (1998, p.311) argues that while it appears performance measurement will support more rational decision-making, the structure of government may actually hinder the process.⁸ After all, the rational benefits of performance measures do not manifest in a vacuum and must be weighed in a political context (Julnes & Holzer, 2002, p. 696). Political theorists criticize the rational school and stress the important contextual role politics plays in organizations and management that weigh heavily on decision-making (2002, p. 696). While government problem-solving necessitates the rational use of information, decisions made in a political environment, one enveloped in deal-making and compromise, influence how actors utilize the information. Hence, politics leads Heinrich (2002, p. 722) to conclude that, realistically, performance measures are best suited for policy guidance and not for the strict measurement of government performance. Ultimately, performance measures may lack effectiveness for allocation decision-making since “budgeting is intrinsically and irreducibly political (Jordan & Hackbart, 1999, p. 72).”

Resource Scarcity: The Need for Performance Measures?

Performance measurement is considered a rational method for coping with declining budgets. Shields (1988, p. 67) asserts that in order to deal with fiscal stress “rational approaches to management” are recommended. Performance measures fit the criteria and are viewed as

⁸Broom (1995, p. 14) cites that, in Texas, agency staff had the unfulfilled expectation that performance budgeting would change the political budgeting process to an analytical one.

rational aids to decision-making since they promote the efficient utilization of resources (Lynch & Day, 1996, p.405; Gianakis, 2002, p. 38). In times of fiscal stress the demand for rational information contained in performance measures would appear to be in high demand and galvanize public managers and organizations to champion performance measure usage in the budget process. In fact, Gianakis (2002, p. 38) posits “these fiscal trends bode well for an enhanced role of performance measurement.”

Another reality in a cutback environment is the increased politicization of the budgetary process. The literature reveals that the more politicized the environment, the less important performance analysis becomes. While performance measures are still valuable as performance indicators, the decision-making process often times becomes one based on political choice instead of rational information (Plant & White, 1982, p. 65). Plant and White (1982, p. 65) forewarn that the cutback environment in itself is highly irrational, creating an unstable atmosphere making budget decisions a matter of survival. This environment creates an operational challenge for public administrators that base rational decisions on technical and analytical data. Yet, current fiscal trends project that budget constraints and the demand for services will continue,⁹ increasing the necessity for workable tools that give the perception of rationality to the budget process.

While the literature asserts the more politicized the environment the less reliance placed performance data, Levine (1978, p. 322) notes “this criterion assumes organizations are fully rational actors, an assumption easily dismissed.” Add budget shortfalls to the atmosphere, and critical decisions on budget cuts become a mix of “analysis and political bargaining (Levine,

⁹Boyd (2002, p.8) explains that state finances will be tight for the next several years and cites increased Medicaid costs and decreased sales tax receipts as major factors burdening states.

1978, p. 322).” Even if a system becomes more political or irrational during cutbacks, there could still be a call among decision-makers for use of performance measures. If performance measures are mandated, there is no getting around them.

Political Climate: The Demand for Performance Measures?

The current political environment seems to demand for the use of performance measures in government. Today, the political landscape of government is treacherous for public administration. Not only are all levels of government experiencing budget shortfalls and taxpayer unrest, but researchers expound on the endemic loss of societies’ confidence in public institutions (Gianakis, 2002, p. 37; Caiden, 1998, p. 36). Gianakis (2002, p. 37) warns that the public discontent towards government does not simply flow from the reinvent government movement of the past decade, but from a democratic “secular shift” regarding the size and purview of government. The politics of less government, not necessarily more efficient government, is a cause of concern for conscientious public administrators. Furthermore, the specter of privatization continues to loom large in government on the pretense that government should be run “like a business” however; even businesses are wrought with their own managerial ills and inefficiencies.

In this volatile climate, performance measures may just be the most critical line of defense for politicians and public administrators rallying against the dismantling of critical public programs. Caiden (1998, p. 37) explains that government’s role is devolving to one of “funder, lender, contractor, or regulator” and not the provider of public services which increases the need for public servants to “watch out for the value of money.” Public managers can elevate their role and enter the public discourse through performance data that reveals whether

service delivery systems are running efficiently and effectively (Gianakis, 2002, p. 38).

Performance monitoring professionalizes the role of public administrators by affording them the discretion to employ their expertise to achieve program outcomes (2002, p. 38). External groups and citizens will continue to demand to see verifiable results and, although the climate is unstable, Gianakis (2002, p. 40) maintains performance measures are the best defense to ensuring tax dollars are spent wisely.

This research explores the attitudes and perceptions of state agency directors towards the utilization of the current Texas performance measurement system. Working hypotheses are developed from an exhaustive review of scholarly literature that provides the framework of this empirical research. The study reports results of a survey distributed to all Texas state agencies to assess how performance measures are developed and implemented. The final chapter offers concluding insights and recommendations on the research project.

Utilization of Performance Measures

The utilization of performance measurement involves critical factors influencing the adoption and development of performance measures and their implementation in the state budget process (Julnes & Holzer, 2001, p. 693). Studying these factors enable a deeper understanding of what is required for the successful use of performance measurement. The literature highlights five factors influencing the utilization of performance measure in government. For the purpose of this research, utilization consists of the stages of development and implementation.¹⁰ These factors include communication, information, resources, disposition, and bureaucratic structure.

The first three factors represent elements that are rational and technical influences on the

¹⁰Julnes & Holzer (2001, p. 695) explain there is a clear distinction between policy stages of development and implementation. The former attracts a large audience and support, while the latter highlights controversy.

utilization process. The latter two factors address the political and cultural aspects of the utilization process. Combined these factors are links in the chain of the utilization process leading ultimately to the budget allocation decision-making conclusion.¹¹

Epstein and Olsen (1996, p. 44) assert that assessing the utilization of performance measures for decision-making begins with evaluating how the system is developed and implemented. Melkers and Willoughby (2001, p. 57) advise that “providing performance information in the budget process, while not transforming the decision process, is adding value to the deliberations.” Instead they stress that performance measures create a more informed environment that leads eventually to better decision-making by individuals. Ultimately, however, resource allocation in the formal budget process is the focus of performance measurement (Gianakis, 2002, p. 35). Therefore, the evaluation of performance measures’ true potential to improve the quality of the decision-making process is yet to be realized. As it stands there is scant evidence of states linking performance measures to their budget allocation decisions (Melkers & Willoughby, 2001, p. 62).¹²

Performance Measure Development

Lynch and Day (1996, p. 415) reveal that utilizing effective performance measurement systems is difficult since once developed they are often times implemented in organizations that do not have the analytical ability to sustain them.”¹³ Organizations frequently develop

¹¹This chapter reveals interconnectedness among rational and technical factors and cultural and political factors that work to promote and/or hinder the performance measurement utilization process.

¹²Gianakis (2002, p. 36) reports that usage of performance measures in local government varies from 25% to 80%. Also, their effectiveness on this sector’s resource allocation is undetermined.

¹³Lynch and Day (1996, p. 415) define this condition as suffering from “internal capacity dysfunction.”

unrealistic expectations regarding the promise of the performance measurement system to improve performance. Gianakis (2002, p. 43) attributes the heightened expectations to “the nature of change and innovation in public management and the capacity to generalize successful techniques of public management.” Simply put, one size performance measurement does not fit all.

Communication

Good communication is a necessary component of an effective performance measurement system (Grizzle & Pettijohn, 2002, 52). After all, a critical reason for performance measurement is program evaluation and the genesis of evaluation is rooted in communication (Behn, 2003, p. 588). Defining performance requirements is the first step to measuring performance. Behn (2003, p. 588) asserts that before public managers can evaluate a public agency and establish measures, agency goals must be clearly defined and communicated. Likewise, Joyce (1997, p. 8) posits that measuring performance requires linking knowledge of the agency with a thorough understanding of what the organization is trying to achieve. Caiden (1998, p. 41) concurs with the need for good communication, and suggests that measures are hard to develop when agency goals are ambiguous.

Furthermore, Long and Franklin (2004, p. 314), advise there must be clear lines of communication and a collaborative relationship among stakeholders. Ideally, “communication should be two-way, thus fostering access” to information and establishing working relationships that can lead to successful policy outcomes (Long & Franklin, 2004, p. 314). Acknowledging the need for two-way communication ameliorates an impediment to implementation.

Wilson (2001, p. 44) found that certain pragmatic “community of inquiry principles” are evident in the Texas performance measurement system. These community of inquiry principles attest to the communication and collaboration necessary for performance measure development. Notably, he cites that agencies involve their line staff in the development of performance measures (2002, p. 44). Wilson, however, discovered that input from outside stakeholders for performance measure development is weak and that the Legislative Budget Board (LBB), dominates the process (2001, p. 44).¹⁴

According to Epstein & Olsen (1996, p. 42), a well developed performance measurement framework must also be part of a systemwide strategic plan. Kravchuk & Schack (1996, p. 350) and Heinrich (1999, p. 363) explain that performance measures must correlate with established goals for accomplishment and should be developed with a direct linkage to strategic plans. The collaborative effort necessary in establishing these policy objectives, contained in agencies’ strategic plans, will have a positive impact on the quality and usefulness of measures developed (Radin, 1998, 308). Objectives derived from an agency’s strategic plan provide a foundation for the development of specific measures, which are then used for program evaluation and interpretation (Kravchuk & Shack, 1996, p. 350). Julnes and Holzer (2001, p.695) support the bridging of strategies and goals with performance measures, and believe organizations focused on goal attainment are more conducive to successfully employing performance measures.

Radin (1998, p. 315) claims that difficulties are eminent when there is a disconnect between the development of strategic plans and performance plans in the performance

¹⁴Wilson (2001, p. 48), with respect to the hypothesis of mutual collaboration in performance measurement development, found that “the power in the measurement development process seems to reside with the LBB.” The Legislative Budget Board (LBB) is an organization with primary performance measurement authority for Texas state agencies.

measurement process. She notes the need for a close link and good communication, almost an interdependency, between the creators of both documents (1998, p. 315).

Communicating directives is another requirement of effective performance measurement development. Grizzle & Pettijohn (2002, p. 52, p. 54) and Grifel (1994, p. 20) stress that stakeholders utilizing performance measures should receive “clear, accurate, and consistent” guidance information from agency leaders on how to implement these tools since details on their utilization is often vague. The task, however, is often difficult to achieve since one clear statement can be interpreted in as many different ways as there are stakeholders (Grizzle & Pettijohn, 2002, p. 54). Likewise, Heinrich (2002, p. 716) advises caution, and reports that federal agencies have found it difficult to link their long-term strategies to performance goals. Nevertheless, clear guidance information is needed to develop an effective performance measurement system.

Furthermore, Behn (2003, p. 569) emphasizes if policy objectives are clearly understood by line staff and the performance measurement system is developed rationally, staff would be less fearful of performance measures. Similarly, Wilson (2001, p. 24) points out linking performance with budgeting can “engender a certain fear in program managers.” He notes that a reaction to fear is the construction of easily achievable measures and to falsify results (2001, p. 24).

Finally, the Legislature plays a significant role in fostering better performance measurement policy by “clearly defining ends of high intrinsic value to the public” while enabling public managers to determine the means (Moore & Heneghan, 1996, p. 171). Leaders increase trust in the system and offer purposeful direction by articulating the requirements of

expected accomplishments. Good communication perpetuates a cycle, positively affecting the development of good measures thus increasing an agency's disposition to implement.

As a result of these research findings, the following hypotheses, which assess state agency directors' attitudes towards evidence of effective communication principles in the development of performance measures, are developed:

Working Hypothesis 1 (WH1):
Effective communication is evident in the performance measurement system.

Working Hypothesis 1a (WH1a):
Strategic plans are clearly communicated.

Working Hypothesis 1b (WH1b):
Performance information guidance is clearly communicated.

Information

The cornerstone of an effective performance measurement system is access to good information. Effective performance measures must be developed with reliable and accurate information to ensure their usefulness and be monitored to ensure data validity and quality (Lane, 2002, p. 15). According to Kravchuk and Schack (1996, p. 357) good measures are reviewed and revised as an ongoing management process. This fosters a perception of accuracy which contributes to their impact on the utilization process (Frederickson, 2002, p. 11). Epstein and Olsen (1996, p. 44) note that accurate and credible information is important and works "to ensure performance results are accepted by elected officials and the public."

Kravchuk and Schack (1996, p. 357) warn against the aggregation of too much information that can paralyze staff and yield the measurement system ineffective. Behn (2003,

p. 592) concurs, and terms this condition “noise” that perpetuates confusion when there is a proliferation of information. Likewise, Behn (2003, p. 592) explains that agencies must develop the ability to filter out excessive information, extract useful data, and develop key measures. Moreover, Lane (2002, p. 15) notes that the “volume of information that must be managed is staggering,” therefore administrators should concentrate on performance measure quality not quantity. Above all, Heinrich (2002, p. 714) stresses that key measures should “approximate actual performance as closely as possible,” increasing the impression of accuracy and motivating employees to utilize the system. Gleaning good information from the preponderance of data, however, no doubt consumes valuable staff time and agency resources (Behn, 2003, p. 592).

