

DOCUMENT RESUME

ED 414 299

TM 027 745

AUTHOR Jorjani, Hamid  
 TITLE Demystifying Results-Based Performance Measurement.  
 PUB DATE 1997-05-00  
 NOTE 57p.; Paper presented at the Annual Meeting of the Canadian Evaluation Society (Ottawa, Ontario, Canada, May 1997).  
 PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)  
 EDRS PRICE MF01/PC03 Plus Postage.  
 DESCRIPTORS Accountability; \*Cost Effectiveness; Definitions; Foreign Countries; Leadership; \*Organizational Change; \*Performance Based Assessment; Private Sector; Program Evaluation; \*Public Sector

ABSTRACT

Many evaluators are convinced that Results-based Performance Measurement (RBPM) is an effective tool to improve service delivery and cost effectiveness in both public and private sectors. Successful RBPM requires self-directed and cross-functional work teams and the supporting infrastructure to make it work. There are many misconceptions and definitional problems related to RBPM. In the first place, defining the scope of performance measurement in the public sector is particularly difficult in some instances, largely because it is difficult to define the bottom line in public service. In the second place, the concept of RBPM is to include or cross over on important topics such as accountability and empowerment. A third issue is that the idea of RBPM is strongly linked with management and leadership culture, so that it is difficult to describe it without reference to leadership, empowerment, accountability, and advances in information technology. The basic tenets of RBPM can be defined as responding to a changing environment, meeting the challenge of the public interest, and reporting performance measures that capture management's response and the public's interest. RBPM allows organizations to look at their missions. The important element is relevant performance comparison through an integrated, comprehensive set of measures that flow from the vision and strategy of top executives. Although RBPM has been associated with downsizing, it is really a strategic repositioning that allows organizations to focus on strengthening their competitive positions. (Contains 7 figures, 2 tables, and 52 references.) (SLD)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 414 299

# Demystifying Results-based Performance Measurement

by  
**Hamid Jorjani**

**CES Conference**

**May 1997  
Ottawa**

TMO27745

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

Hamid Jorjan

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

# Demystifying Results-Based Performance Measurement<sup>1</sup>

## 1. INTRODUCTION:

Most public sector organizations are still largely dominated by an administrative culture in which the headquarter lays down the rules and delegates very little authority to the lower ranking managers and employees. Within this culture performance is assessed in relation to conformity rather than the successful performance of tasks.

With rapid changes in science, information technology, socio-economic, and political environment, both private and public organizations are seeking reforms (Bisgay, 1995; Ricciardi, 1996). Organizations are challenged to meet increasing demands for better and improved services at the time when fewer resources are available to meet those demands.

Many top executives and subject matter experts are convinced that Results-based Performance Measurement (RBPM) is an effective tool to improve service delivery and cost-effectiveness in both private and public sector (Mihn, 1995; Wholey and Hatry, 1992; Bisgay, 1995). Essentially, RBPM is going back to the basics and redefining vision/mission, strategic directions, goals and results and restructuring the way organizations do business. Although, there is nothing particularly new about such ideas, finding a powerful person to champion the change certainly can ensure the effectiveness of this concept (Nyhan and Marlowe, 1995).

---

<sup>1</sup> I wish to thank Elaine Lawson, Frank Brunetta and Terry Tunney for their interest and continued support of my R&D activities; Ms. Ingrid Monasterios of the Canadian Agricultural Library for the literature search; and many of my colleagues particularly Brian O'Donnell who provided excellent comments.

The RBPM, however, cannot make an organization into something that it is not. It can be an effective way to manage, but it is not “one size fits all” for every organization or in any situation. It requires self directed and cross-functional work teams and the supporting organizational infrastructure in order to improve client satisfaction, cost reduction, and product quality. The critical element in RBPM is measuring results and conveying performance information. Although, these days, the term performance measurement is used extensively, it is often oversimplified, misinterpreted and even misapplied. For the most part, measurement of team performance has focused on organizational results (i.e., project outputs and intermediate outcomes) or team-process measures, neither of which gives the precision needed to fine tune the team’s efforts and contribution. Measurement of outcome (i.e., impacts) has been particularly difficult in public organizations where it is extremely difficult to establish common denominators of performance among varied activities (Jorjani and Dyer, 1996). Therefore, while RBPM provides many opportunities, it also presents major challenges.

Discussion papers like this are intended to help us understand the concept, some of the challenges and opportunities, with a view to identify the ways in which we are best equipped to implement this concept. This paper will have served this purpose well if it establishes a platform for future discussion on these issues among those interested in the topic. This paper is aimed at a wide audience including public service managers, program auditors and evaluators, academics, analysts and the general public. It is hoped that this paper sensitise these groups to the concept, the questions it covers and improves their understanding of them and encourages constructive debate. In pursuit of this objective, the paper will provide an overview of the concept and will discuss challenges, opportunities and some of the implications of operationalizing the concept within a public organization.

several unanswered questions about some of the theory-laden concepts, such as leadership, empowerment, and accountability that are difficult to deal with in the public service environment. The core questions asked are: is this another promising theory fraught with many pitfalls and unanswered questions? and further, why have very few succeeded in making it work for them? Whether well founded or not, the existence of these perceptions and questions will get in the way of organizations who see merits in implementing a RBPM approach to doing business.

A more revealing glimpse of this concept may be gained by a systematic examination of the context and the linkages involved in the RBPM. Clearly, managers' perception is fundamental to producing changes in the public service. Without a clear understanding of these linkages managers may not be able to judge the significance of RBPM. Hence, in order to create a positive perception first, we need to understand the context, the risks and the down sides as well as the opportunities.

### *2.1 The Context:*

Many governments and their organizations are the product of years of accumulated responsibilities and roles as we had to react to the realities of the cold-war era. While doing some of the things made sense at the time, but the overall impact has been outdated and over extended organizations that are heavily burdened with overheads and often an unclear definition of their mission.

RBPM is a post-cold war phenomenon where priorities are shifted to other considerations, such as openness and greater participation by the people in the affairs of the state, sufficient employment opportunities, effective environmental consideration and better communication

and reporting mechanism. In the past governments used to run bureaucracies that were pursuing narrow interests, often at a very high cost to the tax payer and the environment. As a result, most governments were experiencing economic challenges, such as an economy dominated by government subsidies and spending, high budget deficit, and rising global competitiveness. Top executives were often constrained by administrative procedures and conflicting accountability requirements. Furthermore, dissatisfaction of the elected officials with governments reporting process, the public disenchantment with results and increased tax burden gradually caused an increasing public distrust in governments (GAO, 1995a).

## ***2.2 The Need for Restructuring:***

Today, the most important challenge is the structure of governments and the public decision-making processes. A combination of elements, such as post-cold war geo-politics, globalization of economy, fiscal pressures, tax fatigue, youth unemployment, national identity, and advances in information technology and related sciences and technologies have direct or indirect impacts on government structures in market economies. As many private sector organizations have come to understand effective organizations cannot afford to be static in this fluid environment. Structures and processes that have worked well in the past no longer allow public organizations to respond quickly in a rapidly changing world.

A comprehensive reassessment of governments' roles and responsibilities is central to any reform. One of the emerging post-cold war strategies is to bring about a government that is not only smaller but also more efficient and effective. As a general rule in this competitive global market, clients and external stakeholders think in terms of results rather than the internal processes that produce the result (Mihn, 1995).

Since the early 1980s, and particularly after the cold war, there has been a new focus on the role and activities of governments (Bulder, et., al., 1996). Much of this new interest has been inspired by fiscal constraints and a pervasive question of what tax payers are getting for their money that is invested in various government programs. In rethinking the efficacy of traditional approaches to the role of government and how governments did business, the elected officials and top executives in the public service recognized that a new mind set and approach for better management in the public sector had to be established. This required new structure and management processes to promote client-focus, efficiency, effectiveness and clear delineation of roles and responsibilities. In this context it became clear that responses were urgently needed to facilitate the following:

- Openness and improved public awareness of government activities,
- Greater focus on articulating clear objectives to be pursued by government organizations in order to facilitate setting priorities and achieving results.
- Improved system of reporting to elected officials and top executives to enhance their decision-making and allocation of public resources to competing needs.

Consistent with this new conventional wisdom, public organizations began moving away from earlier concepts, such as *governability*, which is said to be mainly associated with regulations, law and order and the means to enforce them to a new one that is called *governance*.

Governance is a broad term that is associated with internal reshaping and use of public management and putting people first (UNDP, 1996). Some of the characteristics of sound governance are illustrated in table 1. A closer look at these characteristics reveals the significant linkages between the objectives of RBPM and sound governance. Some of these common elements will be discussed in the following section.

Other changes were focused on effectiveness of government activities and performance measurement. Top executives in government have recognised that their ability to make sound decisions is hampered by the absence of sound performance information. As a result, there is increasing focus on a results-based performance measurement approach that establishes appropriate strategic goals, defines proper performance measures, and develops useful performance information to meet both Parliamentarian and public managers needs. Results-based management provides a mechanism for government organizations and their senior managers to jointly engage in the reassessment of strategic goals and associated results. The most important component of this approach is undoubtedly consultation. Consultations with managers and stakeholders is vital in preparation of strategic plans. These consultations are an opportunity to work collectively in reassessing and clarifying the missions of government agencies and the outcomes of government programs.

Governments at all levels are striving to reform by, among other things, developing clearer priorities for programs and their relationships to other levels of government and the private sector, and more results oriented. In most OECD countries, such as UK, USA, Australia, and New Zealand, this reform has included an emphasis on accountability and improved service to tax payers and clients (Smith, 1995; GAO, 1995b; ). In Canada, this increased emphasis is evident in recent initiatives such as PRAS, Improved Reporting to Parliament, and Government-wide Performance Indicators Project (President of the Treasury Board, 1995; Government of Canada, 1996; President of the Treasury Board, 1996;).

