

By Jack Phillips and Patti Phillips

# How to measure the return on your HR investment

## Using ROI to demonstrate your business impact

The demand for HR's accountability through measurement continues to increase. Here, Jack and Patti Phillips provide a comprehensive overview of the ROI process and how it can positively impact the HR community.

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**C**ALCULATING RETURN ON INVESTMENT (ROI) has been a valuable measurement tool for a long time – it's not the latest management fad. During the 1920s, ROI was the emerging tool to place a value on the payoff of stock investments. In recent years, the application of the concept has been expanded to all types of investments, including human capital investment. This reflects the growing demand for evidence of positive returns on investing in HR programs. Today, clients – those funding the HR initiative – require critical evaluation data, and measuring ROI can be a valuable tool for communicating the positive impact of HR's work on the organization. For an ROI process to be feasible, it must balance many issues, including feasibility, simplicity, credibility, and soundness. The ROI methodology described in this article meets these challenges. More specifically, it considers the three major target audiences that an ROI process will affect.

- **The HR community:** HR staff members must have an easy-to-understand approach to measurement. If the process appears confusing and complex, then professionals will give up in a fit of frustration, assuming that the ROI cannot be developed or that it is too expensive.
- **Internal clients:** those who are the recipients of HR programs need a process that will provide quantitative and qualitative results, as well as one that earns their confidence. The measurement program should be effectively communicated to other areas of the business.
- **Research community:** researchers in measurement and evaluation need a process that they can support – one that holds up under their scrutiny and close examination. Such professionals also need a process that can be replicated from one situation to another, a reliable process that

will result in the same measurements if two different practitioners are evaluating the same HR program.

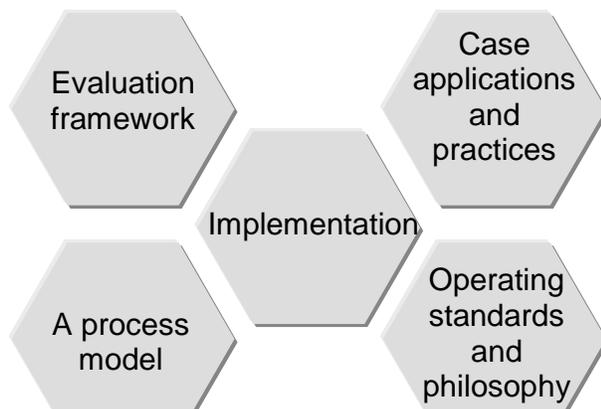
An awareness of these audiences is critical to get the ROI process up and running and ensure that it can be communicated across the organization.

### Developing the ROI process

To develop a credible approach for calculating the ROI in HR, several pieces of an evaluation puzzle must be developed and integrated (see figure 1, below). This puzzle comprises five important elements:

1. An evaluation framework is needed to define the various levels of evaluation and types of data, as well as how data are captured.
2. A process model must be created to provide a step-by-step procedure for developing the actual ROI calculation. Part of this process is the isolation of the effects of the program from other factors in order to show the monetary payoff of the HR project.

Figure 1. The key elements of the ROI process



3. A set of operating standards with a conservative philosophy is required. These guiding principles keep the process on track to ensure successful replication. The

operating standards also build credibility within the organization.

4. The necessary resources should be devoted to implementation issues to ensure that the ROI process becomes operational in the organization. Implementation addresses issues such as responsibilities, policies, procedures, guidelines, goals, and internal skill building.

5. Finally, successful case applications are critical to show how ROI actually works in the organization. Users of the ROI process are encouraged to develop a case study, and quickly.

Together, these five elements are necessary to solve the ROI puzzle and develop a comprehensive evaluation system that contains a balanced set of measures, has credibility with the various stakeholders involved, and can be easily replicated. Here's a closer look at these five essential pieces.

### Puzzle piece #1: the evaluation framework

There are seven types of data used in the ROI process. Although these data types can be considered separately, they are inevitably woven together and their meaning lies in relation to one another.

The first type of data, reaction from participants (HR stakeholders), is measured on almost all HR functions and programs, usually with generic questionnaires and surveys.

Although this level of evaluation is important as a customer satisfaction measure from program participants, a favorable reaction does not ensure that participants have learned to implement the HR program.