Good communication aids in the process of identifying useful information and developing good measures. Grizzle and Pettijohn (2002, p. 55) report that a lack of agreement among stakeholders is a culprit for excessive measures or information that increases the workloads and anxiety of staff charged with implementation. Behn (2003, p.592) stresses the challenge of translating data into an understanding of what the organization is trying to accomplish. Morgan and Heneghan (1996, p. 171) attest to this challenge, and advise that performance measures work best when an organization focuses on establishing performance requirements that capture information most valuable to the public.

Lane (2002, p. 15) and Grifel (1993, p. 407) recommend ensuring performance measure quality with reviews and audits of performance information. Compliance monitoring is central to an effective performance measurement system and is a harbinger for increased stakeholder acceptance (Grizzle & Pettijohn, 2002, p. 55). Hence, Bouckaert (1991, p. 230) reveals that when measures appear to be credible and accurate they may be motivating to stakeholders and

serve to legitimize organizational activity. Consequently, Melkers and Willoughby (2001, p.56) predict difficulties with implementation if the quality of the performance measures are in doubt.

As previously stated, Grifel (1994, p. 19) contends that a performance measurement system can yield a tremendous amount of information, however, to justify the investment of resources, the information must be used in the decision-making process. In the final analysis, the difficulties governments encounter are not developing effective measures, problems arise utilizing them for decision-making (1994, p. 19).

As a result of these research findings, the following hypotheses, which involve the analysis of the quality of performance information used in performance measurement system development, are constructed:

***Working Hypothesis 2 (WH2):
The performance measurement system operates with good information.***

***Working Hypothesis 2a (WH2a):
Performance information is reliable and accurate.***

***Working Hypothesis 2b (WH2b):
Performance information is monitored for compliance.***

Resources

Substantial cost are incurred by organizations implementing a performance measurement system. Therefore, a system needs an adequate investment of resources for effective utilization. Organizations with performance measurement experience attest to the need to commit critical resources such as expert staff, continuously focused on measures and information to ensure data quality (Julnes & Holzer, 2001, p. 695). Consequently, Jordan and Hackbart (1999, p. 702) emphasize that having the “availability or non-availability of sufficient resources” invested in a

performance measurement system effects its implementation. For instance, Long and Franklin (2004, p. 314) found that, federally, lack of resources posed a significant challenge for performance implementation.¹⁵

Ensuring that resources are compatible with the expectations of the system also helps with implementation (Frederickson, 2002, p. 11). Hence, leaders who wish to extensively use performance information for decision-making would be wise to appropriate sufficient resources for staff to manage data. After all, investing the proper resources helps to produce and sustain good information that supports useful measures (Grizzle & Pettijohn, 2002, p. 55) Doing so instills confidence in stakeholders to utilize the data (2002, p. 55).

Furthermore, insufficient resources can lead to data corruption when staff is not able to keep track of information (2002, p. 55). Evidence of insufficient resource commitment perpetuates a lack of trust in the system (2002, p. 55). While Heinrich (2002, p. 714) contends that performance measures should be “relative simple and inexpensive to administer,” Gianakis (1996, p. 136) warns that performance measures can be costly to develop and implement, therefore, governments should be prepared to cope with the added expense.¹⁶ Frederickson (2002, p.11) concurs that assembling and sustaining performance measures can deplete both financial and personnel resources. Nevertheless, Grizzle and Pettijohn (2002, p. 55) recommend for a performance measurement system to function optimally, key resources such as staff and technology must be available and administered properly. Finally, Caiden (1998, p. 40) cautions

¹⁵ Long and Franklin (2004, p. 314) surveyed officials, representing 14 federal cabinet level departments, on implementation of the Government Performance and Results Act and found that 79% cited lack of resources as a significant challenge in their organization.

¹⁶Heinrich (1999, p. 365) asserts that the need to invest proper resources is highlighted by the reality that performance measures are costly to administer and monitor.

that administrators must be cognizant of and monitor the affects of resources scarcity in the organization, which interferes with performance measure usage.

Hence due to these research findings, the following hypothesis, concerning the assessment of the requisite resources invested for performance measurement system operation, is formulated:

***Working Hypothesis 3 (WH3):
Proper resources are invested in the performance measurement system.***

Human Capital

Human capital is the greatest investment an organization can make to foster the effective utilization of its performance measurement system. Just as financial resources must be invested in a system, staff must also be budgeted to the use of performance measures. A dedicated and trained staff increases the management capacity needed for overall system utilization. Likewise, Edwards (1980, p. 54) warns the principal source of implementation failure is inadequate staff.

According to Jordan and Hackbart (1999, p. 695) successful performance measurement systems have staff with technical knowledge or access to information about how to use performance measures. For successful implementation, Edwards (1980, p. 54) asserts that personnel must be prominent in numbers and expertise, with capabilities to perform the requisite tasks. The need for experts is evident and many organizations hire outside consultants to assist with developing their systems (Grizzle & Pettijohn, 2002, p. 55). Also, due to the labor intensity of performance measurement, managers need to economize the use of personnel to “activities with the highest productivity per person (Behn, 2003, p. 594).”

Public administrators have a significant personal influence on performance information when applying professional expertise and knowledge of using measures (Caiden, 1998, p. 48).

By having a direct role in measure development, staff can potentially influence performance measurement success. Therefore, turnover of key staff can cause disruption of information and communication and have a negative affect on performance measurement utilization (Grizzle & Pettijohn, 2002, p. 54).

Due to these research findings, the following hypothesis, which is to assess the influence of staff within the performance measurement system, is developed:

Working Hypothesis 3a (WH3a):
Expert staff is committed to success of performance measurement system.

Technology

The promise of a performance measurement system cannot be realized without the technological advances of computers and software programs. This technology eliminates many obstacles that hinder a system and allow staff to collect, manage and analyze the immense volume of information produced (Gianakis, 2002, p. 40). In times of fiscal stress, investment in costly new data system technology can burden an already strained public budget (Radin, 1998, p. 312). This can lead to internal resistance to performance measurement implementation. Still, providing adequate data collection resources promotes reliable performance information that can be synthesized, analyzed and useful for decision-making objectives (Grizzle & Pettijohn, 2002, p. 53).

Based on these research findings, the following hypothesis, assessing the technology resources invested for performance measurement system operation, is developed:

***Working Hypothesis 3b (WH3b):
Resources are applied to data collection technology for operation of
performance measurement system.***

Resource Scarcity

The fiscal climate of an agency can have a confounding impact on performance measurement implementation. During times of fiscal growth organizations may not use performance measures and fund programs regardless of performance (Jordan & Hackbart, 1999, p. 72). In times of fiscal stress, an organization may implement across the board cuts, affecting worthwhile programs that have performed well (1999, p. 72). Both conditions limit the use of performance measures. Jordan and Hackbart (1999, p. 82) testify that a more rational approach for strained fiscal resources is an adherence to performance measure principles to ensure efficiency and accountability during hard times.

Caiden (1998 p. 40) maintains in a time of budget constraint, “skilled personnel, time and resources may be lacking for a demanding activity that does not contribute to day-to-day operations of the organization.” Likewise, Melkers and Willoughby (2001, p. 56) cite that implementation difficulties are exacerbated when there is a lack of time, money, and personnel. Also, Bouckaert and Balk (1991, p. 231) believe that scarce resources can lead to the interesting dynamic of organizational hypertrophy, a situation in which the existence of measurement itself generates excessive output.¹⁷ This situation becomes troubling and wasteful in a fiscally stressed environment.

The following hypothesis, assessing the affect of resource scarcity on the performance measurement system operation, is developed as result of these research findings:

¹⁷Bouchaert and Balk (1991, p. 231) explain if the productivity measure is cost per unit, then dysfunction occurs when there is an increase in volume to lower costs.

Working Hypothesis 3c (WH3c):
Resource scarcity negatively affects performance measurement system.

Performance Measurement Implementation

Long and Franklin (2004, p. 310) explain that implementation, with its myriad of “challenges or obstacles,” significantly affects performance measurement results by weakening the outcomes of a good system or improving upon a flawed one. There is no ideal type or model of effective implementation but each experience is dependent on unique contextual organizational factors (2004, p. 310). Grizzle and Pettijohn (2002, p. 52) suggest organizations should assess the affects the critical factors such as communication, resources, organizational disposition and bureaucratic structure have on the implementation of their performance measurement system. By identifying and assessing the impact of these factors, administrators can work their performance measurement systems to meet organizational challenges.

Heinrich (2002, p. 714) stresses recognizing the factors “that influence or interfere with performance measurement and may undercut objectives” for organizational improvement. She notes a private sector performance measurement study that identified the factors of “organizational complexity and coordination; organizational climate or culture and values; competition among functional units or within sectors; and general economic and political conditions,” which affect implementation. (2002, p. 714). Heinrich (2002, p. 714) argues that these factors have a greater impact on public agencies due to changes in “political and administrative priorities and professional and partisan conflict within bureaucracies.” More specifically, politics and bureaucracy hinder public sector implementation Likewise, in order to understand the contextual affects these factors have on an organization, Jordan and Hackbart

(1999, p. 696) emphasize that implementation needs to be assessed from a political and cultural organizational perspective as well as with a rational one.

Disposition

An organization with a positive disposition towards performance increases the likelihood of successful measurement implementation (Frederickson, 2002, p. 11). Grifel (1994, p. 19) maintains that performance measures take hold and flourish in a viable bureaucratic environment. Coplin (2002, p. 709) notes for successful introduction and implementation of performance measures to occur, the attitudes and disposition of people in and around the organization must be supportive of the performance measurement system. The people involved are the Legislature, executive management, and agency staff and their dispositions are critical to and assist in promoting a culture that supports the implementation of measures.

Organizational culture and attitudes significantly influence the disposition of stakeholders to “buy in” and implement the performance measurement system (Grizzle & Pettijohn, 2002, p. 56). Stakeholder disposition is also influenced by cultural factors such as confidence, trust, evidence of leadership, and entrepreneurial spirit of the environment which affect usage (2002, p. 53).

Based on these research findings, the following hypothesis, which is to assess the organizational culture and attitudes that influence the disposition of stakeholders to implement the performance measurement system, is developed:

***Working Hypothesis 4 (WH4):
Disposition to implement performance measurement system is evident.***

Organizational Culture

The disposition of an organization is evident in its culture and climate (Grifel, 1994, p. 19; Epstein & Olsen, 1996, p.44). Grizzle and Pettijohn (2002, p. 56) support the importance of an organization's culture, and indicate it is derived from "the shared beliefs and values of its members and the norms or standards of behavior to which its members are expected to conform." Culture has a powerful influence and can mold and reveal "organizational power relationships" and their reaction to performance information (Jordan & Hackbart, 1999, p. 697). Therefore, an organization with leaders that promote performance and staff that are committed to producing results is more likely to support performance measurement. According to Grifel (1993;406), governments that have successfully promoted performance measures experienced changes in their culture. He adds that within them "a culture exists that encourages and depends on data (1993, p. 406)."

Management style is a significant factor influencing agency implementation disposition. When managers find performance measures useful as managerial tools, they are more inclined to support the system (Grizzle & Pettijohn, 2002, p. 56). Consequently, agency management has a responsibility for creating an environment that will foster performance measurement (Grifel, 1994, p. 19). Grifel (1994, p. 19) explains "managers must create or seek favorable conditions for" performance measures for the policy to take root. He asserts management is responsible for highlighting the need and garnering support from staff charged with implementing performance measures (1994, p. 19).

Behn (2003, p. 591) posits that an organization using performance measures imbues its culture with a motivating climate and attracts a dedicated workforce committed to achieving goals for the public good. Similarly, Bouchaert (1991, P. 230) emphasizes that a system

established with good information, and perceived as “accurate, conclusive, and reliable,” motivates a culture of performance. Such a culture motivates a drive for knowledge and inspires a determination to learn about the organization regardless of fiscal climate (Broom, 1995, p. 14). Hence, staff that work with a commitment to performance results are motivated by the organization’s culture.

Fear of measurement can arise in an organization's culture. This occurs when governments note performance success, yet, “punish the unsuccessful (Broom, 1995, p. 14).” Fear can paralyze an organization, hindering the implementation of performance measures and leading agencies to inaccurately report results (1995, p. 14). Julnes and Holzer (1999, p. 696) explain that fear is a usual reaction from line staff who shoulder a large responsibility of performance measure implementation. They advise that a propensity to fear can be overcome by knowledge, when agency staff comprehend that performance measurement can help them fulfill their responsibilities more efficiently (1999, p. 696).