### 2.3 *The Linkages:*

Under this new post-cold war phenomenon, traditional definitions of “public service” are being challenged from different angles. This new phenomenon is not a single concept. It is



rather a combination of circumstances that are linked to recent technological, political, socio-economic and environmental changes. The impact of some these changes are captured under a new term that is the “globalization”. Most people associate globalization with trade liberalization and the new internationalization in the financial market. However, “globalization” is also changing the context within which most governments are operating. There are misconceptions and definitional problems about RBPM on several accounts. First, defining the scope of performance measurement in the public sector is particularly difficult in some instances, mainly because we are having a hard time to define what is the bottom line in the public service (Jorjani, 1996). Second, the concept of RBPM is taken to include or cross-over important topics, such as accountability and empowerment. Third, the notion of RBPM is strongly linked with leadership and management culture change. Thus, it would be most difficult to describe the notion of RBPM without first discussing some of the fundamental linkages with other related issues, such as leadership, empowerment, accountability and advances in information technology. However, it is worth mentioning that to some managers and employees in general, these linkages are to a considerable extent theory-laden. Regardless of the perceived fuzziness surrounding these topics, the linkages and related issues constitute the theoretical underpinnings upon which the whole concept of results-based performance measurement is based. Some of these related topics are discussed below.

### ***ROLE OF LEADERSHIP***

Leadership is an important component in the RBPM. First of all, leadership plays a significant role in providing a vision and direction for the organization and that senior management should be able to energize and inspire other members of the organization in the pursuit of organizational objectives and achievement of results. Top executives can play a decisive role in implementation of RBPM in an organization by insisting that performance goals and

measures be used to drive daily operational activities of the organization. Assuming that top executives are convinced that RBPM is an appropriate vehicle to run their business, consistent reinforcement and the use of corporate measures to make corporate decisions by the senior management, will send a strong message to employees that the top executives of the organization expect that RBPM is thoroughly implemented. Other ways to provide leadership is to legislate the concept and demand compliance, as it has been done in the USA through Government Performance and Results Act (GAO, 1996).

### ***EMPOWERMENT***

Public organizations are complex systems that involve interaction of several components, such as administrative, regulatory, legal, policy and other support operations, and stakeholders, both internal and external. This complex system will not work effectively if people within the organization do not have the right combination of skills, knowledge and attitudes, and if there is not a structured system in place for the regulation of interactions. However, empowerment within an organization involves more than training, it is also about the involvement of the people in determining the mission and goals of an organization, analysis of its shortcomings and identifying solutions and implementing them. In essence, the only way to achieve corporate objectives within this competitive environment is to use everybody's talents, giving key players authority and provide them with means (Moravec, 1996).

### ***ACCOUNTABILITY***

Accountability is commonly defined as holding individuals and their organizations responsible for the outcome and consequences of their activities and performance. Public accountability refers to the wide range of approaches and practices used by governments to ensure that their activities and outcomes meet the intended goals and standards. Public accountability is

intended to ensure close correlation between stated intentions or goals and actions and services rendered to the public as well as the efficient and effective use of public resources. Therefore, in broad terms the notion of accountability reflects the efficient and effective use of public resources, the extent to which the interests and concerns of clients or stakeholders are incorporated in accountability mechanism or incentive and control systems (at the level of individual and group performance) the caliber of leadership, the culture of the organization or work unit, and the extent to which there are reasonable links established between responsibility and authority. Table 2. Shows a hypothetical framework where accountability levels are depicted in relation with reporting, key messages and some potential indicators. It is worth noting that the focus moves from operational level activities and outputs to corporate level outcomes and impacts.

In dealing with accountability issues, one of the important tasks is establishing a clear link between performance and reward. Many managers simply do not really know what their employees are capable of. Most employees are able to give far more than they are asked and, when properly motivated, will willingly give more (Riehl, 1996). However, because organizations are *process* oriented, they tend to reward people who are good at feeding the process. Organizations tend to reward those who are more process oriented, completely ignoring the fact that others with more insight and broader perspective on results and impacts can also function effectively within the system.

Here is the issue, the public service has been characterised with a lot of “red tape” or processes that is by its nature very process intensive and at times not entirely necessary for creating or producing the “Public Good” or “value-added”. It must be recognized that much of today’s bureaucracy has developed during the cold-war era and at times that adding to

administrative complexity was not questioned. Today, this is changing on two accounts. *First*, with the advance of technology and emphasis on a single-window concept in service delivery, some of those process intensive positions have either been entirely eliminated or modified. *Second*, with more emphasis on results-approach to service delivery public organizations are beginning to realize that the critical factor to the success of the organization is well qualified individuals who can transfer information into knowledge regardless of their age, gender, religion or creed. Hence, the competitive nature of the market dictates that expert professionals are involved not only in filtering the information but also participating in decisions that involve identifying potential opportunities that would make or dysfunction an organization.

Thus, government performance is a function of a wider array of variables that include the linkages between:

- clarity of strategic goals and operational objectives and expected results, expected results and a clear delineation of roles and responsibilities;
- performance and reward;
- performance and standards;
- performance and the feedback system (i.e., the integrity of the measurement system, such as relevance, timeliness, sufficiency, reliability and validity of information);
- performance and ability of the end users to put performance information in better uses. For example, the executives using the information for better decision making, the elected officials using the feedback for identifying priorities and allocating resources, and the public using the information to put pressure for better services and value for their tax dollars.

A RBPM approach would require a mission-driven organization . But this means, in order to achieve its goals an organization should free its employees to pursue the organizations mission with the most effective methods they can find (Osborne & Gaebler, 1993, p.113).

### *TECHNOLOGY*

Within the public sector environment, some think of the RBPM as an innovative re-engineering process that is aimed at removing rusted stovepipes by sophisticated centres of expertise that provide quality services to the clients and public at large. One of the key instruments in this re-engineering process is technology which breaks down functional barriers. Changes in technology are expressed as the third industrial revolution where computers and other communication technologies are what the introduction of steam was to the end of 18th century (Nye, 1999). Thus, an important aspect of RBPM is the information technology which acts as a strategic enabler to help an organization achieve its objectives. The continuous integration of information flow among the functional areas of an organization, would require a responsive information system. With rapidly changing and advancing information and communication technology the biggest challenges are (a) integrating business strategy and planning, performance measurement, and reporting with information technology; and (b) creating an appropriate internal information technology backbone to support more interactive approach to doing business (e.g., Sheridan, 1994). Some of the common questions about business goals and information system integration are:

1. How to establish appropriate information system linkages across functional boundaries in order to give managers and employees rapid access to the information they need for planning, designing, analysis, monitoring and reporting of results?

2. How to develop the information infrastructure required to facilitate and monitor electrotonic transactions?
3. How to design an information-system backbone that is flexible enough to evolve as the needs of the organization change?

### *HUMAN RESOURCES ASPECT OF THE RBPM*

RBPM promotes the greatest synergy between people inside and outside the organization. This synergy is characterised by an organizational wide consensus about priorities and societal values and attitudes. Therefore, the organization transfers from a rule- bound entity to a mission-driven organization where the client and the tax payer become the focus. In operational terms, achievements of results becomes an interaction between the top executives who in partnership with the sector CEOs set strategic goals, and the employees who translate those goals into results and outcomes.

From an HR point of view, staff's educational level and specific expertise plays a critical role. The poorly educated and trained staff are less able to make the best use of available information and to identify competitive strategies for improved performance. Thus, governments have to redefine themselves and develop an organizational structure that would support the notion of results based performance measurement. In this context then the link between empowerment and accountability becomes very significant.

When positive values are clearly articulated and widely shared, and management cultures are robust, effective and lasting a distinct positive and productive atmosphere will prevails in the whole organization. Most of the positive values and management culture are common sense

concepts, such as openness and trust, dedication to outstanding service, and perseverance in the face of adversity and commitment to innovation and avoiding waste.

Therefore, HR aspects of the organization must be managed in a manner that reinforces its mission, business objectives and strategies. Why education is important, because strategic management of organizations in relation to their environment is one of the most important features of a senior managers job. In other words educated and well trained staff positioned in appropriate area are strategic resources for achieving competitive advantage.

### **3. PERFORMANCE MEASUREMENT**

Performance measurement in the public service is not a new concept. The earlier attempts to measure and improve productivity of workers dates back as far as the 1910s. The concept was later enhanced by operations research and systems analysis techniques developed during the World War II (Nyhan & Marlow, 1995). Theoretically, performance measurement is a feedback system, a mechanism capable of continuously monitoring the state of a process and automatically sending back appropriate corrective signals (Jorjani, 1994; Dent & Ezzamel, 1995; Kravchuk & Schack, 1996; Jorjani & Dyer, 1996). This feedback process involves analysis of dynamic factors that collectively drive the system towards self renewal and regulation (Burrell & Morgan, 1979; Buckley, 1967; Hedberg, et. Al., 1976). However, this concept predicated upon the assumption that the system has sufficient information carrying capacity, and there are appropriate performance measures to facilitate monitoring the variety of possible activities within the process. Within this context, performance measurement is viewed as an integrated concept that helps organizations better understand their processes and outcomes and to allow for a holistic and integrated analysis of the organization's mission, goals and objectives in relation to its current performance in the context of other internal and

external factors (Kravchuk & Schack, 1996; Senge 1996). An illustration of this concept, particularly in relation to the review function in the public service environment is provided in Figure 1. Some of the broader aspects of this concept, such as performance measurement platform, measurement strategy and methods will be discussed in the following sections.

At the heart of this new approach to performance lies a radical decision to shift from treating financial figures as the foundation for performance measurement to treating this as one among a broader set of measures (Eccles, 1995). Aside from these theoretical discussions the reality is that the current information-based economy is results-oriented. The elected officials, executives and the public are beginning to hold government agencies accountable less for inputs and outputs than for outcomes, and ultimately, the differences they make in the economy or program participant's lives. Prior to this new phenomenon, governments used to be preoccupied with process and hierarchy at the expense of results. The focus was on means rather than on the ends. For example, most organizations used to adopt approaches similar to the so called 'Generally Accepted Accounting Practices'. This approach involved listing of all activities and a balanced statement of how resources were spent. Now with the focus being on results, most public sector organizations are converting to performance-based organizations. A schematic representation of this concept is provided in Figure 2. As shown in this figure, within the public sector performance measurement is about designing and mapping strategic plans focussed not only on tools, activities and program outputs but ultimately on accomplishing socio-economic and enviro-political outcomes initiated by tax payers and their elected officials. This schematic is a conceptual road map of performance measurement that if implemented and used properly would lead to: (i) maximizing societal well-being by focussing on results that reflect societal goals, such as economic growth, employment opportunities, and environmental sustainability; and (ii) changing organizations by



focusing on results and outcomes. The key features of performance measurement depicted in this schematic include:

- 1. Participatory:* The results-based approach to performance measurement allows a more effective government-business-society partnership in setting goals. In a way this aspect of results-based performance measurement could be viewed as a vehicle for promoting a more democratic ways of running governments and business particularly in emerging democracies and newly industrialized societies.
- 2. Encouraging learning and innovation:* Systematic review of resources and constraints in the face of intense global competition, prior to setting strategic goals and priorities and designing the appropriate policies and programs to achieve results, encourages learning and innovation. In today's highly competitive environment, organizations must constantly innovate to get ahead of equally innovative rivals.
- 3. Establishing an effective outcome related public sector performance measurement:* Systematic review of results through appropriate measurement systems allows internal and external decision makers to connect performance information with the end results, particularly in decisions concerning allocation of resources to competing needs.