Learning measurements focus on what participants learned during the HR program. A learning check is helpful to ensure that participants absorb new skills, knowledge, and know how to make the HR program successful. However, a positive measure at

this level is no guarantee that the program will be successfully implemented.

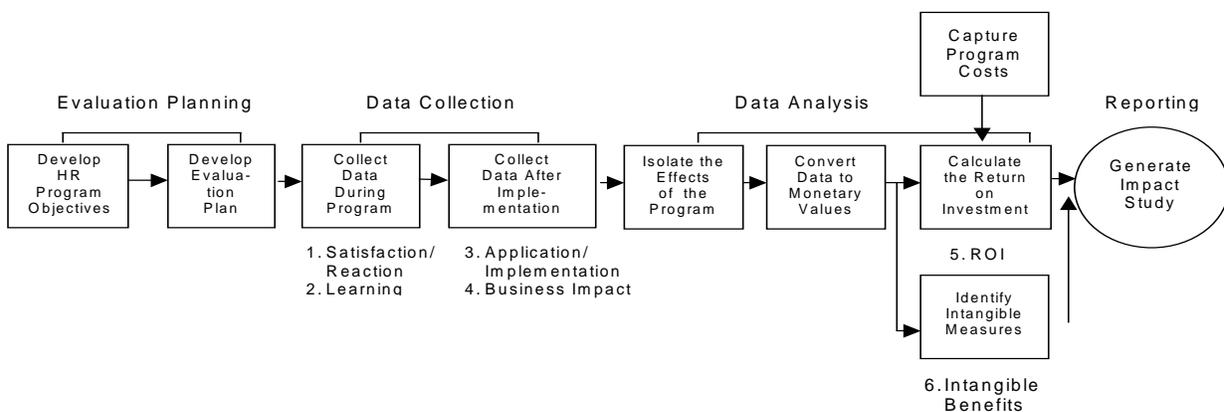
Measuring application and implementation is necessary to determine if participants implement the HR program successfully. The frequency and use of skills are important measures at this level. In addition, this measure includes all the steps, actions, tasks, and processes involved in the implementation of the program. Although the evaluation is important to gauge the success of the program's implementation, it still does not guarantee a positive business impact on the organization.

Measuring business impact focuses on the actual business results achieved directly from the HR program. Typical business measures include output, quality, costs, time, and customer satisfaction. Although the HR program may produce a measurable business impact, there is still a concern that the costs for program may be too high. Measuring cost involves monitoring or developing the cost related to the HR program. A fully loaded cost profile is recommended where all direct and indirect costs are tabulated.

ROI is the ultimate level of evaluation, where the HR program's monetary benefits are compared with the costs. Although ROI can be expressed in several ways, it is usually presented as a percentage or benefit/cost ratio. In addition to tangible, monetary benefits, most HR programs will drive intangible, non-monetary benefits. Intangible benefits are defined as implementation and business measures benefits not converted to monetary value.

Although almost all HR staff groups conduct evaluations to measure satisfaction, few actually conduct evaluations at the ROI level. Perhaps the best explanation for this is that ROI evaluation is often characterized as a difficult and expensive process. A chain of impact should occur through the levels and types of data as the skills and knowledge learned during the HR program are applied on the job as implementation takes place to produce business impact and drive a positive ROI. If measurements are not taken at each level, it is difficult to conclude that the results achieved were actually produced by the HR program. Because of this, it is recommended that evaluation be conducted at all levels when planning an ROI evaluation.

Figure 2. ROI process model



## **Puzzle piece #2: the process model**

Represented by the model in Figure 2, the ROI process has been refined and modified over many applications. As the figure illustrates, the process is comprehensive as data are developed at different times and gathered from different sources to develop the seven types of measures. Each part of the process is outlined below.

*Evaluation planning.* The first two parts of the ROI process focus on critical planning issues. The first step is to develop appropriate objectives for the HR initiatives. These are often referred to as the ultimate objectives of the HR program. These range from developing objectives for satisfaction to developing an objective for the ROI. A specific program should have multiple levels of objectives.

*Documentation.* With the objectives in hand, the next step is to develop two important planning documents. A data collection plan indicates the type of data collected, the method for data collection, data sources, the timing of collection, and the various responsibilities for collection.

The ROI analysis plan, details how the HR initiative is isolated from other influences, how data are converted to monetary values, the appropriate cost categories, the expected intangible measures, and the anticipated target audience for communication.