Therefore as a result of these research findings, one would expect the following:

***Working Hypothesis 4a (WH4a):
Organizational culture promotes use of performance measures.***

Leadership

Change in an organization’s culture towards acceptance and utilization of performance measurement originates with leadership. Research reveals that the single most important element of successful management improvement initiatives is the demonstrated commitment of top leaders to change. For instance, the Legislature created performance measurement and has the sole authority to use measures for budget decision-making (Grizzle & Pettijohn, 2002, p. 56).

Therefore, the Legislature is the “key implementer” making legislative support critical for performance measure success (2002, p. 56). Broom (1995, p. 16) concurs and supports the argument that, as a statewide endeavor, performance initiatives need both executive and legislative leadership to be successful.

A strong performance measurement system has critical management implications. A good system can motivate staff towards performance and improve an agency’s work environment (Grizzle & Pettijohn, 2002, p. 56). According to Grizzle and Pettijohn (2002, p. 56), legislative awareness of this dynamic can motivate legislators towards an increased leadership role regarding implementation (Grizzle & Pettijohn, 2002, p. 56). Hence, Grizzle and Pettijohn (2002, p. 59) note that the Legislature’s influence on performance measurement is not solely limited to the allocation of resources. As leaders, legislators have the ability to build capacity among staff by not only using the measures, but acknowledging the value of staff in achieving results (2002, p. 59).

Frederickson (2002, p. 11) asserts that performance measures have the greatest impact when “top officials really care about and use” them. Likewise, Epstein and Olsen (1996, p. 42) call for a “management champion” to foster support from top organization management as well as the Legislature. Frederickson (2002, p. 11) concludes that organization-wide support from legislative leadership, agency management, and line staff must be dedicated to the policy for it to be successful.

On the other hand, Coplin (2002, p. 709) attests that attitudes of elected and executive officials must evolve if there is to be successful use of performance measures. A lack of leadership and commitment from leaders can cause problems for implementation in an organization (Melkers & Willoughby, 2001, p. 56; Heinrich, 2002, p. 714). Moreover,

Frederickson (2002, p. 11) stresses problems with the federal government's Government Performance Results Act of 1994 and claims federal performance management "is in serious trouble and in desperate need of political and career leadership."¹⁸

In light of the research findings above, the following hypotheses, which assess the evidence of leadership within the performance measurement system, are proposed:

***Working Hypothesis 4b (WH4b):
Agency management exhibits leadership in implementing
performance measurement system.***

***Working Hypothesis 4c (WH4c):
Legislature exhibits leadership in implementing
performance measurement system.***

Innovation

Public agencies can use performance measurement to empower managers towards innovation and perpetuate effective performance measure implementation. Moore and Heneghan (1996, p. 170) advise that, ideally, politicians should focus on the big picture of establishing goals and allow public managers the autonomy of meeting them. Promoting innovation connotes trust and empowers managers, thus increasing a favorable disposition towards the performance measures. Hence, organizations foster innovation and empowerment by trusting managers to personally determine how best to achieve goals.

Grifel (1994, p. 19) maintains that an organization should be prepared to reward managers for their success in achieving their goals. He explains there must be a system in place that rewards risk-takers and promotes innovation for performance measurement to be successful

¹⁸Frederickson (2002, p. 11) notes the Government Performance Results Act is in serious need of attention and resources, indicating a lack of not only leadership but also a commitment to the process.

(1994, p. 19). This encourages managers to utilize knowledge, exercise good judgment, and exert influence over the actions of subordinates to achieve organizational goals. Grizzle and Pettijohn (2002, p. 56) agree that adding incentives to the culture increases the disposition of stakeholders to use performance information to achieve results.¹⁹ Nonetheless, Gianakis (2002, p. 47) refutes the rational theory that encouraging innovation and granting managers professional discretion can promote performance measurement usage. He considers it counterintuitive because the structure of government allows for little flexibility and, in reality, hinders innovation among managers (Gianakis, 2002, p. 47).

In consideration of these research findings, the following hypothesis, assessing the evidence of innovation among stakeholders within the performance measurement system, is developed:

***Working Hypothesis 4d (WH4d):
Legislature encourages innovation by state agencies.***

Trust

Trust, of people and information, is an important factor influencing the implementation of performance measures. From the outset, the Legislature and executive management can promote trust of people by including all users of the information in the measurement design (Kravchuk & Schack, 1996, p. 350). This collaboration promotes trust among participants and confidence in the system. Moreover, the involvement of key users makes for better and responsive policy,

¹⁹Jordan and Hachbart (1999, p. 697) write that “organizational incentives can be used to control and facilitate the use of information.”

by focusing the measures on key concerns and promoting the ideal of policy ownership (Long & Franklin, 2004, p. 311).²⁰ Furthermore, Long and Franklin (2004, p. 311) suggest that “the nature of the relationship among key participants will significantly affect the success of the implementation,” implying the need for collaboration and mutual trust among stakeholders.

When the Legislature focuses on “high value performance,” performance that is clearly defined, legislators have the power to cultivate trust among stakeholders (Morgan & Heneghan, 1996, p. 172). Clearly defining key performance objectives cultivates trust by allowing managers to focus on what matters most. Furthermore, the Legislature also promotes trust by collaborating with and having a confidence in agency management (Grifel, 1994, p. 20). Consequently, Grifel (1994, p. 20) stresses the need for trust among people and laments that “without trust, performance measurement can become a weapon rather than a tool.”

Stakeholder trust in information promotes confidence in the performance measurement system. Jordan and Hackbart (1999, p. 72) indicate that throughout the states there was “historical dissatisfaction or distrust with the measures used,” which they suggest is a factor for lack of usage. Likewise, good information increases the magnitude of trust in the system by the Legislature, which in turn elevates the trust of other stakeholders (Grizzle & Pettijohn, 2002, p. 58). Nonetheless, Heinrich (2002, p. 721) reports that under the federal Government Performance Results Act of 1994, agencies had “a continuing lack of confidence in the credibility of performance information.” While the information generated is still useful, bad information cannot effectively improve government operations (2002, p. 721).

²⁰Epstein and Olsen (1996, p. 42) also discuss a “pride of ownership” when line staff are included in measurement development. They stress the effect can motivate participants in the process and alludes to trust and value of people in the system.

Due to these research findings, the following hypotheses, assessing the evidence of trust among stakeholders within the performance measurement system, are developed:

Working Hypothesis 4e (WH4e)
Trusts of agency staff ability to implement performance measurement system is evident.

Working Hypothesis 4f (WH4f):
Trust of performance measure data is evident among stakeholders.

Organizational Climate²¹

An organization's political and fiscal climate can significantly affect the use of performance measures. Citizens expect elected officials to tighten their budget belts and use tax dollars more efficiently when resources run short (Gianakis, 2002, p. 40). A period of budget shortfalls means organizational decline and an increasingly tense political environment. Levine (1978, p. 318) explains that cut backs of public organizations "are political matters usually calling for the application of the most sophisticated attack or survival tactics in the arsenal of the skilled bureaucrat-politician." He recommends that organizations initiate the use of "rational choice techniques" to cope with shortfalls, implying that the use of performance measurement can be an effective means of managing a tight budget process (1978, p. 312).

Accordingly, Grizzle and Pettijohn (2002, p. 58) find that resource scarcity may increase the Legislature's disposition to utilize performance information to make difficult decisions. They contend that the Legislature is more disposed to use performance measures in a cut back environment than when resources are slack (2002, p. 58). Hence, the use of performance measures affords legislators a modicum of political security when making budget cuts that may be

²¹For these hypotheses, organizational climate infers the both political and fiscal climate.

unpopular with certain voters. Heinrich (2002, p. 714) suggest that resource scarcity, as part of an organization's climate, is a contextual factor that influences or interferes with performance measurement. She highlights the need for an awareness of this phenomenon as it causes changes in the politics and priorities of an organization (2002, p. 714).

Therefore, as a result of these research findings, one would expect the following hypothesis:

Working Hypothesis 4g (WH4g):
Organizational climate creates urgency for performance measure use.

Bureaucratic Structure

A public agency's bureaucratic structure is integral in promoting the utilization of the organization's performance measurement system. The bureaucratic and political demands stakeholders experience influence reactions to the performance measurement system. These experiences play an important role in understanding how performance measures are used against the backdrop of bureaucratic challenges. The research at hand also heightens an awareness of the affect bureaucratic structure has on resource allocation decision-making.

Heinrich (1999, p. 365) describes common bureaucratic challenges on a performance system as "ineffective, top-down administration conflicting with organizational goals, political influences, and shrewd management behavior." Likewise, Long and Franklin (2004, p. 310) concur with Heinrich's notion of bureaucratic rigidity, and indicate that performance measurement implementation is a "bottom-up" process that is hindered by "top-down directives" creating inflexibility in the system. Assessing bureaucratic behavior and how stakeholders react to "top-down mandates for implementing a one-size fits all policy directive" is crucial for determining performance measurement success (2004, p. 310).

Moreover, Grizzle and Pettijohn (2002, p.58) add to the discourse on bureaucratic complexities, and indicate that “organizational fragmentation may hinder the coordination necessary to implement successfully a complex policy requiring the cooperation of many people, and it may also waste scarce resources, inhibit change, create confusion, lead to policies working at cross-purposes, and result in important functions being overlooked.” Thus, organizations that promote successful policy implementation are able to cope with fragmentation.

Furthermore, Julnes and Holzer (2001, p.696) propose that in order to understand how change occurs, organizational politics must be analyzed. The political context here involves analyzing how internal and external groups such as agency management and staff, the Legislature, legislative staff, and citizen groups, interact with each other to implement the policy. Radin (1998, p. 307) emphasizes that decision-makers operate separately with disparate policy and political goals, which complicates an already confounding budget process. Similarly, Heinrich (2002, p. 716) attests to the existence of “mission fragmentation,” and adds that stakeholders focus on immediate programs or goals, and lose sight of unified objectives within the organization. Radin (1998, p. 307) believes that is a natural condition of a pressure filled, decentralized, and fragmented government that overburdens management and staff.²²

Hence, as a result of these research findings, the following hypothesis is developed:

***Working Hypothesis 5 (WH5):
Bureaucratic structure affects use of performance measurement system.***

²²Radin (1998, p. 307) defines this phenomenon that imposes successive management objectives on people as “crowded management space.”

Organizational Fragmentation

Radin (1998, p. 307) indicates that the bureaucratic structure of government often works against “the rational goals of legislation,” suggesting organizational complexity hinders performance measurement implementation. The fragmented nature of government often hampers successful implementation of a management policy due to the varying levels of government (1998, p. 307; Kravchuk & Schack, 1996, 353). Successful policy implementation requires the collaboration of a variety stakeholders, however, disparate performance goals and objectives frequently diverge and create discord among organizations (Long & Franklin, 2004, p. 314). Furthermore, lack of policy consistency contributes to fragmentation. For instance, at the federal level one official lamented that when administrations change, regardless of political affiliation, the new leadership will develop a policy that changes within months, creating resistance among staff (2004, p. 314).

Legislators often confront competing demands on their time in the legislative environment that makes it difficult to focus on performance measurement (Gizzle & Pettijohn, 2002, p. 53). These demands negatively affect the Legislature’s disposition to focus on performance information (2002, p. 53). Similarly, agency staff are also burdened with competing management demands for time, which negatively affects staff disposition and ability to implement performance measures (2002, p. 53; Melkers & Willoughby, 2001, p. 62).

In addition, the primary goal of a performance measurement system is to utilize the information to inform decision-making. Nevertheless, organizations have reported difficulty linking performance information into budget decision-making frameworks (Melkers & Willoughby, 2001, p. 62). Furthermore, Caiden (1998, p. 41) stresses that legislators often find performance information confusing since it is difficult to correlate measures with the budget

format utilized. Hence, legislators may find performance information difficult to integrate into budget decision-making routines.

As a result of this literature, the following hypotheses, assessing the affects of an organization's fragmentation on performance measurement implementation, are developed:

***Working Hypothesis 5a (WH5a):
Organizational fragmentation hinders performance measure usage.***

***Working Hypothesis 5b (WH5b):
Legislative environment creates competing demands for Legislators' time.***

***Working Hypothesis 5c (WH5c):
Competing demands of agency staff affect the use of performance measures.***

***Working Hypothesis 5d (WH5d):
Performance information does not fit into budget decision framework.***

Organizational Knowledge

As previously mentioned, an organization needs expert staff to effectively implement a performance measurement system.²³ Expert staff are a valuable resource that contribute to the organizational knowledge of an agency. Legislators and legislative appropriations staff, as well, harbor organizational knowledge required for successful policy implementation (Grizzle & Pettijohn, 2002, p. 60). Grizzle and Pettijohn (2002, p. 60) explain that to achieve performance measurement goals, the Legislature should know how to use performance information and apply it during the appropriations process (Grizzle & Pettijohn, 2002, p. 60). Having the ability and program knowledge to use the information increases the likelihood that the Legislature will use the measures to make allocation decisions. Furthermore,

²³Working Hypothesis 3a: Expert staff is committed to success of performance measurement system.