On the surface, this systems concept may be seen as a centralized approach to organizational control which was considered as a sub-optimal and inefficient system (e.g., Williamson, 1975). However, in today's information-based economy, and with rapid advances particularly in information technology some of the perceived short-comings associated with control systems are no longer a challenge. For example, with advances in computer technology multi-level data communication occurs instantaneously.

### 3.1 What is Performance:

Performance has a wide spectrum that involves several levels of information. Performance information has a relationship with the end-users information needs, be it the public, management levels, and top executives. Therefore, performance measures are tailored to match the requirements and responsibility of each end user. For example, the elected officials require higher level, more strategically oriented planning, and results information with a focus on outcome. Managers, on the other hand, are interested in performance information that is tied to program goals and demonstrates the degree to which the desired results were achieved.

### 3.2 What is Measurement:

It is a process of observing, analysing, and recording *changes* that reflect productivity effectiveness and efficiency of government activities. An effective, accurate and credible measurement requires a measurement system that includes bench marking, setting targets and standards (Standards should be realistic), and measurement methods. And also, involves employee performance incentives and reward system (e.g., Brinkerhoff & Dressler, 1990). Some of the steps involved in effectiveness measurement include: strategic planning (e.g., setting targets and performance standards, developing measures, establishing an appropriate measurement system (i.e., looking at the existing information silos, current collection, analysis and reporting structures, data needed, and costs of establishing a new system), validating measures, and integrating the measurement system with management processes through the review function. A detailed discussion on the key steps will be provided in the following sections.

### 3.3 *Performance metrics:*

As noted by several authors, the biggest challenge to performance measurement is the issue of metrics, the careful measurement of an organization's performance against goals and objectives specified in strategic or business plans requires specific indicators (e.g., Henderson, Jr., 1995; Kimm, 1995). Aside from the question of selecting appropriate performance measures, there are questions about linkages between planning and budgeting, and the relationship between multi year strategic planning and annual plans and reports (Kimm, 1995). Traditionally, public organizations used the amount of money directed toward their programs, or the level of staff deployed, or even the number of tasks completed as some of the measures of their performance. But in the current environment when many government programs are undergoing intense public scrutiny, an organization that reports only these measures has not answered the defining question of whether these programs have produced real results. Most experts are convinced that strategic decisions and effective communication with the public would require more than financial performance measures. Furthermore, better performance and financial information can advance the debate on the need for and the effectiveness and efficiency of specific government programs (GAO, 1996). While methods for collecting and using nonfinancial measures are well represented in literature, many are still unconvinced as to how non-financial measures can be effectively integrated with financial measures (Lee, et. Al., 1995).

#### *Common terminology:*

Try to avoid confusions during discussions about various levels of performance information. The best way to deal with this issue is to develop a distinct terminology or a tier system that closely reflects the information needs of the organization and its stakeholders. For example, consistent with levels of performance information required for setting strategic goals,

measuring organizational performance, and program or activity related performance measurement, the process could focus on three main categories or tiers of performance information. Depending on the organization's mandate, the required performance measures may include:

1. Sectoral Performance Indicators (SPI). These can be either quantitative or qualitative expressions that are typically expressed in relation to broad corporate level strategic goals, such as those articulated in outlook documents. SPIs reflect the environment in which the sector operates. This information could also identify the external factors that could affect the sector and impact on the organization's ability to accomplish its objectives. Because of the broad nature of these indicators, organizations have no or very little significant influence over such indicators (e.g., GDP).
2. Agency Performance measures (APM) could be abstract concepts, proxy indicators or an evidence (e.g., an MOU or other documented agreements) that describe the extent to which a desired outcome has been achieved. APMs involve two separate components, the performance measure and the target. For example, "to increase the immunization rates (measure) for two years Olds by 40% by 1999 (target)". Hence, setting targets in terms of results-based indicators is a crucial next step. Typically, APMs reflect the key performance (or results) spectrum of core departmental activities (as described under each business line), that are designed to serve one or more client groups. APMs will enable organizations to assess accomplishments, make decisions, realign processes and assign accountability.
3. Operational Performance Indicators (OPI) are program specific indicators that are tied to program or service initiative goals. OPIs describe how well an activity is carried out.

or to what degree a program is accomplishing what is intended and the likelihood that it will continue to achieve those goals. With regard to the selection of appropriate measures, authors have suggested different criteria (e.g., Brinkerhoff and Dressler, 1990). However, the following are the more closely associated with the results-based performance measurement.

These are:

- reflect measuring towards goals and objectives,
- reflect results (i.e., short, intermediate, and long-term) that are integrated with the organization's mission and goals,
- reflect accountability structure.
- reflect service quality standards,

*Self-assessment:*

Self-assessment is a measurement technique to monitor the performance of an organization. This technique is based on criteria originally developed for quality awards. Some of the most common frameworks for self-assessment include the American *Malcolm Baldrige National Quality Award Criteria* (MBNQA), the *European Quality Award* (EQA) criteria, Canadian National Quality Institute *Quality Criteria*, Canadian Comprehensive Auditing Foundation *Governance Information Check-Up*. It is said that services and manufacturing organizations are more likely to use self-assessment than public sector organizations (Zairi & Sinclair, 1995). One of the key questions concerning self-assessments is to what extent these self-assessment checklist methods are effective. For example, should these checklists be incorporated in every measurement study? Would the required performance data be available to facilitate a comprehensive audit and evaluation? What happens when the information needs

of the client are focussed on one or two attributes of the checklist, such as design and delivery (e.g., quick and dirty assessments), or objectives achievements (e.g., mid-term evaluations)? Aside from these questions, checklist performance measurement could be very mechanistic, in that performance is gauged primarily against certain attributes that are provided in the self-assessment forms. Because of this mechanistic approach there is a strong likelihood that the performance information generated becomes very subjective. Furthermore, a performance tool should not create just another report card, it should also actively encourage improvements in the quality of outputs and outcomes. Some of these views are also shared by other authors. For example, Ricciardi (1996) emphasises the need to ensure a measurement tool gives equal weight to quality as well as productivity. The other point is that in a results-based environment, the organization depends on teamwork and the synergy between people and the organization. Regardless of the structural organization, team efforts involve people with cross-disciplinary background and divergent goals and aspirations. Constant negotiation and conflict resolutions that take place within the organization constitute the essential parts of the performance and productivity. One may argue that the checklist self-assessments cannot capture these aspects of people's productivity and as such it may convolute the intricate relationship between performance measurement, recognition and rewards. Hence, it is fair to argue that self-assessment and checklists are not the panacea. However, they could be considered as part of a measurement strategy.

*Measurement strategy:*

Public organizations would require a wide spectrum of performance information that include strategic, tactical and operational levels. All this information is collected, massaged, interpreted and transferred into strategic feedback information that is fed through various decision-making and reporting structures, both internal and external. Consistent with some of

the tenets of RBPM, the corporate decision-making apparatus is separated from the operational component. However, the connecting bridge between the two levels is the core business of the organization (Figure 3). In order to be able to channel all the required information effectively to various levels of decision-making and planning and reporting structures, there is a need for a sophisticated performance measurement *system* that relates to the entire organization and its activities. This system should address the two key questions of what do we need to put in place? and what do we need to measure?

### *What do we need?*

First, we will deal with the issue of what do we need. This system comprises a number of subsystems that are interdependent. These include:

1. *Information System*: typically, any information system would include two components:
  - (a) an information platform that provides the physical capacity for collecting, sorting retrieving, and massaging data as well as presenting the findings.
  - (b) a set of random and/or pre-defined and formatted information and data (e.g., correspondence, transactions, outputs, etc.).
2. *Planning Component*: it is a process that matches organizational strategic goals, resources, and skills through a detailed and orderly process of documenting roles and responsibilities, resources, tasks, targets, milestones, expected results, appropriate feedback loops, and time lines. Planning is usually done in different sequences:
  - i) *quarterly* or *semi-annual* plans need to be prepared at each project level, and they construct the performance baseline.
  - ii) *Annual Plans* reflect the business plans that are prepared by each business line principal. The best way to prepare these plans is to hold annual conferences where regional and HQ managers evaluate progress against

corporate as well as business line plans, adjust directions and develop new strategies.

iii) *Multi-Year Plans* are traditionally prepared for submission to central agencies for priorities identification and budget allocation.

3. *Measuring Results*: it is a regular monitoring of the extent to which the organization is achieving its vision and fulfilling its mission (as described in the planning component). This process has two sub-components that include: (a) standards and benchmarks against which an observed performance could be gauged. (b) self-assessments and checklists and other review methods (e.g., case-studies, benefit/cost analysis, etc.), audits, evaluations and impact studies.
4. *Reporting Results*: reporting is synchronized either with each clients preference or critical times that coincide with planning and budget cycles and other important decision-making process. It will also respond to the specific format and content requirements of the end users.

If operated appropriately, this measurement system should provide relevant, timely and accurate performance information. Within the context of RBPM, there are two elements in performance measurement. (A) internal measurement reflecting all cross-functional operational and management activities (B) external management reflecting impacts and effects of the public activities within the sector and society as a whole. By adding an international dimension, one could expand the external management to include the global market.

#### *What to measure, how to measure and who does the measurement?*

Using a systems concept, the wide spectrum of public performance could be measured through three components: *Process Feedback*, *Direction Feedback*, and *Outcome Feedback* (Jorjani, 1994). However, as most public policy and program outcomes' are realized in a 3-4 year



time period, the outcome feedback could be modified to include another sub-component that is focused on intermediate outcome. Figure 4, depicts this measurement system. This integrated system comprises four quadrants:

- The *first* quadrant represents an internal tracking system whereby various issues, such as design and delivery, HR, finance, and other support services (e.g., communication and information systems, safety and security, etc.), could be measured against established guidelines, standards and milestones. These tracking activities are usually carried out internally (i.e., within the project environment). Some of these tracking systems may include quality or environmental management practices auditing and other methods, such as ISO 9000, ISO 14000 and, where appropriate, some of the specific steps provided in various self-assessment check lists. These methods are aimed at improving performance at all functions of the organization.

