Ongoing Program Performance Information Systems and Program Evaluation in the Government of Canada

John Mayne
Program Evaluation Branch
Office of the Comptroller General of Canada*

ABSTRACT

Les systèmes d’information sur la performance des programmes n’ont pas donné, dans bien des cas, les résultats attendus, et cela parce qu’on n’a pas mis le soin voulu pour déterminer quels étaient les renseignements nécessaires et qui avaient besoin de ces renseignements, et pour établir le lien entre ces éléments et les diverses caractéristiques des renseignements périodiques par rapport aux renseignements permanents. L’information permanente est appropriée pour les besoins de la gestion et du contrôle directs des programmes, et pour l’impuissance des gestionnaires. Elle ne se prête pas très bien à l’utilisation comme intrant des décisions de stratégie ou de ressourement d’envergure. L’information périodique, notamment celle qui est fournie par l’évaluation des programmes, convient à l’utilisation pour la prise de décisions de stratégie ainsi qu’à la préparation des comptes à rendre au Cabinet et au Parlement au sujet des programmes. Cette information par contre ne convient pas très bien à la gestion et au contrôle de programme. Pour qu’ils servent avec efficacité, les systèmes d’information sur la performance des programmes au sein du gouvernement doivent faire une distinction bien nette entre ces modes d’utilisation, décider du type d’information qui est approprié, et procéder avec parcimonie en ce qui a trait à la nature et à la quantité de l’information produite.

This paper briefly reviews the history of ongoing program performance information systems and program evaluation initiatives in the Government of Canada since the late ’60s. This will not be a detailed, in-depth examination but rather a journalistic review from one who has watched the various initiatives come and often go during this time. The paper suggests that ongoing information systems and (periodic) program evaluation have and should have quite different roles to play in providing information to government. Furthermore, it suggests that the key to making either work is a careful consideration of the decision environment in which each operates, rather than questions concerning the production of the information.

After a brief description and discussion of the various federal initiatives to produce program performance information, there is a discussion of the kinds of information needed to manage the public sector. The characteristics of both ongoing information systems and program evaluation as ways of producing management information in the public sector are reviewed.

*The views expressed here are those of the author and do not necessarily reflect those of the Office of the Comptroller General.
There follows a short description of the current state of program performance measurement systems in the federal government. The paper concludes by suggesting lessons that should have been learned concerning ongoing and periodic information systems.

**Brief Historical Review**

Over the past 20 years the federal government has introduced various approaches to measure and document the performance of its programs. The resulting plethora of acronyms have been commented on by numerous writers (cf. Hartle, 1976; Havens, 1976; Laframboise, 1978). And indeed, almost everyone with even a passing acquaintance with public administration has run across PPBS (Planning, Programming and Budgeting System), OPMS (Operational Performance Measurement Systems), MBO (Management by Objectives), PMS (Performance Measurement Systems) and the like. These and other such initiatives were all aimed at providing managers (albeit at different levels) with information on the resources used by programs and/or on their results. All were hoped to provide better information for decision makers. Most fell well short of their expectations.

PPBS was introduced in the Government of Canada in the late 1960s and early 1970s and was intended to provide information on the costs and benefits of programming alternatives in order that the best decisions on programs could be arrived at. While generally not thought to have been successful (cf. van Gunsteren, 1976; Reid, 1979; Schick, 1973), it did lead to a new results-orientation in program budgeting away from the more traditional line object focus.

In 1974, the federal government introduced OPMS as a means to ensure that program managers had available the necessary information on program performance — in particular on the immediate outputs of programs — with which to manage better (cf. Treasury Board, 1974). Furthermore, it was envisaged that this information would be used in resourcing decisions by Treasury Board. This was followed in 1976 by a Treasury Board policy on performance measurement. Until 1979, the government tabled an annual report in Parliament on its progress with the introduction of these systems. While the policy remains on the books, it is not being visibly pursued. The Treasury Board Secretariat tended to use the information only when it was useful in making resource cuts and not when it suggested an increase in resources were warranted. Coupled with, in many quarters, a lack of need on the part of line managers to account systematically for the achievement of program results, this led to an undermining of performance measurement systems. In the best of cases, what remained were management information systems that departments (particularly operational ones) or parts of departments found useful for internal control purposes. In other cases, the systems degenerated into producing data devoid of any useful information.

