ROI in the Public Sector: Myths and Realities

By Jack J. Phillips, PhD

Interest in return on investment (ROI) by public sector organizations continues to grow among federal, state and local agencies. Still, myths regarding the use of ROI in government abound, which prevents many agencies from developing a comprehensive approach to evaluating human resources, training, and performance improvement initiatives. The key is distinguishing what is myth versus what is reality. This article addresses some of those myths and realities.

Interest in return on investment (ROI) by public sector organizations continues to grow. This interest is not isolated to large federal agencies. In a recent survey of 2,200 public sector organizations, 523 respondents suggested that interest in comprehensive evaluation of training including ROI includes federal, state, county, municipal, and city/local agencies. (1) In 2002, the International Public Management Association for Human Resources (IPMA-HR) and the American Society for Training and Development (ASTD) published the first casebook highlighting application of ROI to a variety of government entities. (2) In November 2003, the first ROI conference for public sector organizations was held in Biloxi, Miss., sponsored by the Workplace Learning and Performance Center of The University of Southern Mississippi. Speakers and participants included representatives of federal, state, and local agencies as well as community college systems from around the country. In July of this year, the first ROI certification exclusive to public sector organizations

Still, with all of this activity, myths regarding the use of ROI in government abound, which prevents many agencies from developing a comprehensive approach to evaluating human resources, training, and performance improvement initiatives. The key is distinguishing what is myth versus what is reality. Table 1 lists the critical issues regarding the use of ROI in the public sector. Before reading further, take a minute to decide if you deem the issues myth or reality. Then read on to examine each issue in detail.

Myth #1 Senior government leaders will never require the use of the ROI Methodology to evaluate programs.

Reality
This is already occurring in many agencies, sparked by legislation, taxpayer concerns, and responsible leadership.

Efforts have been made toward more responsible performance management and measurement in the public sector. The Chief Financial Officers Act of 1990 was enacted to improve the management practices of the federal government and to ensure the production of reliable and timely financial information for use in managing and evaluating federal programs. The government

This article originally appeared in Public Personnel Management, June 22, 2004
Reform Act of 1994 added to the Chief Financial Officers Act by requiring all federal agencies to prepare and make public annual financial reports. It also authorized the Office of Management and Budget to implement a pilot program to streamline and consolidate certain statutory financial management and performance reports into a single, annual accountability report. (3)

One piece of legislation that has had influence in enhancing accountability in government agencies is The Government and Performance and Results Act of 1993. GPRA (or the "Results Act") is the primary legislative framework through which agencies are required to set strategic goals, measure performance, and report on the degree to which goals are met. Basically it requires government agencies to develop performance plans that outline the link between strategic goals and day-to-day operations.

The document that has had even more influence is the President’s Management Agenda 2002 (PMA). The PMA outlines five government-wide goals along with nine program specific goals. These government-wide goals include:
1. Strategic management of human capital;
2. Competitive sourcing;
3. Improved financial performance;
4. Expanded e-government
5. Budget and performance integration

These five government-wide goals are based on three guidelines; that government should be Citizen-centered (rather than bureaucracy-centered) Results-oriented Market based (promoting rather than stifling innovation through competition)

Given that citizens are the primary customer of the government, here, we're really talking about the government becoming: Customer focused Results-oriented Competitive

These challenges sound like those faced in private sector corporations. With these challenges at the table, along with the onset of full-cost accounting in some agencies, a paradigm shift is taking place; one that aligns public sector practices more closely with private sector practices than in the past. Included in this shift if the requirement that agencies not only measure for outcomes, but that they understand their costs and look to ROI as a measure of success for many of their programs.

_**Myth #2 The ROI Methodology is a flawed corporate concept that has inappropriately made its way into the public sector.**_

_**Reality**_

The ROI Methodology incorporates the steps of cost-benefit analysis, which had its beginning in the public sector.

ROI is not the first private sector practice to be applied to public sector organizations. Total quality management (TQM), zero-based budgeting, and the balanced scorecard all had their initial beginning in the private sector and to some extent have been applied in government.
While the fundamental use of ROI comes from accounting and finance (earnings divided by investment), the process of cost-benefit analysis is grounded in welfare economics and public finance. Both account for the financial benefits of a program, project, or initiative compared to the costs. The ROI Methodology incorporates five steps of cost-benefit analysis.