Any deviation from normal values pertaining to regulations, standards and milestones would trigger management-led reviews that may include several methods, such as bench marking, audit and evaluation. These reviews are carried out by the review arm of the organization (e.g., Review Branch). The results of these assessments could be presented in *Quarterly or Semi-Annual Plans* that are widely distributed to employees and stakeholders.

- The *second* quadrant focuses on improving internal productivity or reducing costs of operations and timeliness of services. Most of these measurements are carried out internally by designated systems (e.g., automated tracking device that records all transactions, or a filing system that keeps records of all correspondence, complaints, etc.) or individuals who are tasked with the responsibility of tracking the processes and

monitoring compliance with rules and regulations, and reporting results. These measurements are carried out against established corporate directions, targets, and project milestones as articulated in the business plan, as well as operational directives, guidelines, and standards provided by government or professional associations and other related stakeholders (e.g., policies or directives on hiring freeze, gender issue, service or delivery standards set by partners etc.). The measurement methods include some of the self-assessment techniques as well as the established procedures for effectiveness measurement (e.g., TBS guidelines). These measurements enable team leaders and task coordinators to determine whether activities and efforts are proceeding as planned.

Any inconsistencies in the flow of resources and support services to internal and external clients would trigger management or client-led reviews. These reviews are generally carried out by the review arm of the organization. Findings of these assessments are presented in *Annual Plans*.

- The *third* quadrant focuses on how the organization achieves its superior performance that reflects its strategic goals and client's requirements. For example, are organization's lines of business well targeted, are goals and objectives still relevant (i.e., do they still correspond with the changing environment), and are cross-functional activities complimentary or going at cross-purposes? In other words at this stage the focus is on intermediate outcomes and causality particularly with respect to changing environment earlier on to ensure the desired outcomes are realized. To respond to these questions and to measure the effectiveness and efficiency of policies and

programs, managers would request an objective evaluation and/or audit of their programs by the review arm of the organization.

- The *fourth* quadrant focuses on impacts and effects of what has the organization bought for the tax payer. Has the organization achieved its goals and objectives? The parties who are interested in answers to such questions, often include the elected officials, top executives, central agencies, the stake holders and tax payers. Thus, these reviews are either carried out by the review arm of the organization, central agencies or as a joint effort involving both the organization and the central agencies.

#### 4. REPORTING PERFORMANCE MEASUREMENT

There are two central themes in performance reporting. *First*, effectiveness performance reporting is the outcome of an integrated process that spans planning, execution, monitoring, and reporting. Hence, the linkages between strategic plans and execution should be tight, as should linkages between financial and operating views of performance (Coit and Karr, 1996). *Second*, the key to RBPM lies in meeting the public interest challenge and reporting measures that capture public interest (Ammons, 1995). In terms of utility, it would be much better that performance information is made available at times that coincide with planning and budget cycles and other important decision-making process (Wholey's book with New comer the book is on evaluation strategy).

RBPM is not entirely a numbers-driven exercise. It is as much about a focused communication as it is about measurement. It is focused in that it allows better communication with the elected officials, senior management and the tax payer about what results government programs produce and what outcome are government agencies buying for tax payers.. In terms

of reporting, there is an acknowledgement that different levels of information is needed by different audiences. Reports need to be tailored to meet these different needs. For example, it is important to determine the information needs of the user and how often that info is needed? Performance data if not well targeted (i.e., tailored for the users information needs) could be misinterpreted or used prematurely in making decisions. Who's opinion matters in reporting?

- elected officials: for them the important point is to be selective in information presented, as well as narrative explanation of what worked and what did not.
- central agencies: for them the important thing is information on efficiency and effectiveness of the programs.
- management: depending on their levels of responsibilities, for them the important thing is timeliness, reliability, adequacy of the information on the operation and impacts of the programs.
- public: needs summary information on the value of results that government achieves for their tax money.

## 5. IMPLEMENTATION:

Many foreign governments such as Australia, New Zealand, and USA have adopted the notion of results-based performance measurement. However, the degree to which some of these governments have adopted this concept varies significantly from one country to another. For example, the New Zealand and Australian governments have chosen to separate the notion of strategic directions and outcomes from the operational issues and program outputs (GAO, 1995b; Holmes & Wileman, 1995;). In the USA this concept has been implemented through the Government Performance and Results Act of 1993, that is commonly referred to as GPRA (Mihn, 1995 ). This Act is designed to improve program effectiveness and client satisfaction by strategic goal setting and performance measurement and public reporting. The experience

of these governments demonstrates that in an era of rapid advances in information technology, resource constraints, and increasing public distrust in governments, a clear articulation of mission, expected outcomes, and the use of appropriate performance measures would help organizations to improve efficiency and effectiveness of the programs and ultimately increase client satisfaction (Ref. Mihn, 1995).

### *5.1 A SIMPLIFIED GUIDE FOR OPERATIONALIZING RBPM*

Public activities are unique and by definition they are exclusive and all encompassing, such as defence agriculture and environmental protection. Developing and implementing a results-based performance measurement strategy is a significant undertaking which requires full and sustained management commitment and support. While it can involve a considerable investment of resources, it can be very time-consuming and may require a long implementation period, it can also be managed as a staged process, proceeding at whatever pace the senior executives of an organization considers appropriate.

#### *(1) Getting Started:*

The critical preliminary step is to assess the organization's readiness and capacity to implement RBPM approach. Therefore, to begin with, a small group of senior managers be established to examine some fundamental key issues. These include:

1. Recognition of the need for change by the senior management, and awareness of the available options or suggested alternatives provided by government.
2. Senior managements' willingness to adopt and invest in results-based performance measurement as a tool to improve effectiveness. To facilitate this process some estimated statement of potential costs must be prepared. In this matter, benchmarking and learning from the experience of other countries and organizations would be useful.

3. Senior managements' willingness to endorse, and continuously reinforce the exercise.
4. Senior managements' willingness to consult and communicate with the stakeholders from the outset. Consultations are essential for fostering agreement among stakeholders and senior management on defining RBPM in terms appropriate to the organization culture and environment, articulating a mission statement, and identifying strategic goals that the organization should strive to achieve.

At the end of this exercise the group should propose an action plan that would outline the specific expectations and directions provided by the senior management, such as what needs to be done? who are the initial architects and engineers for preparing the blueprint for a new Results-based *Performance Framework*? and when would the preliminary tasks be accomplished? Once the proposed action plan is reviewed, and validated by key players, the task begins.

(II) Situation Analysis:

A team of analysts, management, and support services representative should be among the first candidates for drawing a blueprint for the "*performance framework*". The team should first conduct a thorough analysis of the organization it analyzes, the organization's environment and clients, work process, and culture. This assessment should cover some of the key issues, such as organizational capacity to design and implement RBPM in terms of skills, and administrative, managerial and operational infrastructure, resources and expenditures. Furthermore, the assessment should also include a thorough examination of the risks associated RBPM and the opportunities that its implementation can afford.

After this analysis of organizational readiness, strengths and weaknesses, and customer expectations, the team member's level of understanding about the total systematic perspective of the organization is very current and very high. Thus, enabling them to synthesize information and create an optimal foundation for a *Performance Framework* that shows how pieces are put together.

*(III) Confirming the Organization's Mandate and Expected Results:*

A clear focus on mission and desired outcomes and a systematic performance measurement facilitates a better communication with the public, elected officials central agencies, the stakeholders and employees.

1. It is important to have a clear understanding of several key issues, such as what the organization is about as an enabling body, who is the organization trying to influence, and what is the organization's vision with respect to what it wants to achieve. This process relies heavily on collective thinking and consultation. These collective efforts could involve a series of simultaneous consultations with various stakeholders through workshops, conferences, and the information highway technology.
2. In consultation with the internal and external stakeholders, articulate a handful of key corporate results the organization is required to achieve over the short to medium term in order to move closer to those strategic goals. Group all the homogenous results under representative lines of business that best summarise the organization's service delivery. Developing business lines is a natural grouping of the organization's enabling policies, programs, and other services. If the grouping is done appropriately, business lines will reflect services that are targeted at a specific client group. This facilitates better resources allocation, tracking and monitoring of activities and results. It also

enhances communication with the public and their elected officials, central agencies, other stakeholders and employees.

After consultations, team members go back at the blueprint to ensure that the framework is properly aligned to some collective strategic goals and expected outcomes. A synthesis of this collective thinking and analysis is mapped out in Figure 5. As shown in the illustration, the idea is to collaboratively defining strategic goals and results and outcomes that are consistent with government guidelines and clients' expectations. The important issue in this exercise is to be able to see all the components in the broader picture of the decision making process in the public service environment.

(IV) *Devise strategies:*

1. *Validate or develop communication strategies:* At this point, it is important to establish good communication links or validate the existing systems. Resistance to change is directly linked to misconceptions, lack of trust and confusion. And trust is linked to communication, hence, more communication and consultation would increase trust.
2. *Design measures:* Performance measures should reflect an organization's mission, goals, and objectives. It is important to remember that RBPM focuses on the impact of cross-functional activities that are contributing to results achievement. Thus, the challenge is to develop meaningful measures that are focused on a wide spectrum of performance efficiency, quality and the impacts and effects of the efforts on the people that the organization is mandated to serve.
3. *Establish Measurable Performance Targets:* Without a basis for comparison it is difficult to measure change in performance. Hence, it is critical to set guidelines, targets and milestones, and to determine how the organization wants to achieve those



goals and make a time line for when each step should be made. These include some internal management targets as well as service standards that would provide a link between long-term strategic goals and anticipated outcomes and operational functions that support achieving of those goals.

(V) *Delineate roles and responsibilities and empower team leaders:*

Once the organization knows where it is headed and how to get there, senior management should look at several HR issues, such as the work environment, accountability, reward systems, training, and competencies to ensure that they are properly aligned to achieve business results.

1. Develop a plan that shows how organizational pieces are put together. Desaggregate cross-functions activities required under each line of business, establish appropriate teams, delineate roles and responsibilities. Continuous or succession planning would be required on several fronts, such as resource allocation, HR, effectiveness and performance appraisal, and reporting.
2. Empower business line principals (usually at Assistant Deputy Minister levels), team leaders (usually at Director General levels), task coordinators (e.g., Directors), working groups (e.g., senior analysts and/or managers) and staff to pool their resources, skills and other competencies to work collectively to achieve results.
3. Develop an appropriate mechanism to deal with the accountability and reward issues. To deal effectively with accountability issue, some countries, such as New Zealand have developed innovative processes, such as outputs “purchasing agreements” between policy and operational centres of responsibility within the organization. Figure 6., is an attempt to synthesize this concept in an illustrative manner that captures all the key elements.