In 1977, a policy on program evaluation was promulgated by the Treasury Board. It made deputy heads responsible on a cyclic basis for knowing the results of their programs, thereby calling for a periodic, departmental review of programs over and above whatever ongoing information the
department was collecting. Previously, evaluations had been carried out in a few departments and by Treasury Board staff in the Planning Branch (cf. French, 1984), both on an ad hoc basis. Little happened until 1981 when resources in the newly created Office of the Comptroller General were devoted to the implementation of the policy. This impetus led to the establishment by 1983 of evaluation units in most departments and agencies (cf. Auditor General, 1983: Chapter 3). And while a lot of evaluations have been completed, there is a continuing debate on the usefulness of the venture, with examples of good and bad evaluations abounding (cf. Auditor General, 1983: Chapter 3; Rayner, 1986).

Management Information in Public Sector

With the benefits of hindsight, it would appear that attempts at implementing management information systems in the public sector have not always been well thought out, either in concept or in implementation. Too often, they have been based on a simplistic view of bureaucracy; namely, of a rational manager who surely "must" want or need such information. As a result, many of the suggestions for creating and implementing information procedures are technical in nature, assuming that the problem is one of the production, that better systems and procedures will solve the problem of the non-use of program performance information for decision-making purposes.

Bureaucratic life is rather more complex than that and the suggestion here is that the problem is one of demand rather than supply. To get in place management information systems that are used requires that they become and are seen to become part of the management structure and practice. This, of course, is easier said than done (cf. Mayne and Mayne, 1983). To start down this road, let us first turn to the purposes for which information for management is collected.

A useful distinction can be made between two basic purposes for management information: to support either *operational* or *strategic* decisions. The term "operational decisions" is used here to cover matters relating to the administration and control of a program; i.e., tactical delivery issues and fine tuning program adjustments, as well as the accountability of program managers. The term "strategic decisions" covers the reconsideration of the objectives, basic design, approach to delivery, and resourcing of a program, as well as questions of the efficacy of the program and accountability to Cabinet and Parliament.

Information can also be distinguished by the frequency of reporting and by whether the information is to be used inside or outside the organization. The operational information listed above normally is required on a regular basis and is tied into the annual budgeting and work planning process, while strategic information need not be required on a regular basis but rather at key decision points such as a periodic in-depth review.

This paper is not an analysis of information needs in the public sector. The identification of various information needs and uses is done solely to indicate that information is produced for different reasons, by different people, at different times. The point is that any information system that is
intended to serve all these ends will, I suggest, never be successful. Producing information is costly in terms of human, financial and time resources. Information on everything is neither feasible nor desirable. Thus deciding what information to produce, for whom and when should be a careful and deliberate choice.

The question becomes, then, what purpose(s) can and should ongoing information and program evaluation play and how would such roles be institutionalized? The latter is especially important, because a goal such as "to improve program management" does not tell us much. How do you get managers to want to improve management?

Note that in the simplistic rational model these questions are not that important. Since much information can indeed be used for different purposes, this model would have the ongoing program performance and program evaluation information produced and then it would inevitably be used. Problems encountered along the way would be technical in nature; the mere existence of the information itself will cause it to be used by well-meaning and rational managers.

**Ongoing Information as Management Information**

Ongoing program performance information is characterized by (i) a focus on inputs and outputs as opposed to outcomes, and by (ii) reporting on a regular or ongoing basis. Ongoing information systems can and do report on program outcomes, i.e., on events beyond the immediate control of the program personnel, but typically this is the exception and when they do so, the outcomes being tracked are still quite operational in nature. The large bulk of information that such systems collect deal with the operational outputs of the program, items that can be routinely collected and reported on.

The problems associated with the establishment and maintenance of ongoing program performance information systems are well-known:

- Even if set up well initially, over time the system tends to become a data system rather than an information system. It is then seen as a system for the technical specialists to play with, is not updated and becomes irrelevant.
- Sometimes, where it is taken seriously, the system develops a life of its own and the operational indicators, which were intended as proxies for some goal, output or result, become the (new) objectives of the program or its operations.
- With a few exceptions, ongoing information systems have a very limited ability to provide reliable information on the extent to which the intended outcomes of the program are attributable to the program.

Given these characteristics and problems, operational information systems should be designed for what they do best, namely as input into operational decisions. And this information is needed. Program managers need information on outputs in order to manage better and make operational decisions. Senior managers need this information to hold program managers to account. This kind of personal accountability should occur on a regular
basis and focus in the first instance on operational outputs, which are attributable to the program and hence realistic accountability targets. Furthermore, if this accountability process is tied to the work planning cycle, then the ongoing information system will be suitably updated as needed and should not become a data system. That is, normal cyclical work planning, whereby operational goals are set and a personal accountability review based on those goals undertaken, would ensure that the information required to hold and be held to account was up-to-date and relevant. The system would be self-correcting. This is the decision environment into which ongoing measurement systems should be primarily targeted. When this environment is absent, ongoing systems will only work on an individual case basis when a particular manager uses the information for monitoring program outputs. Work on developing ongoing information systems should focus on creating this link between the ongoing information, accountability of managers and the work planning cycle.