Broom (1995, p. 17) suggests that exhibiting legislative knowledge can impact agency staff and management who should also demonstrate effective capabilities of utilizing performance information. Taking a leadership role and displaying a desire to gain knowledge of the system builds organizational capacity and fosters performance measure success (Broom, 1995, p. 17, Caiden, 1998, p.40).²⁴

Legislative appropriations staff play a significant role in supporting or diminishing the influence of performance information on budget decisions (Grizzle & Pettijohn, 2002, p. 60). Grizzle and Pettijohn (2002, p. 60) argue that legislative staff support and knowledge of performance information influences legislators' reactions towards the measures. Legislators' may be better able to integrate the information into budget decision routines and learn to use the measures more effectively in negotiating compromise when staff are competent to offer counsel in such matters (2002, p. 60). Conversely, if staff do not support or lack knowledge of performance information, legislators lack an important consultative resource and may be unable to realize the potential of the information, thus undermining the entire system (2002, p. 60).

Therefore, as a result of these research findings, one would expect the following:

***Working Hypothesis 5e (WH5e):
Legislature knows how to use performance information.***

***Working Hypothesis 5f (WH5f):
Legislative appropriations staff have knowledge of performance information.***

²⁴Yet, Coplin (2001, p. 12) attests, with respect to local governments, performance information knowledge is lacking and when knowledge is evident, commitment to utilization is not guaranteed.

Decision-making

The real test of a performance measurement system is whether or not performance measures are used for budget allocation decision-making (Lane, 2002, p. 15). After the measures are developed and implemented and the utilization factors of communication, information, resources, disposition and bureaucratic structure are considered, to what extent are performance measures utilized in the budget process? Grifel (1993, p. 404) holds that the performance measurement system's power "is not simply from gathering and reporting results; it is the utilization of those results for budgetary allocation and management decision-making." Lane (2002, p. 15) concurs, and stresses that to justify the expense of resource and labor, "ultimately performance information must be integrated in budget decision-making."

Still, Grizzle and Pettijohn (2002, p. 57), explain that performance measurement "runs contrary to how decisions get made through deal making and coalition building" which weakens them as decision-making tools. They argue there is a perception "that performance information does not guide resource-allocation decisions (2002, p. 57)."²⁵ Furthermore, Behn (2003, p. 590) contends that while performance measurement can help agency management make budget decisions, the appropriation of "tax monies is a political decision made by political officials." Therefore, performance information may be overlooked for the sake of political considerations when making budget decisions. In addition, Julnes and Holzer (2001, p. 702) explain that even when the Legislature is committed to the system, when it comes time to use performance

²⁵Jordan and Hackbart (1999, p. 73) found, in a study of five states, that state officials had "concern for how the legislative branch would use the performance information, and there was not agreement regarding where and when the performance measures should link to the allocation of funds."

information to make budget cuts or improvements, legislators decline to use them.²⁶ Also, Caiden (1998, p. 44) found that performance measures are disappointing for use in budgeting and the “information does not provide real guidance to resource decisions.” The existence of performance information implies that performance measures will be used for decision-making but that is not always the case. Jordan and Hackbart (1999, p. 85) argue that regardless of the power of performance measures to inform decisions “states seem reluctant to use performance directly as an allocation tool.” Similarly, Gianakis (2002, p. 51) explains that, historically, elected officials forsake policy for politics when making budget decisions. Hence, if a program successfully implements policy and measures confirm this, it would matter little to a legislator that the policy was flawed in the first place. Political expediency would circumvent performance.

Grizzle and Pettijohn (2002, p. 57) infer that the Legislature must take a stronger leadership role promoting performance measurement by linking performance outcomes to actual budget decisions. Hence, if performance measures do not appear to be used by Legislators for decision-making, agency personnel will be less inclined to implement them (Jordan and Hackbart, 1999, p. 73). Still, Broom (1995, p. 14) predicts performance measures are gaining ground and “although we have not yet found that states are systematically using performance measure information as a basis for making program funding decisions or abandoning policy directives, we are seeing the first steps in that direction.”

Government agencies also use performance information to make budgeting and critical operational decisions within their organizations. For instance, Behn (2003, p. 590) maintains that line staff utilize performance information to make internal budget decisions. He asserts after

²⁶Gianakis (2002, p. 51) states “there is little reason to assume that elected officials have reversed their historical aversion to utilizing a policy approach to resource allocation decision-making.” In fact, Connelly and Tompkins (1989, p. 288) doubt they are used for decision-making.

"elected officials have established macro priorities, those responsible for micro decisions" may utilize performance data to determine the most efficient means of investing the agency's limited resources.

Due to this research, which is to assess whether the Legislature and agencies utilize performance measures for critical decision making, is proposed:

***Working Hypothesis 6 (WH6):
Performance information is used for critical decision-making.***

Summary of Conceptual Framework

Public administration scholars have furthered the importance of exploring how practitioners develop and implement performance measures. While the past decades have witnessed an influx of performance measurement in the public sector, there are still many organizations which do not use them due to the difficulty of utilizing them. Moreover, Julnes and Holzer (2001, p. 694) state that “even when organizations develop performance measures, the biggest challenge is getting them used.” At the center of this research is the tenet that performance measurement, when used appropriately, leads to better decision-making (2001, p.694, Jordan and Hackbart, 1999, p. 71).

A review of literature on performance measurement, budgeting, and organizational behavior highlights five factors influencing the utilization of performance measure in government. Utilization, in this research project, consists of the stages of development and implementation. These important categories are developed into working hypotheses, which become the framework of this research. Working hypotheses are a conceptual framework most associated with exploratory research (Shields, 1998, p.207). The categories include

communication, information, resources, disposition, and bureaucratic structure and resource allocation. An analysis and description of each working hypothesis reveals their linkage in the research process. Table 2.1 below describes the working hypotheses and sub-hypotheses and their link to the literature.

The first three sets of hypotheses involve those factors that are rational and technical influences on the utilization process. The latter two sets of hypotheses address the political and cultural aspects of the utilization process. The final hypothesis links each factor together and explores whether, after developing and implementing the performance measures, they are ultimately utilized in critical decision-making processes.

The first set of hypotheses relates to the evidence of effective communication principles in the development of performance measures. Specifically, the communication of strategic plans and performance information directives are explored. (See Table 2.1 below.)

The second set of hypotheses involves the analysis of the quality of performance information used in the system. To gain credibility a performance measurement system must be based on reliable and accurate information. Further, to ensure the validity and reliability of data, the performance measures must be monitored for compliance. (See Table 2.1 below.)

The third set of hypotheses concerns the requisite resources invested for performance measurement system operation. For a performance measurement system to function optimally, the key resources such as staff and technology must be available and administered properly. (See Table 2.1 below.)

The fourth set of hypotheses addresses the organizational culture, climate, and attitudes which influence the disposition of stakeholders to “buy in” and implement the performance measurement system. These hypotheses delve into attitudes such as confidence, trust, evidence of

leadership, and entrepreneurial spirit of the environment which influence usage. (See Table 2.1 below.)

The fifth set of hypotheses assesses the bureaucratic structure and its affects on performance measurement implementation. These hypotheses envelop the bureaucratic and political demands the stakeholders working within the system experience. The experiences play an important role in understanding how performance measures interact with these bureaucratic challenges if they are to fulfill their important role in resource allocation decision-making. (See Table 2.1 below.)

Finally, the sixth and underlying hypothesis assesses to what extent performance measures are currently utilized for the critical purpose of internal agency decision-making and legislative budget allocation decision-making. This hypothesis explores the ultimate impact the five categorical factors of communication, information, resources, disposition and bureaucratic structure have on performance measure usage. See Table 2.1 below for the link of each working hypothesis and sub-hypothesis to the literature.

Table 2.1 Working Hypotheses Linked to Literature

<i>Working Hypotheses</i>	<i>Scholarly Support</i>
WH1: Effective communication is evident in the performance measurement system.	Behn (2003), Caiden (2000), Grifel (1994), Grizzle & Pettijohn (2002), Kravchuck & Schack (1998), Long & Franklin (2004), Moore & Heneghan (1996), Wilson (2001)
WH1a: Strategic plans are clearly communicated.	Behn (2003), Julnes & Holzer (2001), Kravchuck & Schack (1996), Moore & Heneghan (1996)
WH1b: Performance information guidance is clearly communicated.	Behn (2003), Grizzle & Pettijohn (2002), Heinrich (2002), Julnes & Holzer (2001) Kravchuck & Schack (1996), Moore & Heneghan (1996)
WH2: The performance measurement system operates with good information.	Behn (2003), Grizzle & Pettijohn (2002), Julnes & Holzer (2001), Kravchuck & Schack (1996), Moore & Heneghan (1996)

WH2a: Performance information is reliable and accurate.	Behn (2003), Bouckaert (1991), Frederickson (2002), Grifel (1994), Grizzle & Pettijohn (2002), Heinrich (2002), Julnes & Holzer (2001), Melkers & Willoughby (2001), Moore & Heneghan (1996), Radin (1998)
WH2b: Performance information is monitored for compliance.	Grifel (1993), Grifel (1994), Grizzle & Pettijohn (2002), Heinrich (2002), Julnes & Holzer (2001), Kravchuck & Schack (1996), Melkers & Willoughby (2001)
WH3: Proper resources are invested in performance measurement system.	Grifel (1994), Grizzle & Pettijohn (2002) Julnes & Holzer (2001), Frederickson (2002), Melkers & Willoughby (2001), Moore & Heneghan (1996)
WH3a: Expert staff is committed to success of performance measurement system.	Caiden (1998), Edwards (1980), Epstein (1982), Frederickson (2002), Grifel (1994), Grizzle & Pettijohn (2002), Julnes & Holzer (2001), Melkers & Willoughby
WH3b: Resources are applied to data collection technology for performance measurement system.	Caiden (1998), Epstein (1992), Frederickson (2002), Gianakis (2002), Grifel (1994), Grizzle & Pettijohn (2002), Julnes & Holzer (2001)
WH3c: Resource scarcity negatively affects performance measurement system.	Caiden (1998), Grizzle & Pettijohn (2002), Jordan & Hackbart (1999)
WH4: Disposition to implement performance measurement system is evident.	Broom (1995), Coplin (2002), Epstein & Olsen (1996), Greiner (1996), Grifel (1994), Grizzle & Pettijohn (2002) Jordan & Hackbart (1999), Julnes & Holzer (2001)
WH4a: Organizational culture supports use of performance measures.	Ammons (1995), Broom (1995), Grifel (1993), Grifel (1994), Frederickson (2002), Joyce (1993), Lane (2002), Melkers & Willoughby (2001)
WH4b: Agency management exhibits leadership in implementing performance measurement system.	Behn (2003), Greiner (1996), Grifel (1994), Grizzle & Pettijohn (2002)
WH4c: Legislature exhibits leadership in implementing performance measurement system.	Broom (1995), Coplin (2002), Epstein & Olsen (1996), Frederickson, (2002) Greiner (1996), Grifel (1994), Grizzle & Pettijohn (2002), Jordan & Hackbart (1999), Julnes & Holzer (2001)
WH4d: Innovation is encourage by management and Legislature.	Grifel (1994), Julnes & Holzer (2001), Moore & Heneghan (1996)
WH4e: Trusts of agency staff ability to implement performance measurement system is evident.	Grizzle & Pettijohn (2002)

WH4f: Trust of performance measure data is evident among stakeholders.	Grifel (1994), Grizzle & Pettijohn (2002), Morgan & Heneghan (1996)
WH4g: Organizational climate promotes use of performance measurement.	Connelly & Tompkins (1989), Gianakis(2002), Halachmi & Bouchaert (1996), Heinrich (2002), Joyce (1993), Lee (1997), Williams (2003)
WH5: Bureaucratic structure affects use of performance measurement system.	Broom (1995), Grifel (2003), Grizzle & Pettijohn (2002), Heinrich (1999), Heinrich (2002), Julnes & Holzer (2001), Long & Franklin (2004), Moore & Heneghan (1996)
WH5a: Organizational fragmentation hinders performance measure usage.	Gianakis (1996), Grizzle & Pettijohn (2002), Kravchuck & Schack (1996), Radin (1998)
WH5b: Legislative environment creates competing demands for Legislators' time.	Grizzle & Pettijohn (2002)
WH5c: Competing demands of staff affect the use of performance measures.	Grizzle & Pettijohn (2002)
WH5d: Performance information does not fit into budget decision framework.	Behn (2003), Gianakis (1996), Grizzle & Pettijohn (2002)
WH5e: Legislature knows how to use performance information.	Broom (1995), Caiden (1998), Coplin (2001), Frederickson (2002), Grizzle & Pettijohn (2002), Joyce (1993)
WH5f: Legislative appropriations staff have knowledge of performance measurement information.	Caiden (1998), Frederickson (2002), Greiner (1996), Grizzle & Pettijohn (2002), Julnes & Holzer (2001)
WH6: Performance measures are used for critical decision-making.	Behn (2003), Broom (1995), Epstein & Olsen (1996), Frederickson (2002), Gianakis (1996), Grizzle & Pettijohn (2002), Jordan & Hackbart (1999), Lane (2002), Melkers & Willoughby Grifel (1993)

Chapter 3: Setting

Introduction

The purpose of this research project is to assess the attitudes and perceptions of Texas state agency directors regarding the utilization of the current Texas performance measurement system. Texas has a solid history of developing and using performance measures which makes it fertile terrain for exploration (Melkers and Willoughby, 1998, p. 71). Therefore, to explore the current performance measurement system in Texas, it is necessary to compare Texas' experiences and perspectives to those revealed in the broader literature.