*(VI) Develop a Performance Measurement strategy:*

Monitoring the extent to which the organization is achieving its vision and fulfilling its mandate should be done on a regular basis. Develop an appropriate monitoring and feedback system and a compatible information platform to provide the critical information for planning, timing, tracking, monitoring and coordination of efforts, as well as performance measurement. The schematic of this exercise is provided in Figure 7. As shown in the schematic, the key components of this process is communication with the key stakeholders who, direct or indirectly, play a major role in the entire process.

**6. OPPORTUNITIES:**

Many problems of public sector organizations are with goal clarity and performance measurement. It is not hard to understand why the public trust in public organizations has declined. When public administrators fail to clearly articulate what is that they are doing and what benefits are they buying for the public with their tax money, they causes mistrust. Without clear objectives and a means of keeping track a well structured and purposeful organization can quietly be reduced to a disjointed entity.

By adopting an enterprising approach to establish and communicate a clear direction by defining their mission and goals through strategic planning, establishing annual objectives that are directly linked to missions and goals, measuring performance to assess how well objectives are being met, and reporting on performance public organizations would gain public trust and support. The experience of other countries suggests that RBPM is increasingly recognized as that enterprising approach.

## 7. CHALLENGES:

Most discussions on RBPM have focused on its advantages and the process of *managing for results* rather than the fears and concerns of people involved in making it happen. As RBPM involves challenging vested interests with power bases derived from traditional arrangements, considerable will on the part of senior management is needed to make major institutional reforms. In the absence of circumstances conducive to organizational changes, alternative approaches will be selected which may represent a considerable waste of resources and a deferral of the solution to the results-based performance measurement by temporality strengthening the existing system. No matter how flawless in conception, there are strong possibilities that in implementation the RBPM strategies may fall short. The majority of the failures appear to be due to organizational resistance to change or some strategic issues. Some of these are listed below:

1. Too many inner fiefdoms and power struggles. Once organizations focus on outcomes, some of the managers begin to see that traditional organizational boundaries breakdown and teams of employees start working across organizational lines. To some senior managers, this is an erosion in their authority, power and control.
2. The champion moves on (gets transferred or promoted) or simply loses interest.
3. The spirit is willing but the tools are weak (e.g., poor communication at the initial stages and subsequently between the principals and their business planning team).

### 7.1 Clients in the Public Sector Environment:

In the Private sector it is fairly straight forward to define a client. Within public organizations defining who is the client poses a very difficult challenge. Public organizations are a complex policy making and program and service delivery in many areas, such as regulatory, research,

enforcement, and sectoral support, among other things. Some public service managers associate the term “client” in different ways. While it is easy to identify the recipient of a social benefits cheque as a client, some of the public service employees consider the chief executive (e.g., the Minister or the Deputy Minister) as a client, and others focus on a broader perspective that involves the public as whole.

Another way of defining the “client” in the public sector is to recognize that there are several different clients for each government service. There are direct and indirect clients, each of whom may have different concerns or expectations. Direct clients interact with the government either by choice or entitlement, or as a result of laws or regulations that dictate the requirement. These clients may include an individual receiving an Unemployment Insurance cheque or someone seeking assistance in applying for a government grant. Indirect clients receive a collective benefit from a government service, such as Canadians do through governments’ food safety regulations. In addition there are internal clients, such as employees in a given department receiving services other sections within the organization. The expectations of direct and indirect clients differ and sometimes conflict. The challenge is to balance the needs of both groups. This multiplicity of clients, which sets governments apart from the private sector, merits full attention when implementing RBPM.

## 7.2 Accountability:

Some staff are concerned that they would be held accountable for outcomes that they could or partially influence through their efforts. To deal with these concerns organizations should focus on appropriate training on RBPM, employee involvement in developing performance measures and continued commitment and reinforcement of the approach by senior management.

## FINAL WORDS

In this paper I have consistently presented patterns of thinking that have contributed to the formation of the basis for RBPM and its implementation. The basic tenets of RBPM is responding to changing environment, meeting the public interest challenge, and reporting performance measures that capture management's response and public's interest. RBPM allows organizations to have a hard look at their mission and decide what they should or should not be doing. The important thing in RBPM is relevant performance comparison. Performance measurement consists of an integrated, comprehensive set of measures that flow from top executives vision and strategy. It deals with the what, how and whom issues. RBPM is mainly about focusing on what organization do and how they do their business as much as it is about measuring what is done. RBPM is some times associated with downsizing. But in reality, it is strategic repositioning that allows organizations to focus on strengthing its competitive position.

The commitment, leadership and active involvement of the top executives is critical for this type of effort to succeed. In particular, top executives will need to play a key role in articulating the organization's results-oriented objectives. Communication with the employees and the stakeholders is equally important for achieving a consensus on results and cross-functional roles and responsibilities.

<b>Table 1. Characteristics of Sound Governance</b>	
<ul style="list-style-type: none"> <li>• Transparency</li> <li>• Accountability</li> <li>• Effectiveness and efficiency with a focus on outcomes</li> <li>• Dissemination of information</li> <li>• Building trust and confidence of tax payers</li> <li>• Promoting sustainability, equity, and tolerance</li> </ul>	<ul style="list-style-type: none"> <li>• Separation of powers</li> <li>• Minimizing non-participatory decision making</li> <li>• Flexibility with regards to allowing political, social and economic space for self-organization</li> <li>• Decentralization, when and where appropriate</li> </ul>

Table 2. Components of Results-based Performance Measurement

Levels of Decision Making	Accountability	Reporting Mechanism	Key Messages	Potential Indicators
<i>Sectoral</i>	Health of the sector is a joint responsibility of industry leaders, federal and provincial governments and not for profit organizations	- Sectoral outlook for medium and long-term.	- Strategic direction, - Departments mission/vision statement, - Key commitments, - Strategy to measure performance,	- GDP growth (absolute, % of total economy) - Value/volume of agri-food exports.
<i>Portfolio and Departmental</i>	The Minister and Deputy Minister	- Minister's report - Corporate Plan (multi-year, medium and long-term)	- Strategic goals, targets, key results areas, performance measures, roles and responsibilities	- ROI to R&D investments.
<i>Business Line</i>	Assistant Deputy Ministers (Principals)	Business Line Plans	- Business line objectives, targets, anticipated outcomes or results	- Value of collaborative funding in the key sectors.
<i>Business Line Team</i>	DGs (Team Leaders)	Annual Workplan	- Operational objectives, milestones, process and operational maps depicting tasks and cross-functional linkages, and responsibilities.	- Number of investment opportunities identified.
<i>Cross-functional and cross disciplinary expertise</i>	Directors and Managers	Performance review process	Work plan and activity/task assignment	- Levels of competencies, participation, innovation, & accomplishments.

## References

- Anonymous. 1995. The trouble with re-engineering. *Management Decision*. 33(3): 39-40.
- Ammons, D.N. 1995. Overcoming the inadequacies of performance measurement in local government: The case of libraries and leisure services. *Public Administration Review*. 55(1): 37-47.
- Athanassopoulos, A. D., and S.P. Curram. 1996. A comparison of data envelopment analysis and artificial neural networks as tools for assessing the efficiency of decision making units. *Journal of the Operational Research Society*. 47(8): 1000-1016.
- Birchard, B. 1996. Eastman Chemical: Quality & strategy. *The Magazine for Senior Financial Executives*. 12(10): 34-36.
- Birchard, B. 1996. Where performance measures fail. *The Magazine for Senior Financial Executives*. 12(10): 36.
- Bisgay, L. 1995. Guidance on performance measurement. *Management Accounting*. 76(11): 62.
- Brinkerhoff, R.O. and D.E. Dressler. 1990. *Productivity measurement, a guide for managers and evaluators*. Sage Publications. Newbury Park.
- Bulder, B., F. Leeuw, and H. Flap. 1996. Networks and evaluating public-sector reforms. *Evaluation*. 2(3): 261-276.
- Bulger, S. L. 1995/1996. Performance management: The foundation for high-performance organization. *National Productivity Review*. 15(1): 101-109.
- Campbell, R. B., and L. M. Garfinkel. 1996. Six strategies for success in measuring performance. *HR Magazine*. 41(6): 98-104.
- Coit, C., and J. Karr. 1996. Performance measurement: Miles travelled, miles to go. *Banking Strategies*. 72(5): 68-70.
- Cupaiuolo, A. A. 1995. *Seamless Government: A Practical Guide to Re-Engineering in the Public Sector*. *Public Productivity & Management Review*. 18(4): 409-411.
- Daly, D. C. 1996. Performance measurement and management. *Management Accounting*. 78(3): 65-66.
- Dent, J., and M. Ezzamel. 1995. Organizational control and management accounting. In J. Holloway, J. Lewis, and Geoff Mallory (eds.), *Performance measurement and evaluation* (pp. 5-14). London: Sage Publications Ltd.