This role for ongoing program performance information systems, however, has frequently not been the one intended. A major role intended for past ongoing information systems in the Government of Canada has been as input into resourcing decisions, particularly resourcing decisions by persons outside the organization. Such a role, I suggest will never work for several reasons. First of all, central resourcing decisions are frequently and quite rightly based on other than operational information on a program: such things as political priorities and basic policy decisions in the program area. And even in those cases where operational information on the program could and should play a role, the incentives are all wrong. If ongoing program performance information is seen primarily as a resourcing tool to be used by others, ongoing information will be ignored by departments or, more likely, subverted. Since ongoing performance information is input and output focussed (and hence closely tied to the program) and has to be collected routinely, it is completely in the hands of the program personnel. And it is irrational to expect the dog to fetch the stick with which it is to be beaten (at least after the first time).

**Program Evaluation as Management Information**

Program evaluation is characterized by (i) a focus on program outcomes as opposed to outputs and (ii) periodic reporting; i.e., it is study-based. Program evaluation does, of course, examine program outputs but its forte is an ability to measure and determine program outcomes; i.e., determining the influence of a program on the events or conditions it is intended to affect. Indeed, if evaluation were aimed primarily at examining outputs, I would question the need for a discipline separate from (operational) audits or comprehensive audits.

There are a number of drawbacks with program evaluation as a source of information:

- Being study-based, evaluation is not well-suited to annual or more frequent reporting and hence may not be timely without careful planning. It clearly cannot be used for ongoing operational control of a program.
There is a limit to how quickly information from evaluations can be produced; it therefore has a limited capacity to support urgent unforeseen decisions.

Given the wide variety of possible outcome (both intended and unintended) that could be measured for any one program, evaluations require a considerable commitment from the decision makers to provide focus and make it relevant to upcoming decisions. Without this direction, the studies may be too broad or too narrow or miss the mark.

These characteristics and limitations would suggest that program evaluation should be seen primarily as an input to strategic decisions. Significant policy and resourcing decisions require information on program outcomes, as do questions on program accountability, and these types of decisions and issues occur periodically not continuously nor even every year. Indeed, determining whether or not events or changes can be attributed to programs takes time and costs money and should be done only once in a while. Similarly, governments can seriously reconsider programs only once in a while and not every year. (That was the downfall of Zero-Based Budgeting, trying each year to reconsider each budget fundamentally.)

Evaluation information is also well-suited to improving program accountability. The type of data collected by an evaluation extends beyond the program so that much of it is not collected by the program operations, but rather by independent evaluators. It also focusses on "arms length" outcomes that are beyond the immediate control of the program and it occurs only once in a while, leaving program management alone most of the time. As a result, program evaluation can be seen realistically as a strategic management tool to be used by others... even though it may not be appreciated by the program management.

Ongoing Program Performance Information and Program Evaluation in the Federal Government Today

In the 1980s, Operational Planning Frameworks (OPF) became the most recent attempt to have performance information on programs made available to the centre, in this case Treasury Board. OPFs describe a program, indicate the results that are to be achieved and provide the framework for which resource levels are assigned — all in a manner that reflects departmental management structures. They were developed with close links to the annual budgeting process and have evolved to be seen as setting the basis for accountability on programs to Treasury Board. To date, general financial accounting structures have been approved in most departments. However, this initiative is still of limited utility for accountability purposes because the use to be made of the results information (as opposed to financial information) is still not clear. In particular, the accountability regime is still to be put in place. As a result, there is no procedure established for using performance information and hence no realistic approach being taken as to what kind of information should be reported. That is, inadequate effort has been made to date to distinguish what can and should be collected regularly through ongoing information systems and what can only be col-
lected periodically through program evaluation. This needs sorting out since not all performance information can be reported annually: a choice must be made.

Paralleling this initiative was the development of the Part III of the Estimates as a means of reporting to Parliament on the achievements of programs. The format being used and developed allows for both periodic and ongoing performance information to be reported and an effort is underway to determine the most appropriate combination of information that will best inform parliamentarians and yet be practical. Again the balance between ongoing and periodic information must be struck.