Performance Measurement in Texas

The primary job of the Texas Legislature is to develop a two-year budget for the state, a process that dominates each biennial legislative session. Since the early 1990s, Texas has developed its biennial budget by linking agency strategic plans to a performance-based budgeting system (HRO, 2003, p. 3). Broom (1995, p.3) explains that, in 1991, the Texas Legislature and Governor sought to “exert policy making control over a fragmented budget process.” Hence, the Legislature established a process, in statute, by which priorities are set for agency activities. Through this process, agencies developed strategies for attaining goals and the Legislature determined funding after considering performance measures used to gauge agency success in achieving goals (2003, p. 3). For future budget cycles, agency appropriations were adjusted relative to the current biennial level of funding (2003, p. 3). This process served

Texas well for a decade and established the state as a national leader in the use of performance measures (Wilson, 2001, p.26).

The new millennium, however, brought with it a shift in budget conditions forcing Texas officials to grapple with \$9.9 billion revenue shortfall (Albanese, 2003, p. 32). In 2003, determined to reign in state spending and cope with the shortfall, state officials augmented the budget system and linked current tools, performance measures, with zero-based budgeting, a previously used budget format (HRO, 2003, p. 3).²⁷ ²⁸ Unlike performance-based budgeting, which considered future funding based on currently levels, budget considerations with zero-based budgeting begin at zero (2003, p. 3). Texas officials implemented zero-based budgeting so that every expenditure is scrutinized, creating a transparent budget document (Albanese, 2003, p. 32). With zero-based budgeting, agencies prioritize essential services and justify funding requests based on the priority services (HRO, 2003, p.3). While the format for devising the state budget has changed, state agencies are still held accountable through the linking of performance and budgeting.

Furthermore, agencies continue to develop strategic plans that form the components of each agency's budget. Agency strategic plans and performance measures are noticeably interconnected in the process. The primary Texas agency overseeing the development of strategic planning and performance measurement development is the Legislative Budget Board. Since 1993, agencies have developed long-term strategic plans that cover a five-year period

²⁷ In 2003, Texas leaders adopted a "modified form" of zero-based budgeting which was used in the 1970s and 1980s.

²⁸ Lee and Johnson (1977, p. 120) explain zero-based budgeting makes "the assumptions that budgets can be cut," when in reality it is difficult to cut programs. They believe the system is best applied to "selective programs in any one year rather than governmentwide (1977, p. 120)."

(LBB, 1999, p. 4). As part of the strategic planning process, agencies develop performance measures, revised every two years, that can affect the amount of an agency's appropriation by the Legislature (1999, p. 7). The Texas performance measurement system is comprised of four types of measures defined as (1999, p.9):

- **Outcome Measure** - A quantifiable indicator of the public and customer benefits from an agency's actions.
- **Output Measure** - A quantifiable indicator of the number of goods or services an agency produces.
- **Efficiency Measure** - A quantifiable indicator of productivity expressed in unit costs, units of cost, units of time, or other ratio-based units.
- **Explanatory/Input Measure** - An indicator of factors, agency resources, or requests received that affect a state entity's performance.

The Texas LBB (1999, p. 8) reports that a good system should provide results-oriented information that is "meaningful and useful to decision-makers." Table 3.1 below further describes measure characteristics, such as selective, accessible and reliable, as constituting an effective performance measurement system (1999, p.8). In addition, a good system is supported by executive management and integral to the daily operations of an agency (1999, p. 8). Therefore, the key objectives for a system are to focus the budget on outcomes, strengthen monitoring and performance, provide rewards and penalties for performance, and standardize and simplify the appropriations process (1999, p.6) Also, performance measures can improve agency operations and communications. In particular, the measures can be used to operationalize strategic plans and legislative appropriations, evaluate staff, and communicate with staff, management and stakeholders regarding agency operations (1999, p. 8).

Table 3.1 Characteristics of an Effective Performance Measurement System

<i>Results-Oriented</i>	Focuses primarily on outcomes and outputs.
<i>Selective</i>	Concentrates on the most important indicators of performance.
<i>Useful</i>	Provides information of value to agency and decision-makers.
<i>Accessible</i>	Provides periodic information about results.
<i>Reliable</i>	Provides accurate, consistent information over time.

SOURCE: State of Texas, Legislative Budget Board, *Guide to Performance Management*, p.8.

Strategic plans and performance measures are linked directly to an agency’s budget through a configuration established in the General Appropriations Act.²⁹ Table 3.2 below describes the key components of a Texas agency budget configuration, which link an agency’s strategic plan and performance measures (HRO, 2003, p. 4). In fact, Broom (1996, p. 4) credits the integrated approach of plans and measures as a critical factor to performance measurement success in Texas.

Table 3.2 Texas Agency Budget Configuration Components

<i>Agency Goals</i>	General statements of the agency’s long-range purposes.
<i>Outcome Measures</i>	The actual impact or results of the agency’s actions on the public.
<i>Strategies</i>	How an agency intends to achieve goals and objectives.
<i>Output Measures</i>	Gauge the quantity of a services provided or a good produced.
<i>Efficiency Measures</i>	Gauge the cost of time taken per unit of output.
<i>Explanatory Measures</i>	Provides information to assess reported performance.

SOURCE: State of Texas, House Research Organization, *“Writing the State Budget,”* No.78-1, p. 4

The linkage of strategic plans and performance measures weaves through the General Appropriations Act. As depicted in Table 3.3 below, broad goals and strategies are attained by

²⁹According to Melkers and Willoughby (1998, p. 69), such a linkage “may help to promote sustained implementation of this reform.”

meeting established performance measures. For example, public health promotion is a goal of the Texas Department of Health. Part of achieving this goal, in fiscal years 2004 and 2005, involves an outcome of serving 75% of the eligible Women, Infants and Children (WIC) Nutritional program population. To attain this outcome, the agency's strategy is to utilize \$1.2 billion for WIC food and nutrition services. With this appropriation, the agency expects to serve (output) approximately 1.7 million people at a cost (efficiency) of almost \$30 per person. Assessing achievement in meeting the over all goal is measured and explained by the incidence of low birth weight babies of WIC mothers at 5.9% for the fiscal years.

Table 3.3 Linkage of Strategic Plans and Performance Measures in 2004-2005 General Appropriations Act.

Texas Department of Health	For the Years Ending	
	August 31, 2004	August 31, 2005
A. Goal: PUBLIC HEALTH PROMOTION Ensure that prevention, promotion and education are integral parts of all public health services. Reduce health hazards, support resistance to health threats and promote disease control.		
Outcome (Results/Impact): Percentage of Eligible WIC Population Served	75%	75%
A1.1 Strategy: WIC FOOD & NUTRITION SERVICES To provide nutrition services, including benefits to eligible low income women, infants and children (WIC) clients, nutrition education and counseling.	\$588mil	\$587mil
Output (Volume): Number of WIC participants provided nutritious food supplements per month.	837,828	858,774
Efficiencies: Average food costs per person receiving services	29.93	30.93
Explanatory: Incidence of low birth weight babies to WIC program mothers	5.9%	5.9%

SOURCE: State of Texas, *General Appropriations Act 78th Legislature, Regular Session SB 1*, p. II-23.

Summary

After over a decade, the Texas performance measurement system continues to communicate information, motivate performance, and inform decision-making. From the onset, Texas created its performance measurement system with a clear vision of how the information would be used. (Broom, 1995, p. 4). According to Broom (1995, p. 4), “the strategic planning, performance measurement, and budgeting products are more than linked - they are components in the same policy process.”

The purpose of this study is to explore the attitudes and perceptions of state agency executives regarding the utilization of performance measures and provide an assessment of their use in Texas state government. It will also explore performance measurement effectiveness as a decision-making tool in the budgeting and agency management processes. Texas faces yet another difficult fiscal horizon; therefore, the value of researching performance information has never been timelier. The following chapter describes the methodology that operationalizes the conceptual framework used to fulfill this study’s purpose.

Chapter 4: Methodology

Introduction

This chapter describes the methodology used to address the purpose of this research, which is to assess the attitudes and perceptions of state agency executives toward the utilization of the Texas performance measurement system. This chapter operationalizes the conceptual framework developed by taking the five factors of communication, information, resources, disposition and bureaucratic structure and formulating each separate factor into a working hypothesis and relevant sub-hypotheses. A sixth and overarching hypothesis is developed, analyzing performance measurement usage in decision-making, tying the five working hypotheses together. The conceptual framework is operationalized by deriving survey questions from each hypothesis, thus, connecting the conceptual framework to the state agency directors' assessment. Survey research was selected as the research technique, because it best suited the study's exploratory purpose. The remaining methodology section contains a discussion and justification of the operationalization of the research.

Research Technique

According to Babbie (2001, p. 238), surveys are considered the best tool to collect standardized information from a large sample of respondents. Surveys are also most applicable for descriptive, explanatory, and exploratory research and work best when the individual is the

unit of analysis (2001, p.238). Furthermore, surveys offer the researcher flexibility when analyzing data (2001, p. 268). This flexibility works well when there are a number of questions on a topic. Unfortunately, validity is a weakness inherent in survey research since respondents are offered limited response options (2001, p. 269). These options may be too standardized and not capture people's actual opinions, yielding faulty responses.

The survey instrument was developed by the author and utilized a five-response-item Likert scale for each questionnaire item.³⁰ The working hypotheses and relevant sub-hypotheses were operationalized as a 31 item survey.³¹ An additional two items were developed to gather descriptive information on the sample. The coding for each survey item is as follows:

Strongly Agree = SA
Agree = Agree
Neutral = N
Disagree = D
Strongly Disagree = SD

Operationalization of Conceptual Framework

A review of literature on performance measurement yielded five factors that influence the utilization of performance measure in government. These select categories were developed into five working hypotheses and sub-hypotheses that became the roadmap for this research. A final sixth and underlying hypothesis was developed to assess the utilization of performance measures on critical decision-making in Texas state government. These hypotheses and sub-hypotheses are linked to the research as response questionnaire items in the survey research as indicated in Table 4.1 below.

³⁰A sample survey can be found in Appendix A.

³¹One survey item was removed from the research as its corresponding sub-hypothesis was deleted from the study.

Table 4.1 Operationalization of Working Hypotheses

<i>Working Hypotheses</i>	<i>Survey Questions</i>
WH1: Effective communication is evident in the performance measurement system.	The Texas performance measurement system is developed with clear communication from Stakeholders.
WH1a: Strategic plans are clearly communicated.	Performance measures are developed with a direct linkage to agency strategic plans.
WH1b: Performance information guidance is clearly communicated.	Staff using performance measures receive clear guidance information.
WH2: The performance measurement system operates with good information.	The Texas performance measurement system operates with good information.
WH2a: Performance information is reliable and accurate.	My agency’s performance measures are based on reliable information.
WH2b: Performance information is monitored for compliance.	My agency’s performance measures are monitored to ensure data validity.
WH3: Proper resources are invested in performance measurement system.	The Texas performance measurement system has the resources necessary to operate effectively.
WH3a: Expert staff is committed to success of performance measurement system.	My agency has an adequate amount of staff trained in using performance measures.
WH3b: Resources are applied to data collection technology for performance measurement system.	My agency commits proper resources towards technology for performance measurement system data collection.
WH3c: Resource scarcity negatively affects performance measurement system.	Revenue shortfalls direct resources away from performance measurement system operation.
WH4: Disposition to implement performance measurement system is evident.	My agency favors using performance information for internal decision-making.
	The Legislature favors basing budget allocation decisions on performance information.
WH4a: Organizational culture supports use of performance measures.	My agency’s staff work with a commitment to performance measure results.
WH4b: Agency management exhibits leadership in implementing performance measurement system.	My agency’s management takes a leadership role in promoting the use of performance measures in state government.
WH4c: Legislature exhibits leadership in implementing performance measurement system.	Legislators take a leadership role in promoting the use of performance measures in state government.
WH4d: Legislature encourages innovation by state agencies.	Legislature promotes innovation in the delivery of agency services.