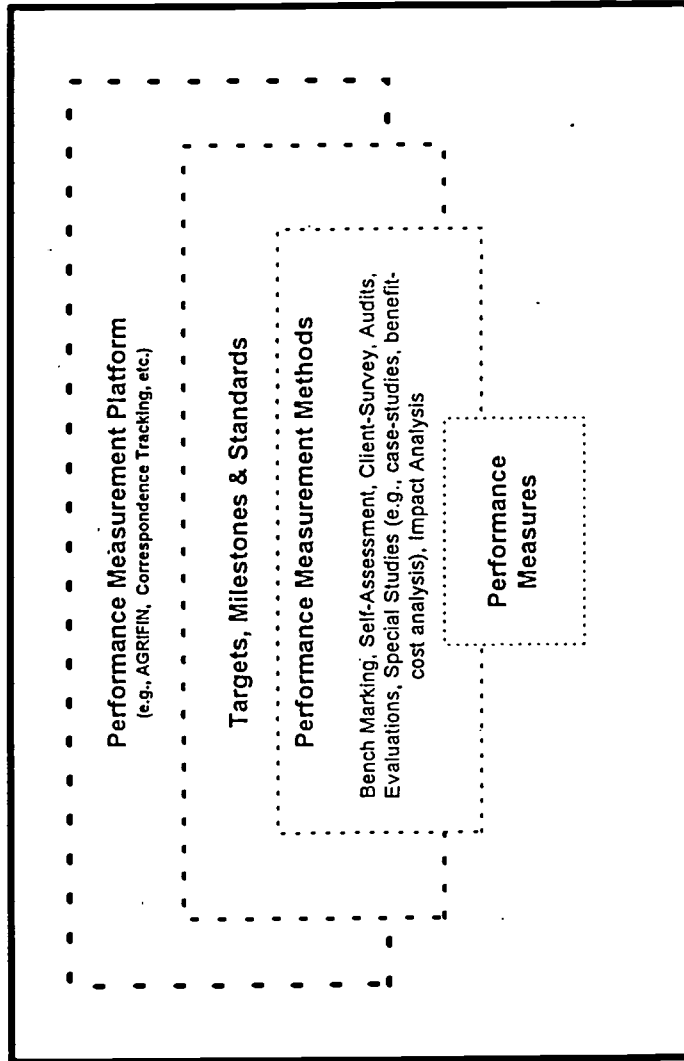
- Doamekpor, F.K. 1996. Performance Measurement and Evaluation. *Academy of Management Review*. 21(4): 1241.
- Eccles, R.G. 1995. The performance measurement manifesto. In J.Holloway, J. Lewis, and Geoff Mallory (eds.), *Performance measurement and evaluation* (pp. 5-14). London: Sage Publications Ltd.
- GAO. 1995a. Managing for results, steps for strengthening federal management. Testimony. United States General Accounting Office. GAO/T-GGD/AIMD-95-158.
- GAO. 1995b. Managing for results: Critical actions for measuring performance. Testimony. United States General Accounting Office GAO/T-GGD/AIMD-95-187.
- GAO. 1996. Executive guide: Effectively implementing the Government Performance and Results Act. United States General Accounting Office GAO/GGD/96-118.
- GAO. 1996. Managing for results: Achieving GPRA's objectives requires strong congressional role. Testimony. United States General Accounting Office GAO/T-GGD/96-79.
- Government of Canada, 1996. Getting government right, a progress report. Privy Council Office. MSSC, Catalogue No. CP22-56/1996.
- Henderson, J. Jr., 1995. GPRA: mission, metrics, measuring, and marketing. *Public manager*. 24(1): 7-10.
- Holmes, J., and T. Wileman, 1995. Toward better governance, public service reform in New Zealand (1984-94) and its relevance to Canada. Office of the Auditor General of Canada. Cat. No. FA3-15/1995E.
- Jorjani, H. 1997. Results-based performance measurement: from theory to practice. Presented as a workshop at *Conference '97, Evaluation in Partnership* - Canadian Evaluation Society, the Ottawa Congress Centre. Ottawa, Ontario, Canada.
- Jorjani, H. 1996. The information highway and program evaluation: challenges and opportunities. *Optimum, The Journal of Public Sector Management*. 27(1):7-13.
- Jorjani, H. and J. Dyer. 1996. A review of possible performance measures for evaluating and assessing environmental programs. *Impact Assessment*. 14 (4): 389-418.
- Jorjani, H. 1994. The holistic perspective in the evaluation of public programs: a conceptual framework. *The Canadian Journal of Program Evaluation*. 9 (2):71-92.
- Kim, V.J., 1995. GPRA: early implementation. *Public Manager*. 24(1): 11-14.

- Kravchuk, R. S., and R. W. Schack. 1996. Designing effective performance-measurement systems under the Government Performance and Results Act of 1993. *Public Administration Review*. 56(4): 348-358.
- Lee, H., and W. Kwak., and I. Han. 1995. Developing a business performance evaluation system: An analytic hierarchical model. *Engineering Economist*. 40(4): 343-357.
- McDonald, D., and A. Smith, 1995. A proven connection: Performance management and business results. *Compensation & Benefits Review*. 27(1)59-64.
- Mihm, J. C. 1995/1996. GPRA and the new dialogue. *Public Manager*. 24(4): 15-18.
- Moravec, M. 1996. Bringing performance management out of the Stone Age. *Management Review*. 85(2): 38-42.
- Nyhan, R. C., and H. A. Marlowe Jr. 1995. Performance measurement in the public sector: Challenges and opportunities. *Public Productivity & Management Review*. 18(4): 333-348.
- Peters, J. 1995. Editorial. *Management Decision*. 33(2): 4.
- President of the Treasury Board. 1995. Strengthening government review, annual report to Parliament. MSSC, catalogue No. BT 1-10/1995.
- President of the Treasury Board. 1996. Getting government right: improving results measurement and accountability, annual report to Parliament. MPWGSC, catalogue No. BT 1-10/1996
- Rheem, H. 1996. Performance management programs. *Harvard Business Review*. 74(5): 8-9.
- Ricciardi, P. 1996a. Simplify your approach to performance measurement. *HR MAGAZINE*. 41(3): 98-106.
- Ricciardi, P. 1996b. Avoiding the pitfalls of performance measurement. *Journal for Quality and Participation*. 19(1): 66-69.
- Riehl, H. 1996. A skilful approach to high productivity. *HR MAGAZINE*. 41(8): 97-102.
- Schumann, P. A. Jr., D.L. Ransley, and D.C. Prestwood. 1995. Measuring R&D performance. *Research-Technology Management*. 38(3): 45-54.
- Senge, P. 1990. *The fifth discipline, the art and practice of the learning organization*. New York: Currency Doubleday.

- Shaw, D.G, and C.E. Schneier. 1995. Team measurement and rewards: How some companies are getting it right. *Human Resource Planning*. 18(3): 34-49.
- Sheridan, J. 1994. Enterprise integration: the next plateau. *Industry week*. June 20th. 30-38.
- Simmons, L. C. 1996. Levelling the playing field with co-opetition. *Mortgage Banking*. 56(11): 75-76.
- Smith, P. 1995. Outcome-related performance indicators and organizational control in the public sector. In J.Holloway, J. Lewis, and Geoff Mallory (eds.), *Performance measurement and evaluation* (pp. 192-216). London: Sage Publications Ltd.
- Tinnila, M. 1995. Strategic perspective to business process redesign. *Management Decision*. 33(3): 25-34.
- United Nations Development Programme. 1996. *Workshop on governance for sustainable human development*. New York.
- Wholey, J.S., and H.P. Hatry. 1992. The case of performance monitoring. *Public Administration Review*. 52 (6): 604-610.
- Wholey, J.S., Hatry, H.P., and Newcomer, K.E. (Eds.). 1994. *Handbook of practical program evaluation*. San Francisco: Jossey-Bass.
- Zairi, M., and D. Sinclair. 1995. Business process re-engineering and process management: A survey of current practice and future trends in integrated management. *Management Decision*. 33(3): 3-16.

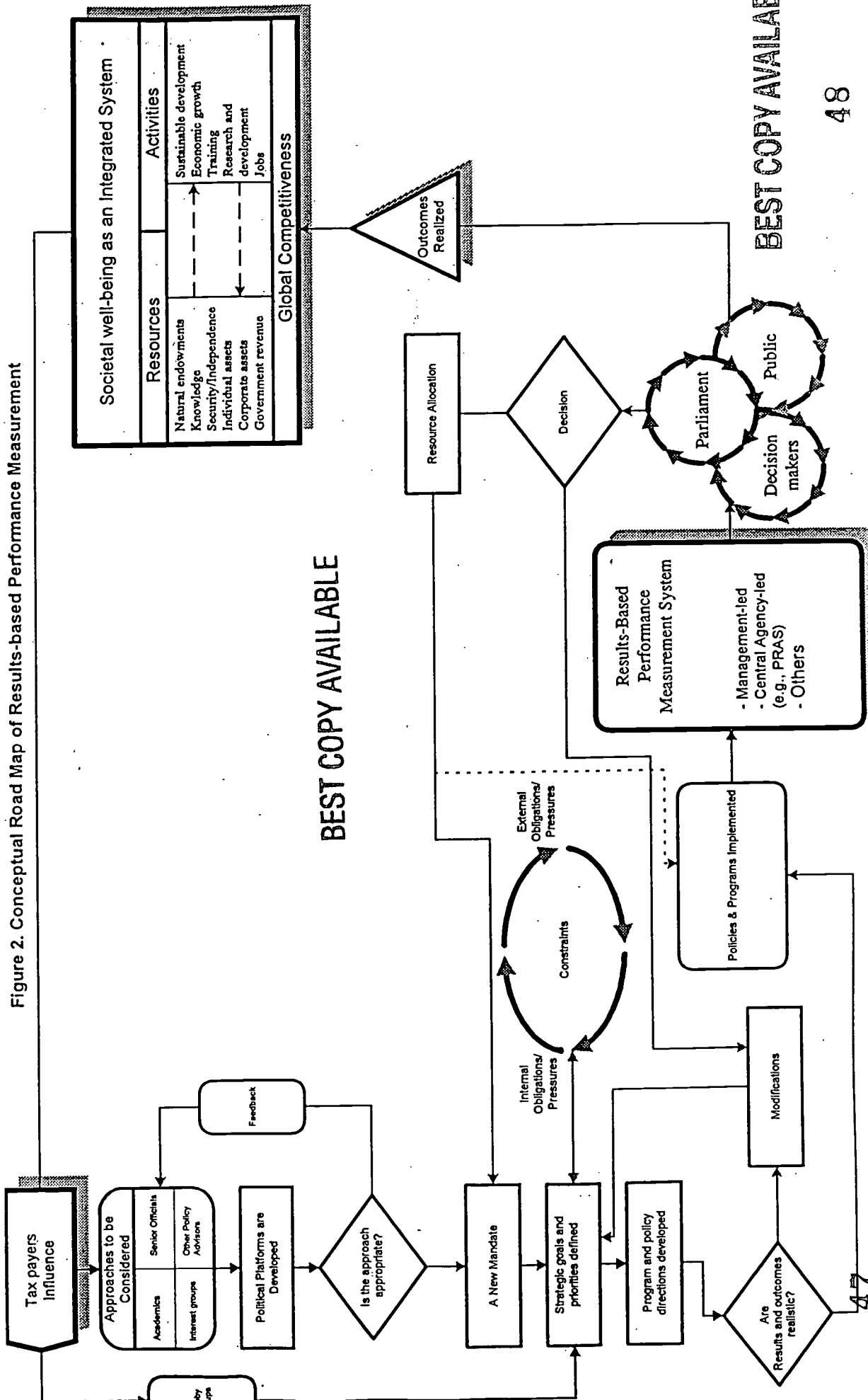
Figure 1. Performance Measurement as an Integrated Feedback System