Meanwhile, program evaluation has developed as a strategic management tool and as one source of the information needed for results reporting. Most departments and agencies have a corporate evaluation function with the deputy head as the primary client and conduct periodic evaluations that provide for reconsideration of all the organization’s programs (cf. Rayner, 1986). But program evaluation does not have a well-defined link to ongoing information, other than through the concept of an evaluation framework.

An evaluation framework (cf. Office of the Comptroller General, 1981: Chapter 7; Office of the Comptroller General, 1984) is a procedure to appraise the information needs of new or revised programs in order to (a) provide a description of the rationale of the program and (b) identify what data should be collected now (and until an evaluation occurs) in order that the achievements of the program can be documented. Less common, but still quite compatible with developing an evaluation framework would be to identify what data should be collected routinely for ongoing efficient and effective management of the program. The evaluation framework, then, could identify what will be measured on an ongoing basis and what will be measured only periodically (i.e. perhaps at the present time and at the time of the evaluation).

There is one other initiative that likely will call for the reporting of information on program results. The government is talking about increasing the authorities of individual Ministers by reducing the number of submissions requiring Treasury Board approval and about enhancing the accountability of Ministers and departments to the Treasury Board by requiring periodic reporting on program results, in a periodic accountability of Ministers and departments to the Treasury Board by requiring periodic reporting on program results, in a periodic accountability session. Such an initiative would leave operational matters more clearly in the hands of departments and strengthen the Treasury Board’s capability for periodic reconsideration of programs. Again, though, it will be critical to consider carefully just what the information needs of the centre are and to allow for both ongoing and periodic information. The OPFs should provide a basis for the type of information required.

**Lessons Learned**

The history of attempts to institutionalize program evaluation and ongoing program performance information systems provides for a number of con-
clusions to be drawn. First, it should be recognized that operational and strategic information needs are quite different. In particular, information requirements for personal versus program accountability are different as is the information required for program resourcing decisions versus that required for managing the operations of the program.

- Therefore, while ongoing program performance information and program evaluation can, and indeed should, complement each other, they are not substitutes. They are best used to serve quite different aims, namely, operational and strategic decision making respectively.

Ongoing program performance information is appropriate for use in (a) directly managing and controlling programs and (b) holding managers to account. It is not particularly well-suited for (periodic) strategic management, and specifically not usually appropriate for major policy or resourcing decisions. Program evaluation is appropriate for use in (a) reconsidering the rationale and results of programs and (b) program accountability to Cabinet and Parliament. It is not particularly appropriate for (ongoing) operations management.

Management information systems must have active involvement of the users of the information. This is especially pertinent for ongoing information since, unless there is a built in self-correcting mechanism such as a tie into personal accountability, the system tends to become ossified. User involvement is equally essential for program evaluation if it is to be relevant to decisions. Furthermore, collecting information is costly in both financial and human resource terms.

- Therefore, a careful choice should be made on what to collect and when, i.e. between ongoing and periodic information. There is a need to work out the trade-offs involved between operational and strategic information needs.

This is so because there are choices to be made; besides being costly, there are competing uses and users for information. It should be taken as given, for example, that an information system being maintained by a program manager for use by outside program resourcing decisions is blatantly unworkable. And yet this is in essence what is frequently being proposed when large integrated information systems are suggested to serve all information needs.

As a corollary to all this, the above suggests that the traditional efficiency versus effectiveness distinction made by auditors is not particularly useful. There is no "effectiveness measurement system" per se. The operational versus strategic distinction is more meaningful to management; it also reflects the actual review and information systems in place. There are typically ongoing information systems (which will deal with operational effectiveness and, on occasion, program effectiveness measures) (and periodic measurement systems which deal with program effectiveness and may provide information on operational effectiveness). These are separate systems and are best dealt with as such, even though they can and should be linked for efficiency purposes... they serve different purposes.

The conclusion is simple. To make either operational or periodic mea-
surement systems work means developing the proper environment for the demand for the information. This is the challenge, not producing the information. The difficulty is that what evaluators do well is to produce information.

References

Auditor General of Canada

French, Richard

Van Gunsteren, Herman R.

Hartle, D.G.

Havens, Harry S.
1976 "MBO and program evaluation, or whatever happened to PPBS?" Public Administration Review 36:40-45.

Lamframboise, A.A.

Mayne, John and Robert S. Mayne

Office of the Comptroller General, Treasury Board


Rayner, Michael

Reid, Timothy E.
1979 "The failure of PPBS: real incentives for the 1980s (The past is not prologue)." Optimum 10: 23-36.

Schick, Allan

Treasury Board