WH4e: Trust of agency staff ability to implement performance measurement system is evident.	Agency staff are considered valuable participants for performance measurement system success.
WH4f: Trust of performance measure data is evident among stakeholders.	Legislature has confidence in the quality of performance measure data.
	My agency's management has confidence in the quality of performance measure data.
	My agency's staff has confidence in the quality of performance measure data.
WH4g: Organizational climate creates urgency for performance measurement use.	Political climate within state government creates an urgency for performance measure usage.
	Resource scarcity within state government creates an urgency for performance measure usage.
WH5: Bureaucratic structure affects use of performance measurement system.	Bureaucratic structure hinders implementation of performance measures in Texas state government.
WH5a: Organizational fragmentation hinders performance measure usage.	Organizational fragmentation within state government hinders the coordination necessary to use performance measures effectively in my agency.
WH5b: Legislative environment creates competing demands for Legislators' time.	Competing legislative demands for Legislators' time drive focus away from performance budgeting implementation.
WH5c: Competing demands of staff affect the use of performance measures.	Staff demands hinder amount of time dedicated to implementation of performance measures in my agency.
WH5d: Performance information does not fit into budget decision framework.	Performance information does not fit into routine budget decision-making.
WH5e: Legislature knows how to use performance information.	Legislators have the knowledge to use performance information during the appropriations process.
WH5f: Legislative appropriations staff have knowledge of performance measurement information.	Legislative appropriations staff have the knowledge to use performance measurement information during the appropriations process.
WH6: Performance measures are used for critical decision-making.	My agency uses performance data to make critical internal decisions.
	Legislature bases budget allocation decisions on performance data during the appropriations process.

Sample

The study sample for this research included all the state agencies listed in the 78th Texas Legislature, 2004-2005 Appropriations Act. Due to the consolidation and sunset of several state agencies, the sample contained fewer agencies than appear in the Act. Furthermore, the sample did not include agencies representing legislative and executive branches or those organizations with state agency oversight. In total, the sample contained 148 state agencies, including institutions of higher education and medical schools. The unit of analysis in this research was each top administrator of the agency identified. The survey was pre-tested by two state agency employees and mailed, at the end of September 2004, with an introduction letter explaining the research purpose and a self-addressed stamped envelope in which to return the survey. Of the 148 surveys mailed, sixty-eight (68) acceptable surveys were received for a response rate of 46%.

Two questionnaire items were included in the survey to gather descriptive information on the sample. The items queried the executive directors on agency size and category of agency function. Table 4.2, below, indicates that a majority (54%) of the respondents represent small agencies, those with total budgets under \$40 million.

Table 4.2 Texas Performance Measurement Survey - Agency Size

Agency Size	N=68	% of Respondents
Agency Total Budget Over \$40 million	29	43%
Agency Total Budget Under \$40 million	37	54%
Unidentified	1	2%
Missing	1	2%

Furthermore, each state agency is categorized by one of eight functions. A depiction of survey respondents by agency function is revealed in Table 4.3, below. Almost a third (32%) of the executive directors represent agencies performing an education function. Next, a quarter (25%) of survey respondents lead state regulatory agencies.

Table 4.3 Texas Performance Measurement Survey - Agency Function

Agency Function	N=68	% of Respondents
1. General Government	11	16%
2. Health & Human Services	2	3%
3. Education	22	32%
4. Judiciary	4	6%
5. Public Safety & Criminal Justice	5	7%
6. Natural Resources	3	4%
7. Business & Economic Development	2	3%
8. Regulatory	17	25%
* Unidentified	2	3%

Statistics

After data was collected, it was coded and entered into an SPSS statistical program to produce concise data summaries. For the results reported, the statistics and tables show the mode and percentage of respondents answering “Agree” and “Strongly Agree” combined into a single percentage for each survey question. Similarly, “Disagree” and “Strongly Disagree” responses have been merged into a single percentage, however, these responses are used for discussion purposes and do not appear in the tables. “Neutral” responses remain unchanged. Utilizing this method allows readers to assess the most frequently occurring perception or mode, and ultimately, the consensus of the sample in the results chapter. Moreover, using these statistics allows the researcher to offer a concise analysis of the state’s current performance measurement system.

Summary

The data in this study was analyzed utilizing descriptive statistics to explore the attitudes and perceptions of the agency directors in relation to each hypothesis. The following chapter describes the results of the survey administered to state agency directors to collect the data and reports whether the findings support or fail to support the working hypotheses developed in this research.

Chapter 5: Results

Introduction

This chapter presents analysis of survey data gathered to provide a utilization assessment of the current Texas performance measurement system. The survey results are organized by working hypothesis and sub-hypothesis and are used to determine the level of support for each hypothesis. Data for each of the 31 survey items is clearly summarized and presented in a table format. Sixty-eight Texas state agency directors responded to the survey mailed to a sample of 148 state agencies leaders, for a response rate of 46%. Complete frequency distributions are found in Appendix A.

Working Hypothesis One: Effective Communication

The first working hypothesis delves into the communication factors that influence performance measurement development. The hypotheses relate to the evidence of effective communication principles in the development of performance measures. Specifically, the input from stakeholders, communication of strategic plans and performance information directives were explored.

The research supports working hypothesis one, and finds that effective communication principles are evident in the current Texas performance measurement system. While less than half (37%) of the survey respondents agreed and strongly agreed that the performance measurement development process has input from a variety of stakeholders, a solid majority

(63%) agreed and strongly their agency’s strategic plans are clearly communicated through the linkage of performance measures to the plans in the process. An even greater majority (75%) concurred with the position that performance measure instructions are effectively communicated to relevant agency staff. As Table 5.1 below indicates, “Agree” is the most frequently occurring response to the survey items. Hence, the data supports working hypothesis one. The executives believe the performance measurement system has effective communication.

Table 5.1 Working Hypothesis One: Effective Communication

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH1: Effective communication is evident in the performance measurement system.	Texas performance measurement system is developed with clear communication.	67	37%	Neither Agree nor Disagree
WH1a: Strategic plans are clearly communicated.	Performance measures are developed with linkage to strategic plans.	67	63%	Agree
WH1b: Performance information guidance is clearly communicated.	Staff receives clear guidance information.	68	75%	Agree

Working Hypothesis Two: Information

The second set of hypotheses deal with the quality of performance information used in the system. To gain credibility a performance measurement system must be based on reliable and accurate information. Therefore, to ensure the validity and reliability of data that actually measure what the agency is trying to achieve, the performance measures must be monitored for compliance with agency goals.

Moreover, as observed in Table 5.2 below, the survey results indicate support for working hypothesis two and its sub-hypotheses, e.g., the performance measurement process operates with good information. Generally, the directors agreed and strongly agreed (57%) that

good information was evident throughout the state’s system. Overwhelmingly, however, respondents agreed and strongly agreed that the performance measurement system in their agency is based on reliable information (93%) and that the measures are properly monitored to ensure data validity (91%). Hence, these findings support working hypothesis two. State agency directors believe the performance measurement system operates with good information.

Table 5.2 Working Hypothesis Two: Information

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH2: The performance measurement system operates with good information	Texas performance measurement system operates with good information	68	57%	Agree
WH2a: Performance information is reliable and accurate.	Agency performance measures based on reliable information.	68	93%	Agree
WH2b: Performance information is monitored for compliance.	Agency performance measures are monitored.	68	91%	Agree

Working Hypothesis Three: Resources

The third set of hypotheses concern the requisite resources invested for performance measurement system operation. For a performance measurement system to function optimally, the key resources such as staff and technology must be available and administered properly. Agencies must also be dedicated to protecting system investments, in the case of resource scarcity.

Once again, the research indicates support for the working hypothesis at hand. Unlike the previous category where support was uniform, the “resources” hypothesis yielded more dispersion in opinion. For example, the respondents similarly agreed and strongly agreed (31%) and disagreed and strongly disagreed (28%) that the overall state performance measurement system is adequately funded. Still, a majority agreed and strongly agreed (66%) that agencies

have valuable resources such as trained staff to use the measures. Likewise, another strong majority (75%) agreed and strongly agreed on the availability of adequate resources for technology to collect and synthesize performance data. Furthermore, the directors concurred and agreed and strongly agreed (52%) with the notion that resource scarcity has a negative affect on performance measurement operations by directing resources away from this system. This dynamic can limit an agency’s ability to train staff and make technology purchases. Awareness of budget shortfalls can assist directors with overall planning and administration of the system. Overall, agency executives believe the Texas performance measurement system has the resources to operate effectively. See Table 5.3 for details.

Table 5.3 Working Hypothesis Three: Resources

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH3: Proper resources are invested in the performance measurement system.	Texas performance measurement system has resources to operate effectively.	68	31%	Neither Agree nor Disagree
WH3a: Expert staff is committed to success of the performance measurement system.	Agency has staff trained in using measures.	68	66%	Agree
WH3b: Resources are applied to data collection technology for performance measurement system.	Agency commits resources towards technology.	68	75%	Agree
WH3c: Resource scarcity negatively affects performance measurement system.	Revenue shortfalls direct resources from performance measurement system.	68	52%	Agree

Working Hypothesis Four: Disposition

The fourth set of hypotheses addresses the organizational culture, climate and attitudes which influence the disposition of stakeholders to “buy in” and implement the performance

measurement system. These hypotheses delve into attitudes such as confidence, trust, evidence of leadership and innovative spirit of the environment, and gauge the organizational capacity to implement performance measures.

The research findings support working hypothesis four, however, there is more variety among the modes of agreement for the sub-hypotheses. Concerning respondent perception of the Legislature, the directors neither agreed and strongly agreed (31%) nor disagreed and strongly disagreed (29%) that legislators favored using performance measures to make budget decisions. Yet, regarding individual agencies, a large majority (79%) of directors indicated they favored using performance information to make internal decisions. Another strong majority (79%) of directors believed their agency's organizational culture fosters performance measures and agreed and strongly agreed that agency staff work with a commitment on performance results. Furthermore, staffs focus on results when leaders promote performance throughout the agency. Notably, well over half (62%) of respondents sensed that agency management took a leadership role in promoting performance. Yet, just over a quarter (28%) agreed and strongly agreed that the Legislature took a prominent role in providing much need leadership of performance measurement statewide.

Furthermore, exactly a fourth (25%) of directors agreed or strongly agreed that the Legislature promotes innovation within state agencies. In fact, over a third (37%) disagreed or strongly disagreed that innovation is encouraged. Fostering innovation, giving people the latitude to try new ideas, is identified in this study as an impetus that empowers managers to utilize personal knowledge and exert influence, which encourages performance. Trust is also vital to the disposition of stakeholders. A vast majority (84%) of directors agreed and strongly

agreed that trust of agency staff is critical and considers them integral participants in the performance measurement process.

Stakeholder trust of information quality can potentially affect performance measurement implementation. Under a third (28%) of respondents agreed and strongly agreed that the Legislature has confidence in the performance measure quality. Well over a half (59%) of respondents were neutral regarding legislative confidence in the measures. Still, a strong majority (81%) of directors agreed and strongly agreed that their agency's management trust the quality of performance measures. Likewise, a high majority (78%) of respondents agreed and strongly agreed that their agency's staff have confidence in the performance data they are directed to implement.

The political and fiscal climate of a state agency affects the dispositions of employees working within the organization towards performance measurement. Slightly less than a majority (47%) of respondents agreed that political demands imposed on agency management and employees creates a demand for performance information. Similarly, just over half (52%) of directors agreed and strongly agreed that budget shortfalls in state government compel the use of performance measure usage. Detailed data are found in Table 5.4 below. Agency executives sensed that, in the respective Texas agencies, the dispositions necessary to implement the performance measurement system are evident.