1. Identify program benefits;
2. Convert benefit to monetary value;
3. Tabulate fully-loaded costs of the program;
4. Identify intangible benefits; and
5. Compare the monetary benefits to the costs.

The difference in the two equations is that cost-benefit analysis results in a ratio comparing monetary benefits to the program costs (BCR); ROI results in a percentage that presents the net monetary benefits (earnings) compared to the costs (investment). The equations are presented as

\[
\text{BCR} = \frac{\text{Program Benefits}}{\text{Costs}} \\
\text{ROI} = \frac{\text{Net Program Benefits} \times 100}{\text{Costs}}
\]

As an example, an ROI study was conducted for a Practical Skills for Supervisors program. (4) The program resulted in an increase in productivity that after converted to monetary value resulted in financial benefits of $221,850. The total costs of the program were $61,886. The benefit-cost ratio and ROI resulted as

\[
\text{BCR} = \frac{221,850}{61,886} = 3.58:1 \\
\text{ROI} = \frac{221,850 - 61,886}{61,886} \times 100 = 258\%
\]

The benefit-cost ratio of 3.58:1 suggests that for every $1 spent on the program, $3.58 is returned. The ROI of 258% suggests that for every $1 spent on the program, $2.58 is returned after costs. The figure that is reported is dependent on the organization; however, in many cases both the BCR and ROI are reported.

**Myth #3 The ROI Methodology does not support traditional program evaluation in the public sector.**

**Reality**
The ROI Methodology complements traditional program evaluation by focusing additional attention on outcomes, ROI, and methods to isolate the effects of the programs.

For many years there has been a great divide between traditional program evaluation and evaluation coming from business. Program evaluators have long been concerned with the correctness of use of methodologies--expending whatever time necessary to ensure purity of research. Business, on the other hand, often takes a more pragmatic view of evaluation--using appropriate research methods, however, expending only enough resources to ensure credible, valid results are reported in an acceptable timeframe within which good decisions can be made.

This article originally appeared in *Public Personnel Management*, June 22, 2004
Business professionals are often unappreciative of the research scientists' thorough approach to evaluation. Research scientists are often unappreciative of the business professional's need for quick, yet credible results. The ROI Methodology bridges this gap. It addresses the need for thoroughly developed data collection and analysis, but also considers the need of feasibility and practicality necessary for managers to make a decision and move forward.

For instance, researchers know that in order to define the cause and effect of an event, a step must be included to isolate the effects of that event. Program evaluation typically offers one alternative--control group. Unfortunately, control group is not a feasible solution in many situations; yet, taking this step is imperative. The question "How do you know it was the program?" must be answered if the results are to be valid. The ROI Methodology offers 10 credible options, including control groups, trend line analysis, and forecasting techniques among others.

The ROI Methodology also considers the need for replication. Replication is a crucial issue in program evaluation. An evaluation is valid if it can be replicated by another researcher and the same results are achieved. By offering a process model that provides a step-by-step approach and incorporating guiding principles to assist in decision making, the methodology offers that replication capability.

Myth #4 With the absence of revenues and profit in most government agencies, ROI is inappropriate.

Reality
Most ROI studies pay off in costs savings--from improvements in productivity, quality, time savings, as well as direct costs reduction.

The absence of revenues and profits is an issue that many government organizations cannot get past when considering the use of ROI. Most ROI impact studies pay off on cost savings rather than actual profits. When considering the ROI equation, earnings divided by investment, earnings are developed in two ways: profits and direct costs savings. Profits are generated when the program is directly linked to sales and revenues. Cost savings are generated from improvements in work output and productivity, quality, time reduction, and direct costs reductions. There are far more opportunities for improvements based on productivity, quality, costs and time than on profits.

In a government setting, cost savings measures are available from every work group. For example, if a government agency implements a program to improve forms processing--a productivity measure is number of forms processed; the quality measure is the error rate on processing forms; a time measure is the time it takes to process the forms; and a cost measure is the cost of processing forms on a per-unit basis. Improvements in work unit performance in a government setting have many opportunities for program benefits that can be converted to monetary value.

Myth #5 There are little or no hard data in a government organization.

Reality

This article originally appeared in Public Personnel Management, June 22, 2004
Every department, work group, or division has productivity, quality, cost, and time measures. Even those measures considered "soft" translate into one of these categories.