## Continuous Improvement



## Feedback Process (Review Function)

Figure 2. Conceptual Road Map of Results-based Performance Measurement



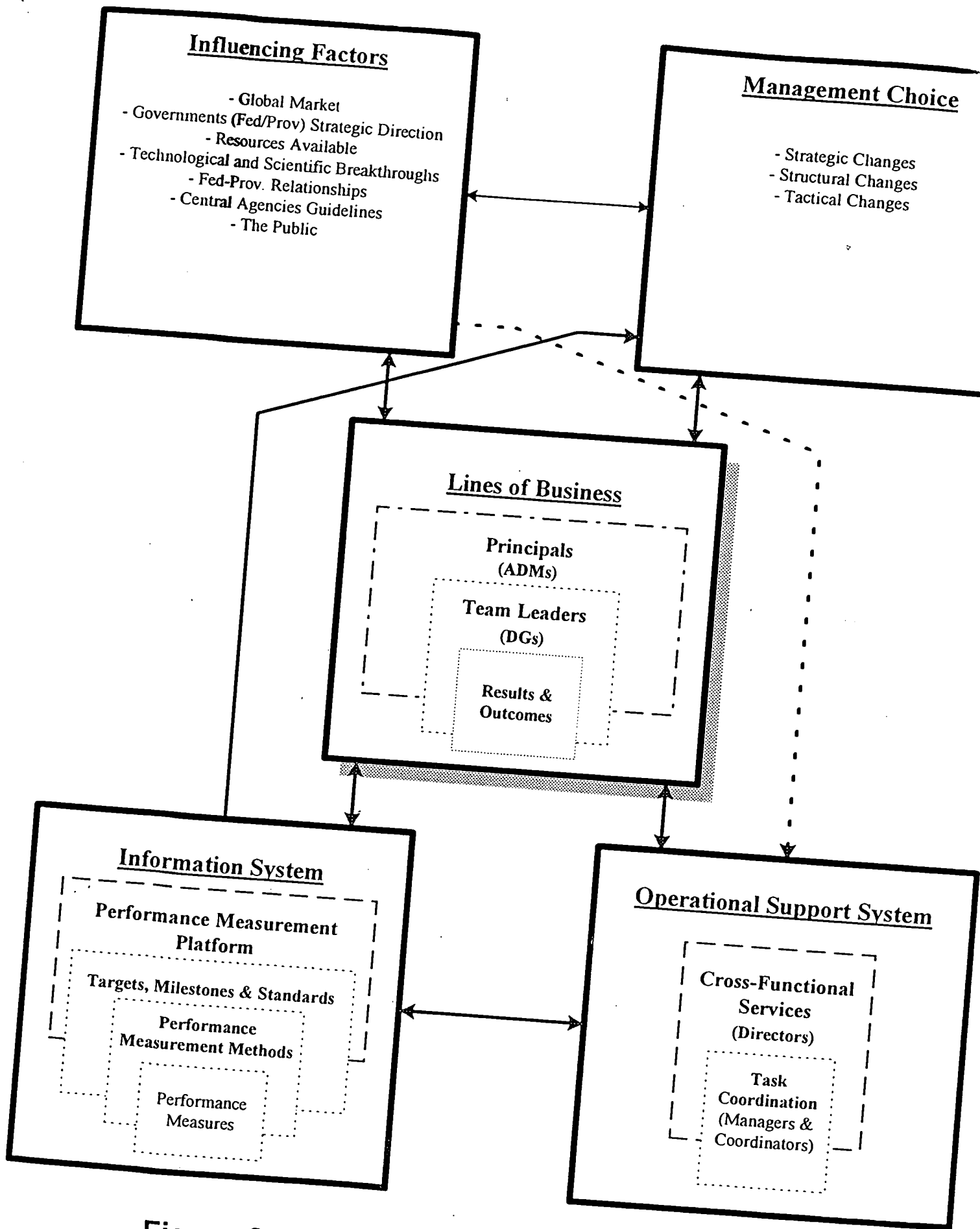


Figure 3. Performance Measurement System

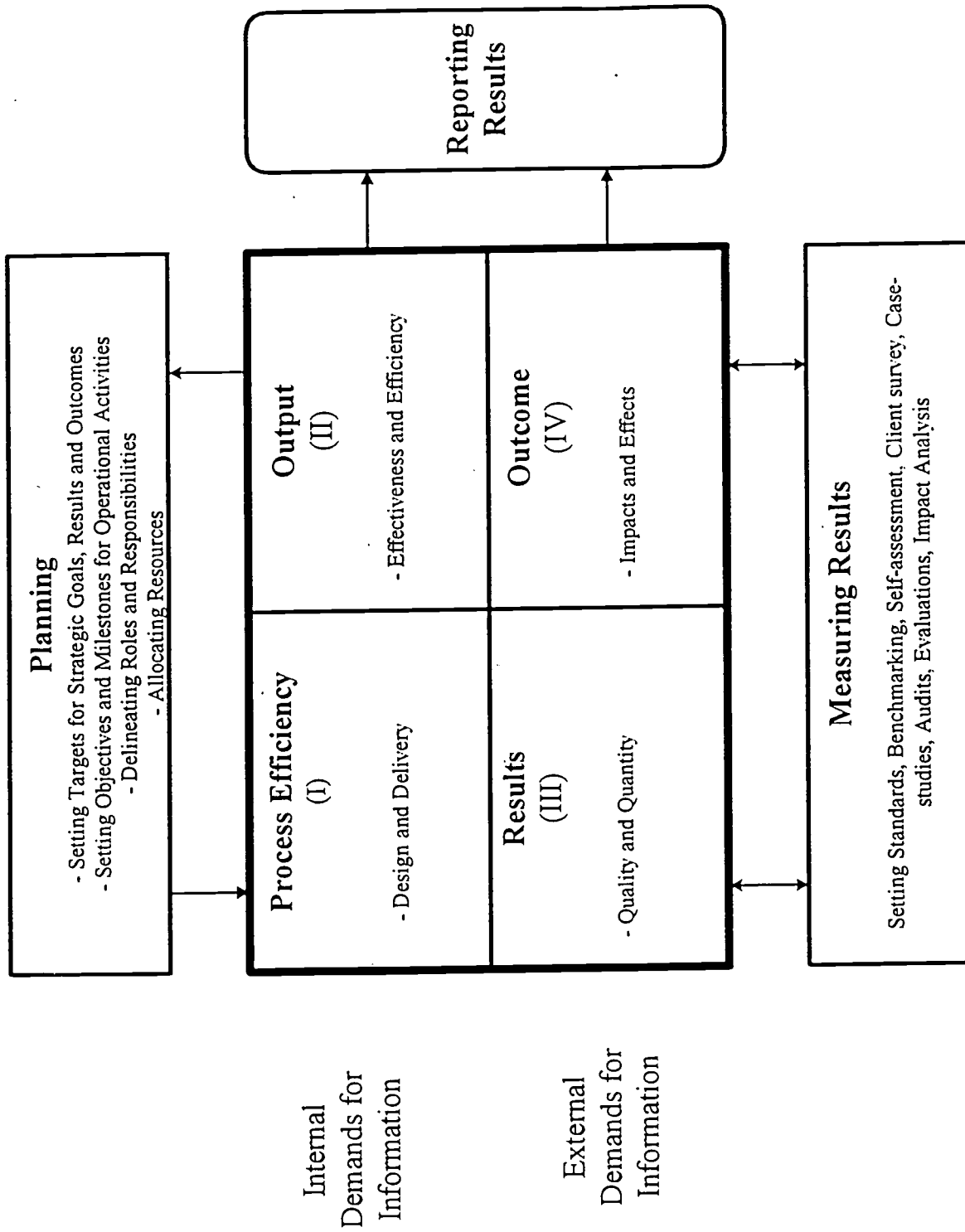


Figure 4. The Quadrants of an Integrated Measurement System

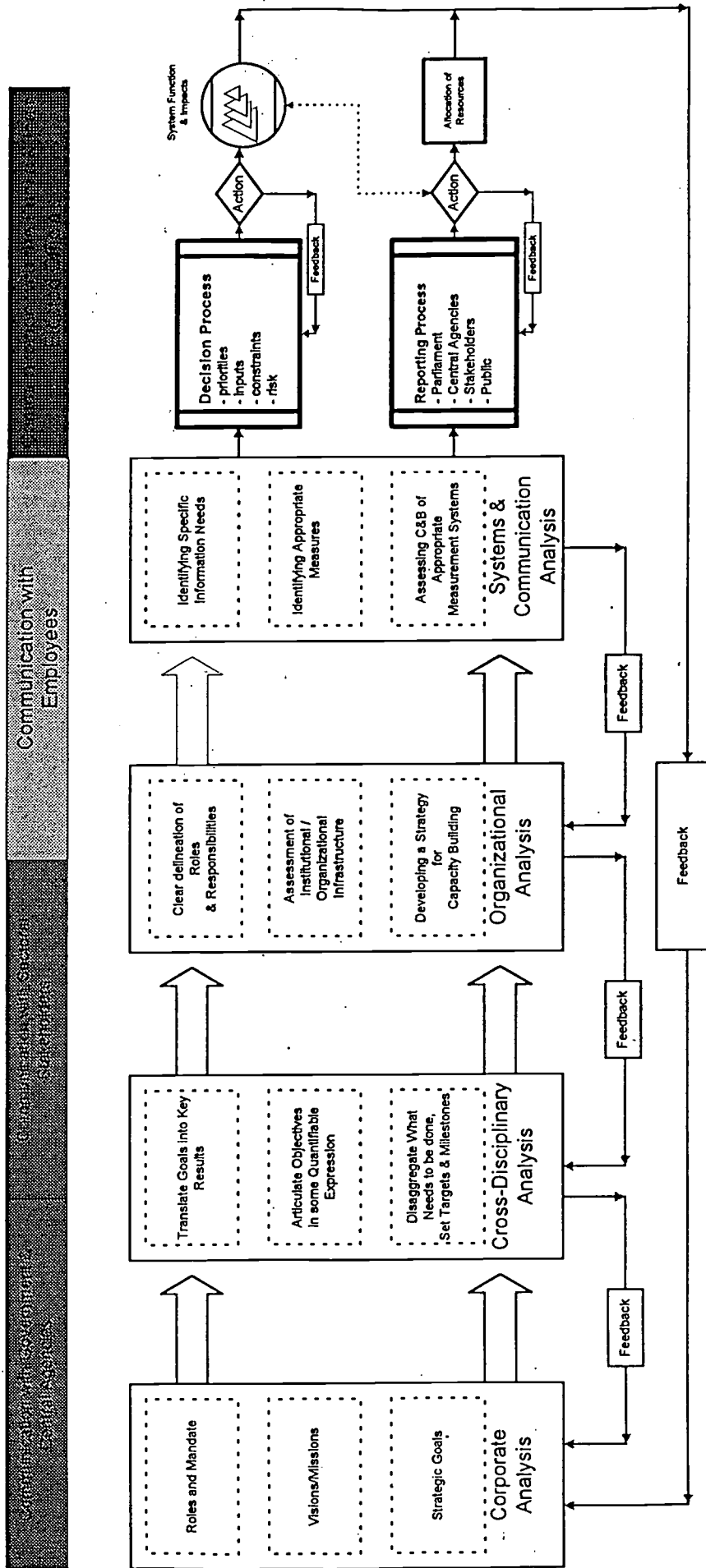


Figure 5. The Role of Results-Based Performance Measurement in the Decision Process: a simplified perspective