Table 5.4 Working Hypothesis Four: Disposition

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH4: Disposition to implement performance measurement system is evident.	Agency favors using performance information for internal decision-making.	68	79%	Agree
	Legislature favors basing budget allocation decisions on performance information .	68	31%	Neither Agree nor Disagree
WH4a: Organizational culture supports use of performance measures.	Agency staff work with commitment to performance measure results.	68	79%	Agree
WH4b: Agency management exhibits leadership in implementing the performance measurement system.	Agency management takes leadership role promoting performance measures.	68	62%	Agree
WH4c: Legislature exhibits leadership in implementing the performance measurement system.	Legislators take leadership role promoting the use of performance measures	67	28%	Neither Agree nor Disagree
WH4d: Legislature encourages innovation by state agencies.	Legislature promotes innovation.	68	25%	Neither Agree nor Disagree
WH4e: Trust of agency staff ability to implement performance measurement system is evident.	Agency staff are valuable participants for performance measurement success.	68	84%	Agree
WH4f: Trust of performance measure data is evident among stakeholders	Legislature has confidence in performance data.	67	28%	Neither Agree nor Disagree
	Agency management has confidence in performance data.	68	81%	Agree
	Agency staff has confidence in performance measure data.	68	78%	Agree
WH4g: Organizational climate creates urgency for performance measurement use.	Political climate creates urgency for performance measure usage.	68	47%	Agree
	Resource scarcity creates urgency for performance measure usage.	68	52%	Agree

Working Hypothesis Five: Bureaucratic Structure

The fifth set of hypotheses assesses the bureaucratic structure and its affects on performance measurement implementation. These hypotheses envelop the bureaucratic demands of stakeholders working within the system experience. The experiences play an important role in understanding how performance measures usage interacts with these bureaucratic challenges if the measures are to fulfill their important role in resource allocation decision-making.

Bureaucratic structure only slightly hinders performance measurement implementation was the overall perception of agency directors. Over a third (38%) of respondents agreed and strongly agreed, while just as many (32%) disagreed and strongly disagreed with this premise. Less than a fourth (22%) agreed and strongly agreed that agencies are burdened by the organizational fragmentation evident when developing and implementing performance measures. Slightly less than a majority (49%) of respondents, however, disagreed and strongly disagreed that agencies are hampered in their use of performance measures due to the multitude of input from internal and external stakeholders. Almost a majority (46%) of directors agreed and strongly agreed that Legislators confront demands that take time away from performance measurement consideration in the hectic legislative environment. Yet, only about a third (34%) of respondents agreed and strongly agreed that agency staff pressures caused a shift of focus away from performance implementation. In fact, less than a majority (46%) of respondents disagreed and strongly disagreed that agency job pressures caused agency staff to neglect their responsibilities concerning performance measures.

Exactly a fourth (25%) of respondents agreed and strongly agreed with the concept that performance information was difficult to integrate into budget decision-making processes. The literature indicated reports that once information is compiled, the data can be difficult to

integrate into a budget decision-making framework, thus weakening the process. Nevertheless, over a majority (59%) of directors disagreed and strongly disagreed that performance data was difficult to correlate with budget decision routines.

A key element of the bureaucratic structure is organizational knowledge. Interestingly, agency directors' perception of legislators' knowledge versus that of legislative appropriations staff knowledge conflicted. Slightly less than a quarter (24%) of respondents agreed and strongly agreed with the sense that legislators had the requisite knowledge to use performance measures effectively during the appropriations process. Moreover, over a third (38%) of agency directors disagreed and strongly disagreed that legislators were knowledgeable to use the measures for budget decision-making. Conversely, exactly half (50%) of respondents agreed and strongly agreed that legislative appropriations staff have the knowledge to utilize the measures during the appropriations process. Generally, these findings weakly support working hypothesis five, which posits that the bureaucratic structural influences of state government affect utilization the performance measurement system.

While there was on overall sense that some bureaucratic structures limited implementation of performance, the respondents, in the most part, did not identify specific issues as problems. For example, an overwhelming majority sensed that organizational fragmentation does not hinder performance. Furthermore, agency directors perceived limited problems within their agencies, yet more problems within the legislature. The directors believe that the legislators do not know how to use performance information once they obtain it. See Table 5.5 below for a summary of detailed data. Agency directors perceived that bureaucratic structure only slightly hinders performance measurement system implementation in Texas.

Table 5.5 Working Hypothesis Five: Bureaucratic Structure

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH5: Bureaucratic structure affects use of performance measurement system.	Bureaucratic structure hinders implementation of performance measures.	68	38%	Agree
WH5a: Organizational fragmentation hinders performance measure usage	Organizational fragmentation hinders use of performance measures.	68	22%	Disagree
WH5b: Legislative environment creates competing demands for Legislators' time.	Legislative demands drive focus away from performance budgeting.	67	46%	Agree
WH5c: Competing demands of staff affect the use of performance measures.	Staff demands hinder time dedicated to performance measures.	68	34%	Disagree
WH5d: Performance information does not fit into budget decision framework.	Performance information does not fit routine budget decision-making.	68	25%	Disagree
WH5e: Legislature knows how to use performance information.	Legislators have knowledge to use performance information.	67	24%	Neither Agree nor Disagree
WH5f: Legislative appropriations staff have knowledge of performance measurement information.	Legislative appropriations staff have knowledge to use performance information.	67	50%	Agree

Working Hypothesis Six: Decision-making

Finally, the sixth and underlying hypothesis assesses to what extent performance measures are currently utilized for the critical purpose of internal agency decision-making and legislative budget allocation decision-making. This hypothesis explores the ultimate impact the five factors of communication, information, resources, disposition and bureaucratic structure have on performance measure usage. More specifically, this impact is gauged by assessing the use of performance measures for critical decision-making by agency executives and legislative appropriations members. While a majority (66%) of directors agreed and strongly agreed that they use performance measures to make critical internal decisions regarding agency operations, just a minority (28%) of the directors agreed and strongly agreed that the Legislature ultimately

utilizes the data when making budget allocation decisions in the appropriations process. Furthermore, over a third (38%) disagreed or strongly disagreed that legislators use performance measures to make budget decisions. This finding corresponds with the sense that the legislators do not know how to use the information, as described in the results of working hypothesis five. See Table 5.6 below for detail data. Agency leaders overwhelmingly believe that performance measures are used to make decisions within their agencies. The executives, however, maintain that legislators usually do not base budget decisions on performance measure data during the appropriations process.

Table 5.6 Working Hypothesis Six: Decision-Making

Working Hypothesis	Survey Question	N	% Agree & Strongly Agree	Mode
WH6: Performance measures are use for critical decision-making.	My agency uses performance data to make critical internal decisions.	67	66%	Agree
	Legislature bases budget allocation decisions on performance data during the appropriations process.	67	28%	Disagree

Summary

The purpose of this study was to assess the attitudes and perceptions of state agency directors regarding the utilization of the current performance measurement system in Texas. In this study, utilization comprises the concepts of development and implementation. The first through third working hypotheses involve development factors, while the fourth and fifth working hypotheses envelop implementation factors. The sixth working hypothesis binds the research and determines whether or not, once the performance measures are developed and implemented, the measures are ultimately used in the decision-making process.

The Texas performance measurement system operates on a solid rational and technical development foundation. This research supports working hypothesis one that states the Texas performance measurement system is developed with good communication. Accordingly, the findings provide evidence that agencies communicate with outside parties, strategic plans are linked to performance measures, and the measures' users receive clear guidance on data implementation.

These findings also support the second working hypothesis, which provides evidence that the system operates with good information. Overwhelmingly, the respondents believed that the system is based on reliable information, and the measures are properly monitored to confirm validity.

Moreover, the evidence supports working hypothesis three, as respondents felt the system has the resources to operate properly. Most notably, the directors fully supported the existence of qualified staff and technical resources to operate an effective system.

The evidence revealed that cultural and political elements somewhat influence the implementation of the Texas performance measurement system. While the evidence supports working hypothesis four, which assessed the disposition of stakeholders to implement the performance measurement system, the evidence revealed weaker support for working hypothesis five, evidence of the bureaucratic structural affects on the system's usage.

Overall, agency directors perceived the dispositions within their organizations as favorable for the implementation of performance measures. The directors had a favorable perception of their staffs' abilities to utilize performance data. Moreover, the directors had a favorable perception of their roles, as policy leaders, in the promotion of the system's implementation. Concerning organizational culture, a director stressed that those performance

measures, which the agency can control, engender a greater commitment to results. For example, agency performance is gauged with measures that it has no control over such as the number of people applying for licensing exams or filing complaints.

When considering the dispositions of the Legislature, however, agency directors' attitudes changed, failing to agree and strongly agree with any of the four questionnaire items addressing the legislative dispositions that composed working hypothesis four. With respect to legislative support of performance measures for decision-making, one respondent commented that the legislature lacked commitment on using performance information for decision making. Additionally, a respondent stressed that the legislature inaccurately believes it promotes innovation.

Therefore, these results showed strong skewed support for working hypothesis four. When questioned on agency disposition to implement, the directors' responses were heavily skewed towards agree and strongly agree. Regarding directors' perceptions of the Legislature's disposition to implement, however, responses were skewed in the opposite direction. Yet, overall, working hypothesis four is supported. Hence, future research should be performed due to a bias working in favor of the directors' own organizations.

Also, the results showed mixed support for working hypothesis five. This hypothesis is based on the theory that the bureaucratic make up of government and agencies, as well as the bureaucratic demands on people, affects the use of performance measures. Generally, agency directors felt bureaucratic structure had an impact on performance measure usage. The directors failed to agree and strongly agree, however, that organizational fragmentation hinders interagency coordination to effectively use measures in the respective agencies. This lack of agreement could be a testament to the evidence of good communication within the system as

revealed by working hypothesis one. Furthermore, the directors agreed and strongly agreed that the legislative environment makes it difficult for legislators to dedicated time to performance budgeting. Yet, they disagreed and strongly disagreed that agency staff job responsibilities hinder the use of performance data at the respective agencies. Agency directors also sensed that performance information could effectively be integrated into budget decision-making processes.

With respect to organizational knowledge, the findings revealed that agency executives believed legislators lack the knowledge to use performance measures for budget decision-making, yet, the directors supported the evidence of knowledge among legislative appropriations staff members.

Finally, the results showed mixed support for working hypothesis six, which posited performance measures are used for critical decision-making. There was clear support among agency directors that performance measures are used in making important agency decisions. The findings, however, did not support that legislators base budget decisions on performance data during the appropriations process.

This chapter presented survey data analysis that assessed the utilization of the current Texas performance measurement. The survey results were described by working hypothesis and used to determine the level of support for each hypothesis and sub-hypothesis. The researcher provided insight on the findings, which allows conclusions and recommendations to be drawn in the final chapter.

Chapter Six: Conclusion

Introduction

This chapter offers concluding observations and recommendations on the research project. The purpose of this research was to explore the attitudes and perceptions of state agency leaders toward the utilization of the current performance measurement system for Texas. Literature on performance measurement, budgeting, and organizational behavior was examined in order to establish a historical perspective of the topic and develop a conceptual framework that was used to collect data. The framework consisted of six working hypotheses and corresponding sub-hypotheses. Specifically, this research analyzed the critical utilization factors influencing the adoption and development of performance measures and their implementation in the state budget process. Survey research explored state agency directors' attitudes and perceptions to collect data and provided an assessment of performance measurement use. The following conclusions were formulated based on the survey results.

Conclusions

The results of this study on the attitudes and perceptions of state agency directors highlights that the respondents have a favorable opinion regarding the utilization of the Texas performance measurement system. The directors have strong support for the communication, information and resource factors that comprise performance measurement development. Regarding the implementation, however, directors' attitudes and perceptions of disposition and

bureaucratic structural effects on the system became more complex. Moreover, respondents felt while agencies use the information to make critical agency decisions, legislators do not use the information for the most critical legislative decisions, appropriating state funds. Table 6.1 below, summarizes the findings by working hypothesis.

Table 6.1 Summary of Findings by Working Hypothesis

Working Hypotheses	Level of Support
WH1: Effective communication is evident in the performance measurement system.	Support
WH2: The performance measurement system operates with good information.	Support
WH3: Proper resources are invested in the performance measurement system.	Support
WH4: Disposition to implement performance measurement system is evident.	Strong Skewed Support
WH5: Bureaucratic structure affects use of performance measurement system.	Mixed Support
WH6: Performance measures are used for critical decision-making.	Mixed Support

1. State agency executive directors in Texas agree that the current performance measurement system is developed with good communication. In the developmental process, input is gathered from stakeholders, strategic plans are tied to performance measures, and staff receive good instructions on how to implement the measures. Hence, working hypothesis one, effective communication is evident in the performance measurement system, is supported.

2. State agency executive directors in Texas agree that the current performance measurement system is developed with good performance information. The measures are created with reliable information and are monitored to ensure they measure what they are supposed to. Working hypothesis two, system composed of good quality information, is supported.