Hard data are often defined as output, quality, cost, and time. Every department, work group, or division has output (productivity), quality, time, and cost measures as addressed as Myth #4. The challenge is to recognize that those measures often considered soft lead to hard measures. For instance, why does any organization want to help managers develop leadership skills? Leadership development is often offered in order to groom managers for future roles, but the more immediate need may be to reduce turnover within an organization, or to build better teams. Why does an organization want to reduce turnover? To reduce the cost the organization is incurring. Why does an organization want to improve teamwork? To increase productivity. All measures of success within a government organization can eventually lead to productivity improvement, quality improvement, cost reduction, or time savings. The question is whether or not the measure should be converted to monetary value.

**Myth #6 The ROI is only one data item that can be misinterpreted.**

**Reality**
The ROI Methodology represents a balanced profile of six types of data, representing both qualitative and quantitative data, often from different sources, collected at different time frames.

The ROI represents a balanced profile of six types of data:
1. Reaction, satisfaction, and planned action;
2. Learning;
3. Application and implementation;
4. Business impact;
5. Return on investment; and
6. Intangible benefits (those benefits we choose not to convert to monetary value).

ROI is only 1/6th of the measures reported; and while the most critical with regard to financial impact of a program or process, it is only part of the story.

As a program, process or initiative is implemented, those involved must see the relevance and importance of the new program—they must react positively; they must also intend to do something with it (reaction). They must also understand what it is they are supposed to do with the new program, process, or initiative and how to do it (learning). Even more important they should do something with it (application and implementation). As a result of their applying the skills and knowledge or implementing the new procedure, a positive outcome with regard to efficient and effective use of resources should occur (business impact). When appropriate, these positive outcomes or program benefits are converted to monetary value and compared to the fully loaded costs of the program. As a result, the ROI is reported. The intangible benefits are those benefits not converted to monetary value, and are often the more important benefits of the program.

ROI is often misinterpreted when the complete story of program success is not reported. Care must be taken to ensure that key stakeholders understand the success of the program with regard to all
measures. Reporting the chain of impact, which occurs as new programs are implemented, tells the complete story of success.

**Myth #7 There are too many constituencies in public sector situations to use the ROI Methodology.**

*Reality*
Multiple constituencies also exist in the private sector ROI calculations should be considered from the perspective of each constituency.

Multiple constituencies exist in public sector and private sector organizations. For example the return on investment may be developed for a training program for managers and executives and calculated in the context of the company's investment. At the same time, the ROI from the perspective of the participant is sometimes examined, particularly if participants are attending the program on their own time or will have to catch up on their work after attending the specific program. Multiple constituencies are not difficult to deal with, they just add to the complexity of the project. It is important to consider ROI from those stakeholders who have a vested interest in the outcome. For example, an evaluation of a teacher education program was sponsored by one government agency. This program aimed at developing knowledge and skills with math and technology for kindergarten through 12th grade teachers. Because the agency invested in the program, the impact to the agency was important. Because the teachers spent two weeks of their summer vacation in the program, the teacher impact was important. With the limited funds in school systems to support teacher development, the outcomes to the school system were of interest although school systems had the least investment in the program. In this particular case there were three stakeholder groups--the agency, the teachers, and the school systems.

**Myth #8 The ROI Methodology is inappropriate for essential government services.**

*Reality*
The ROI Methodology provides data to improve the effectiveness and efficiency of essential services. Although the service will not be discontinued, based on the data, it can be enhanced.

The motive for using the ROI Methodology is not always to decide whether a particular service should be continued or abandoned. Instead, the purpose is to examine the program and make adjustments so that the service can be more effective and be delivered in a more efficient way. Although the service will not be discontinued, it can be significantly enhanced. Consequently, this comprehensive methodology is an excellent way to streamline program analysis, design, development, and implementation. The ROI Methodology is critical in an age where efficient and effective government is a mandate.

**Myth #9 There are no standards for the ROI Methodology.**

*Reality*
Initial standards have been developed as guiding principles. A formal set of standards is currently under development to further support the process.

This article originally appeared in *Public Personnel Management*, June 22, 2004
Some standards have been developed as guiding principles detailing how the data are collected, the program is isolated from other influences, the benefits are converted to monetary value, and the ROI is calculated. These form the basis of the ROI Methodology as practiced today. In addition, a few micro-level standards have been developed as specific rules for working with data collection and analysis and administering the ROI Methodology. Presently, a standards committee representing private sector and public sector organizations is developing detailed standards for application in a variety of situations. The intent is to have a consistent methodology and use for ROI evaluation.