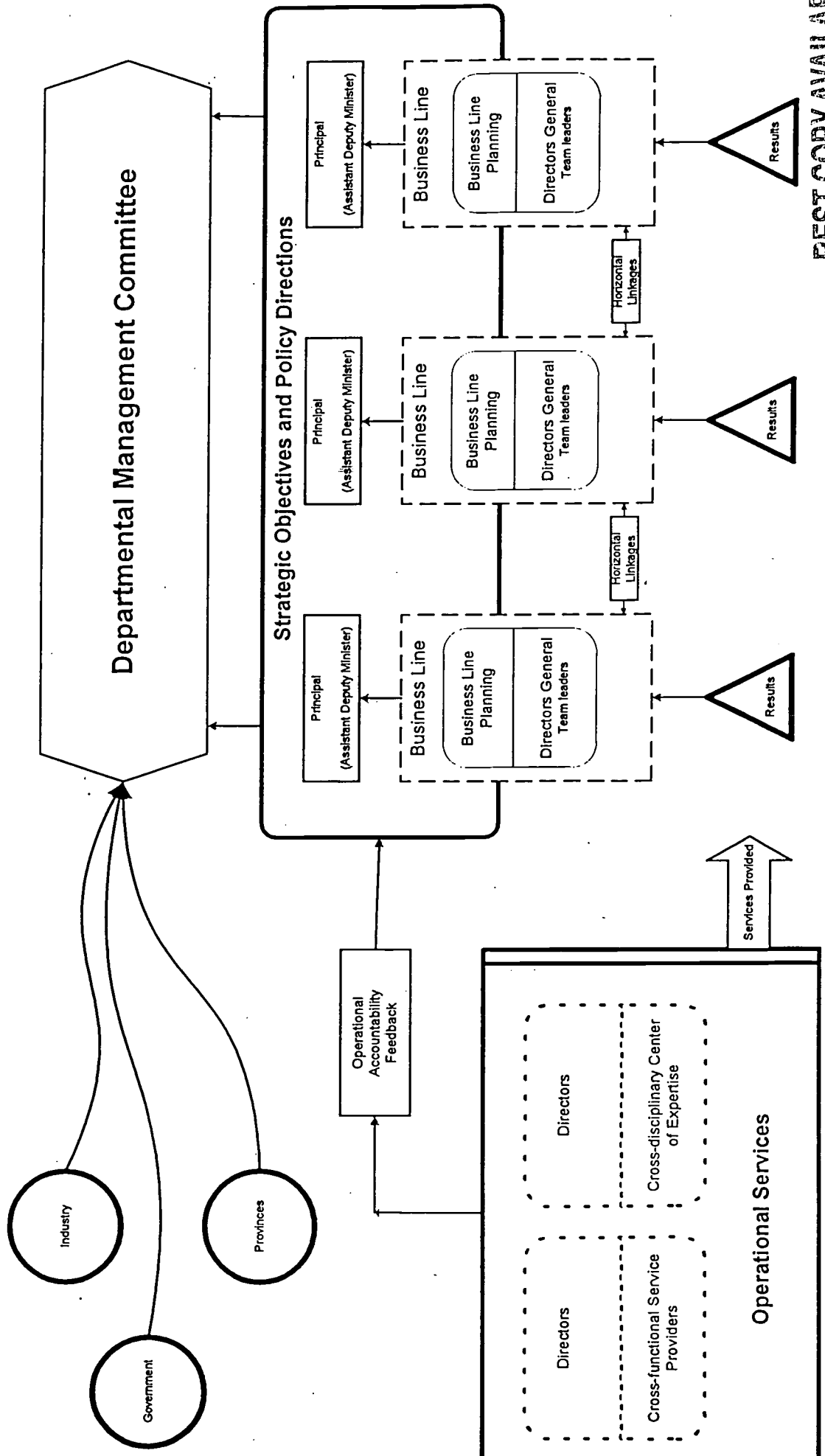


Figure 6. Roles and Responsibilities and Accountability Structure

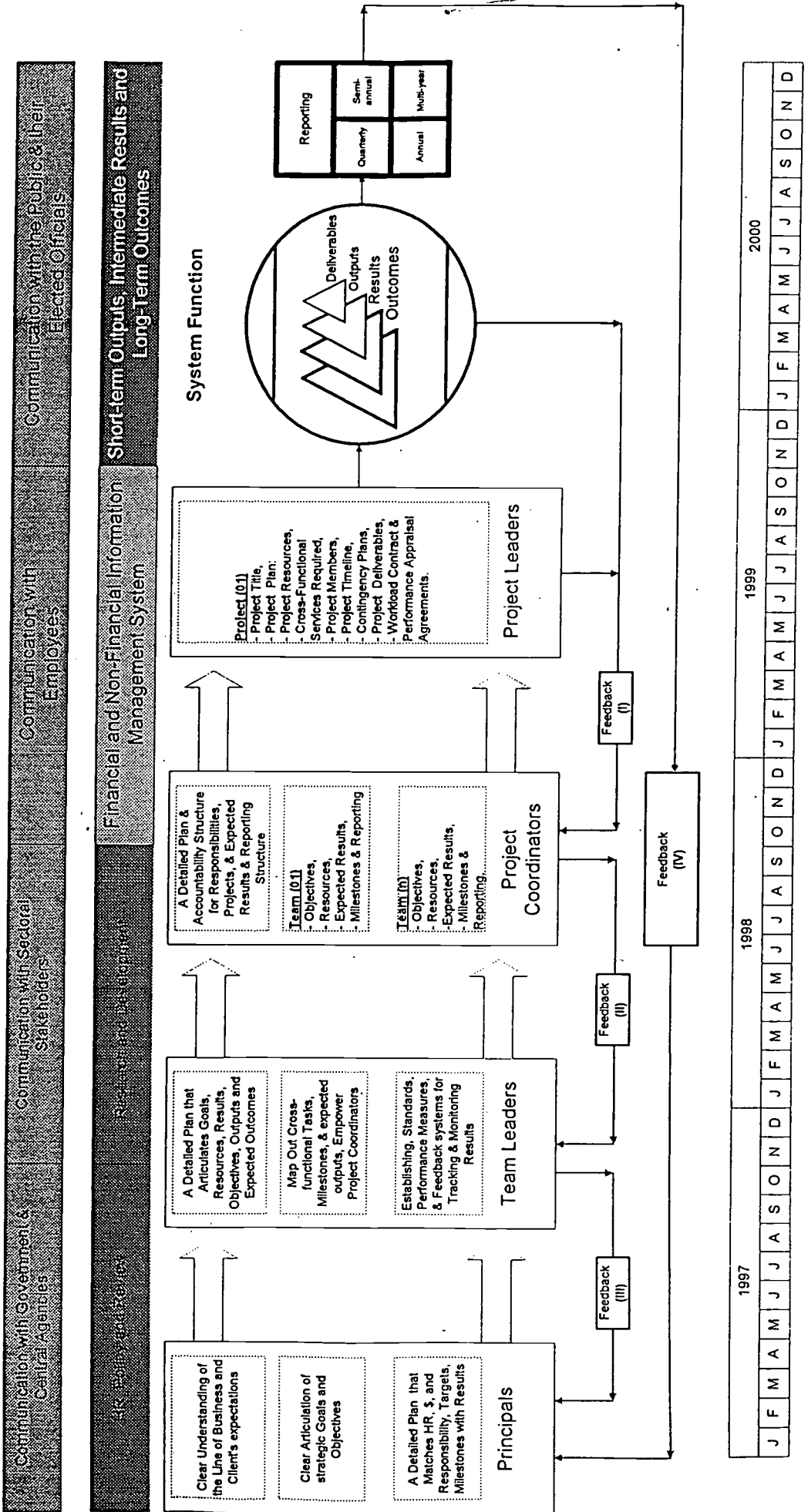
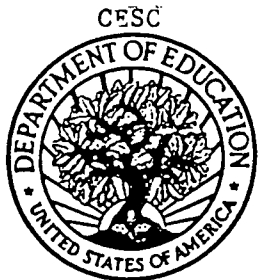


Figure 7. Measurement Strategy



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: <i>DEMYSTIFYING RESULTS-BASED PERFORMANCE MEASUREMENT</i>	
Author(s): <i>Hamid Jorjani</i>	
Corporate Source:	Publication Date:

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents



Check here  
For Level 1 Release:  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

\_\_\_\_\_  
*Sample*  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be affixed to all Level 2 documents



Check here  
For Level 2 Release:  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

\_\_\_\_\_  
*Sample*  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here → please

Signature: <i>Hamid Jorjani</i>	Printed Name/Position/Title: <i>Hamid JORJANI, M.Sc., Ph.D. Senior Analyst</i>	
Organization/Address: <i>Room E109, SJC B, AAFC 930 Carling Ave., Ottawa, Ont. K1A 0G5</i>	Telephone: <i>(613) 759-6474 (613) 834-6344</i>	FAX: <i>(613) 759-6494 (613) 834-6344</i>
	E-Mail Address: <i>Jorjani@em.ogr.ca</i>	Date: <i>Sept 2, 1997</i>