3. State agency executive directors in Texas agree that proper resources are dedicated to the current performance measurement system. Overall, the system has the resources to operate effectively. Notably, staff and technical resources are strong. Hence, working hypothesis three, investment of system resources, is supported.

4. State agency executive directors in Texas agree that there is a favorable disposition among stakeholders to implement the current performance measurement system. Agency directors have a favorable disposition, while their perception of legislators' dispositions is not as compelling. Staffs are committed to performance results, thus sustaining that organizational culture supports the system. Nonetheless, legislators neither take a strong leadership role in promoting performance, nor actually encourage innovation among agency stakeholders in the delivery of state services. Agency staffs, however, are considered important to system implementation success. Moreover, agency management and staff trust the data they work with, while the same notion does not translate to legislators. Organizational climate can affect stakeholder disposition towards the performance measurement system. The findings reveal that directors agree that the effects of political demands and resource scarcity influence performance data usage. Finally, the directors' perceptions, however, were noticeably skewed in favor of agency disposition to implement. Therefore, working hypothesis four, evidence of the disposition to implement performance measures, received strong skewed supported.

5. State agency executive directors in Texas agree, somewhat, that the state's bureaucratic structure affects the current performance measurement system. While the directors generally agree that bureaucratic structure hinders performance measure implementation, they disagree that fragmentation within state government, the voluminous amounts of people and processes that must be navigated to implement performance measures, affects data usage. The findings

reveal that governmental demands for legislators' time shifts focus away from performance measures. Yet, the same did not hold for agency staff, as their occupational demands do not affect their responsibilities regarding performance implementation. Furthermore, the directors sensed that performance data can be synthesized into regular budget decisions. An assessment of legislative knowledge of performance measures found directors agree that legislative appropriations staff have requisite knowledge and that, conversely, legislators do not. Therefore, considering these findings, working hypothesis five received mixed support.

6. State agency executive directors in Texas agree that performance measures are utilized for critical decision-making in government. The measures, however, are more often used for internal agency decision-making, than for legislative budget allocation. While directors agree that their agencies use performance data to make important internal decisions, the same notion does not translate to the Legislature. When legislators confront the decision to use performance data for budget decisions during the most critical opportunity, the appropriations process, the directors believe legislators do not adequately use the information. Hence, working hypothesis six received mixed support. Table 6.2 below, provides detailed summarized findings by working hypothesis and sub-hypothesis.

Table 6.2 Detailed Summarized Findings by Working Hypothesis & Sub-Hypothesis.

Working Hypotheses		Sub-Working Hypothesis Components	Sub-Working Hypothesis	Working Hypothesis
WH1	Effective communication is evident in the performance measurement system.			Support
	WH1a Strategic plans are clearly communicated.		Support	
	WH1b Performance information is clearly communicated.		Strong Support	
WH2	The performance measurement system operates with good information.			Support
	WH2a Performance information is reliable and accurate.		Strong Support	
	WH2b Performance information is monitored for compliance.		Strong Support	
WH3	Proper resources are invested in the performance measurement system.			Support
	WH3a Expert staff is committed to success of the performance measurement system.		Support	
	WH3b Resources are applied to data collection technology for performance measurement system.		Strong Support	
	WH3c Resource scarcity negatively affects performance measurement system.		Support	
WH4	Disposition to implement performance measurement system is evident.			Strong Skewed Support
	WH4a Organizational culture supports performance measures		Strong Support	
	WH4b Agency management exhibits leadership in implementing performance measurement system.		Support	
	WH4c Legislature exhibits leadership in implementing performance measurement system.		Mixed Support	
	WH4d Legislature encourages innovation by state agencies.		Weak Mixed Support	

Working Hypotheses			Sub-Working Hypothesis Components	Sub-Working Hypothesis	Working Hypothesis
	WH4e	Trust of agency staff ability to implement performance measurement system is evident.		Strong Support	
	WH4f	Trust of performance measure data is evident among stakeholders.		Support	
	WH4f(1)	Legislature has confidence in performance measure data.	Mixed Support		
	WH4f(2)	Agency management has confidence in performance measure data.	Strong Support		
	WH4f(3)	Agency staff has confidence in performance measure data.	Strong Support		
	WH4g	Organizational climate creates urgency for performance measure use.		Support	
	WH4g(1)	Political climate creates urgency for performance measure usage.	Support		
	WH4g(2)	Resource scarcity creates an urgency for performance measure usage.	Support		
WH5	Bureaucratic structure affects use of performance measurement system.				Mixed Support
	WH5a	Organizational fragmentation hinders performance measure use.		Weak Mixed Support	
	WH5b	Legislative environment creates competing demands for legislators' time.		Support	
	WH5c	Competing demands of staff affects the use of performance measures.		Mixed Support	
	WH5d	Performance information does not fit into budget decision framework.		Weak Mixed Support	
	WH5e	Legislature knows how to use performance information.		Weak Mixed Support	
	Wh5f	Legislative appropriations staff have knowledge of performance measurement information.		Support	
WH6	Performance measures are used for critical decision-making.				Mixed Support

Limitations

Although well-designed and thoroughly researched, the study has limitations. Primarily the research is limited in its external and internal validity. Since this research assessed the attitudes and perceptions of state agency directors about the Texas performance measurement system, the findings cannot be generalized to other regions of the country. Also, the threat of selection bias looms over the internal validity of this study due to the low survey response rate (46%).

Recommendations

The research conclusions underscore that there are several areas for improvement within the current Texas performance measurement system. The state should perform a review of the resources that are appropriated towards the operation of the performance system to ensure agencies have the staff and tools to maintain an effective system. The leadership roles of individuals, especially legislators, should be emphasized to promote utilization of the measures by stakeholders. The Legislature should wholeheartedly promote innovation in the provision of state services to empower agency staff to personally achieve goals, thus improving staff disposition to implement the system. The institutional knowledge base of stakeholders, especially within the legislative branch, should be weighed to glean an assessment of how legislative knowledge of performance measurement can influence agency operations. Finally, the state should evaluate the use of performance measures for legislative budget decision-making. Calling attention as to why performance information is not used for critical legislative decision-making can provide insight for performance measurement improvement by highlighting weaknesses or challenges that inhibit usage.

Recommendations for future studies include the utilization of a more analytical research design, a larger sample, broadening the study population with the inclusion of the legislative and executive branches, focusing solely on legislative perceptions, and further rigorous analysis of the political and cultural factors of disposition and bureaucratic structure that influence a performance measurement system. Additionally, focused interviews would add more depth to future research. These interviews could provide insight on the sense of bias in the directors' perceptions evidently working in favor of performance measure use within their own organizations.

Finally, the framework developed within this study can be used as a model for applied research to understanding how utilization factors strengthen or weaken a performance measurement system. Ultimately, this research expands the literature regarding performance measurement and improves the understanding of its utilization in government. This research serves to gain a better understanding of what is required for the successful use of performance measurement. This knowledge can be useful when developing a performance measurement system or improving an existing one.

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Appendix A

September 27, 2004

Dear State Agency Director:

My name is Michelle Romero and I am a graduate student at Texas State University- San Marcos, pursuing a Master of Public Administration (MPA) degree. As part of my studies, I am conducting an applied research project exploring the attitudes and perceptions of state agency executive directors towards the utilization of the current Texas performance measurement system. Attached is a survey instrument developed to gather research for this project.

I would greatly appreciate your assistance with my project by responding to this survey. Enclosed is a self-addressed stamped envelope with which to return the survey. All responses are strictly confidential and will be used solely for this academic project.

Thank you for your valuable time and consideration of this request. If you have any questions or would like further information regarding this project, please contact me at mr34691@txstate.edu or (512) 695-2159. Also, to view a sample of the Texas State University MPA program's applied research projects, please go to http://uweb.txstate.edu/~ps07/arp_index.htm.

Sincerely,

Michelle Romero
MPA Graduate Student
Texas State University - San Marcos

Texas Performance Measurement Survey
(Actual numbers in parenthesis)

Please indicate the extent to which you agree or disagree with the following statements by using the scale below:

	Strongly Agree: SA	Agree: A	Neutral: N	Disagree: D	Strongly Disagree: SD
1. The Texas performance measurement system is developed with clear communication from stakeholders.	SA (4)	A (21)	N (24)	D (18)	SD
2. Performance measures are developed with a direct linkage to my agency's strategic plans.	SA (8)	A (35)	N (10)	D (12)	SD (2)
3. Staff using performance measures in my agency receive clear guidance information on their implementation.	SA (16)	A (35)	N (7)	D (8)	SD (2)
4. The Texas performance measurement system operates with good information.	SA (3)	A (36)	N (21)	D (7)	SD (1)
5. My agency's performance measures are based on reliable information.	SA (15)	A (48)	N (4)	D (1)	SD
6. My agency's performance measures are monitored to ensure validity.	SA (23)	A (39)	N (4)	D (1)	SD (1)
7. The Texas performance measurement system has the resources to operate effectively.	SA (2)	A (19)	N (28)	D (18)	SD (1)
8. My agency has an adequate amount of staff trained in using performance measures.	SA (7)	A (38)	N (10)	D (13)	SD
9. My agency commits proper resources towards technology for performance measure system data collection.	SA (14)	A (37)	N (10)	D (7)	SD
10. Revenue shortfalls direct resources away from performance measurement system operation in my agency.	SA (10)	A (25)	N (16)	D (14)	SD (3)
*11. Legislature uses performance measure data to reward and punish agency performance. <i>(*Item Deleted from Study)</i>	SA (3)	A (21)	N (20)	D (18)	SD (5)
12. My agency favors using performance information for internal decision-making.	SA (9)	A (45)	N (5)	D (7)	SD (2)
13. Legislature favors basing budget allocation decisions on performance information.	SA (3)	A (18)	N (27)	D (18)	SD (2)

14. My agency's staff work with a commitment to performance measurement results.	SA (16)	A (38)	N (9)	D (4)	SD (1)
15. My agency's management takes a leadership role in promoting the use of performance measures in state government.	SA (9)	A (33)	N (17)	D (8)	SD (1)
16. Legislators take a leadership role in promoting the use of performance measures in state government.	SA (1)	A (18)	N (29)	D (17)	SD (2)
17. Legislature promotes innovation in the delivery of agency services.	SA (2)	A (15)	N (26)	D (19)	SD (6)
18. Agency staff are considered valuable participants for performance measurement system success.	SA (20)	A (37)	N (7)	D (3)	SD (1)
19. Legislature has confidence in the quality of performance measure data.	SA (1)	A (18)	N (40)	D (6)	SD (2)
20. My agency's management has confidence in the quality of performance measure data.	SA (15)	A (40)	N (8)	D (4)	SD (1)
21. My agency's staff has confidence in the quality of performance measure data.	SA (11)	A (42)	N (9)	D (5)	SD (1)
22. Political climate within state government creates urgency for performance measurement usage.	SA (1)	A (31)	N (22)	D (12)	SD (2)
23. Resource scarcity within state government creates an urgency for performance measurement usage.	SA (7)	A (28)	N (22)	D (10)	SD (1)
24. Bureaucratic structure hinders implementation of performance measures in Texas state government.	SA (4)	A (22)	N (20)	D (20)	SD (2)
25. Organizational fragmentation within state government hinders the coordination necessary to use performance measures effectively in my agency.	SA (2)	A (13)	N (20)	D (29)	SD (4)
26. Competing legislative demands for Legislators' time drives focus away from performance budgeting implementation.	SA (3)	A (28)	N (26)	D (10)	SD (1)
27. Staff demands hinder the amount of time dedicated to implementation of performance measures in my agency.	SA (2)	A (21)	N (14)	D (29)	SD (2)

28. Performance information does not fit routine decision-making in my agency.	SA (5)	A (12)	N (12)	D (33)	SD (6)
29. Legislators have the knowledge to use performance information during the appropriations process.	SA	A (16)	N (25)	D (19)	SD (7)
30. Legislative appropriations staff have the knowledge to use performance information during the appropriations process.	SA (2)	A (32)	N (17)	D (10)	SD (6)
31. My agency uses performance data to make critical internal decisions.	SA (8)	A (36)	N (15)	D (7)	SD (1)
32. Legislature bases budget allocation decisions on performance data during the appropriations process.	SA	A (19)	N (21)	D (23)	SD (4)
33. My agency's total budget is greater than \$40 million.	Yes (29)	No (37)	Don't Know		
34. Circle whichever category represents your agency's function.	General Government (11) Health & Human Services (2) Education (22) Judiciary (4) Public Safety & Criminal Justice (5) Natural resources (3) Business & Economic Development (2) Regulatory (17)				

Thank you for your help.

Please return the completed questionnaire to Michelle Romero in the enclosed, addressed and stamped envelope by October 21. If you have any questions, please contact Michelle Romero at mr34691@txstate.edu or 512-695-2159.