**Myth #10 If my administration is not asking for ROI, I should not pursue it.**

**Reality**

Sometimes senior officers are not asking for ROI because they think it cannot be delivered, creating a dilemma. There are many positive reasons to implement ROI as a process improvement tool. Sometimes senior officers are not asking for ROI because they think it cannot be delivered, or the current team is not capable of calculating the actual return on investment. As discussed earlier, there are a variety of forces in play in public sector organizations requiring them to scrutinize the funding of all types of programs and initiatives. This is requiring senior administrators to examine their position, sometimes altering their previous view of using this methodology. Consequently, some administrators now ask for this where they did not ask for it before. Change in leadership in the top of the public sector organization sometimes causes a change in focus in terms of accountability. The new person may require a comprehensive methodology, such as ROI, where it was not used previously.

Still, there are many reasons to pursue this even without pressure from the top. This is a process improvement tool that can show stakeholders the value of a specific program. Most stakeholders want to recognize the contribution of programs or they want to understand what steps they can take to improve the contribution of particular programs. This is the proactive approach to the ROI methodology, which is replacing the reactive approach of being forced to examine the methodology because of a change in leadership or the thinking of the existing leadership.

**Myth #11 In the public sector, ROI data will be misused for political purposes.**

**Reality**

The ROI Methodology provides a variety of data for several target audiences, with prescriptions for communication and use of the data.

The ROI Methodology provides a variety of data for several key stakeholder groups with prescriptions for communication and use of the data. Every study will have recommendations that, when implemented, result in improvements to the program. The ROI Methodology is normally implemented with the goal of improving programs and processes and not evaluating the performance of the individuals involved in the program. Consequently, it is not the performance evaluation, but the process improvement that drives many of the recommendations. By presenting several types of data with several recommended solutions, the likelihood that results will be misused for political purposes is reduced. Using standards and being objective with the data also helps with this type of analysis.

**Myth #12 The ROI Methodology will add too much cost to budgets that are already too lean.**

This article originally appeared in *Public Personnel Management, June 22, 2004*
**Reality**

The ROI Methodology can be implemented for about 3-5 percent of the direct budget, often less than the current budget for program evaluation.

The cost of implementing the ROI Methodology is often less than the current budget for program evaluation. The emphasis is shifted from counting programs and projects to measuring outcomes. By moving toward ROI, the fully loaded costs of the process will materialize; hence, providing decision makers better information on what is actually being spent. The added cost of the ROI Methodology may deter some; however, when appropriately implemented, programs are changed or eliminated, and the front-end assessment is improved, thereby, reducing the number of inappropriate programs at the outset. So, incurring the additional necessary cost for ROI will ultimately lead to reduced costs of design, development, and delivery. In essence, the savings generated by using the comprehensive evaluation data will at least be partially allocated to additional measurement and evaluation expenditures. Some organizations report that in three to four years, they have doubled their evaluation budgets with the results from the actual evaluation studies.

The use of ROI as a tool to measure the success of programs, processes, and initiatives in federal, state, and local government agencies is growing. Dispelling the myths of ROI is the first step toward improving the evaluation processes within your organization.

**Notes**


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Table 1. Myth or Reality? You Decide

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Table 2. ROI Methodology Guiding Principles

1. When a higher-level evaluation is conducted, data must be collected at lower levels.
2. When an evaluation is planned for a higher level, the previous level of evaluation does not have to be comprehensive.

This article originally appeared in *Public Personnel Management*, June 22, 2004
3. When collecting and analyzing data, use only the most credible source.
4. When analyzing data, choose the most conservative among the alternatives.
5. At least one method must be used to isolate the effects of the solution.
6. If no improvement data are available for a population or from a specific source, it is assumed that little or no improvement has occurred.
7. Estimates of improvements should be adjusted (discounted) for the potential error of the estimate.
8. Extreme data items and unsupported claims should not be used in ROI calculations.
9. Only the first years of benefits (annual) should be used for ROI analysis.
10. Fully load all costs of a solution, project, or program when analyzing ROI.
11. Intangible measures are defined as measures that are purposely not converted to monetary values.
12. The results from the ROI Methodology must be communicated to all key stakeholders.