*Collecting data.* Data collected during the launch or the HR program measures reaction, satisfaction, and learning to ensure that adjustments are made to keep the program on track. The reaction and satisfaction, and learning data are critical for immediate feedback to make early changes. Postprogram data are collected and compared with pre-program data, and expectations. Both hard data and soft data, including work habits, work climate, and

attitudes are collected. Data can be collected using a variety of methods, such as:

- Follow-up surveys and questionnaires to measure satisfaction and reactions from stakeholders, as well as uncover specific application issues with HR programs.
- On-the-job observation to capture application and use.
- Tests and assessments to measure the extent of learning.
- Interviews to measure reaction and determine the extent to which the program has been implemented.
- Focus groups to determine the degree of application of the HR program in job situations.
- Action plans to show progress with implementation on the job and the impact obtained.
- Business performance monitoring to show improvement in various performance records and operational data.

The important challenge in data collection is selecting the method(s) appropriate for the setting and the specific HR program, within time and budget constraints.

*Isolating the effects of the HR program.* An often-overlooked issue in most evaluations is the process of isolating the effects of an HR program. This step is essential because many factors will influence performance data after an HR program is implemented. Specific strategies in this step will pinpoint the amount of improvement directly related to the HR program. The result is increased accuracy and credibility of the ROI calculation. The following strategies have been used to address this important issue:

- A pilot group of participants in an HR program is compared with a comparison (control) group not participating in the program to isolate program impact.

- Trend lines are used to project the values of business impact data, and projections are compared with the actual data after an HR program.
- Participants/stakeholders estimate the amount of improvement related to an HR program; supervisors and managers estimate the impact of an HR program on the output measures.
- External studies or previous research provide input about the impact of an HR program; independent experts estimate the impact of an HR program on the performance variable.
- Customers provide input about the extent to which the HR program has influenced their decisions to use a product or service.

Collectively, these strategies provide a comprehensive variety of strategies to tackle the critical issue of isolating the effects of an HR program.

*Converting data to monetary values.* To calculate the return on investment, business impact data need to be converted to monetary values and compared with HR program costs. This requires a value to be placed on each unit of data connected with the HR program. The list below shows most of the key strategies available to convert data to monetary values. The specific strategy selected usually depends on the type of data and the situation:

- Output data such as an additional product or service provided, are converted to profit contribution (or cost savings) and reported as a standard value.
- The cost of a quality measure, such as a customer complaint, is calculated and reported as a standard value.
- Employee time saved is converted to fully loaded compensation.

- Historical costs or value of a measure, such as preventing a lost-time accident, are used when available.
- Internal and external experts estimate a value of a measure, such as an employee complaint.
- External databases contain an approximate value or cost of a measure, such as employee turnover.

## COMPARING BENEFIT/COST RATIO (BCR) AND RETURN ON INVESTMENT

The BCR and the ROI present the same general information but with slightly different perspectives. Here's an example illustrates the use of these formulas.

An absenteeism reduction program produced savings of \$581,000, with a cost of \$229,000. Therefore, the benefit/cost ratio is:

$$\text{BCR} = \frac{\$ 581,000}{\$ 229,000} = 2.54 \text{ (or } 2.5:1\text{)}$$

As this calculation shows, for every \$1 invested, \$2.50 in monetary benefits is returned. In this example, net benefits are \$581,000 - \$229,000 = \$352,000.

Thus, the ROI would be:

$$\text{ROI} = \frac{\$ 352,000}{\$ 229,000} \times 100 = 154\%$$

This means each \$1 invested in the program returns \$1.50 in net benefits, after costs are covered. The benefits are usually expressed as annual benefits for short-term programs, representing the amount saved or gained for a complete year after the program has been implemented. Although the benefits may continue after the first year, the impact usually diminishes and is omitted from calculations in short-term situations. For long-term projects, the benefits are spread over several years. The timing of the benefits stream should be determined before the impact study begins, as part of the planning process.

- The measure is linked to other measures for which the costs are easily developed (e.g. employee satisfaction linked to turnover).
- Participants estimate the cost or value of the data item, such as work group conflict.
- Supervisors or managers' estimates of costs or values when they are capable of providing an estimate (e.g. an unscheduled absence).
- The HR staff estimates a value of a data item, such as a sexual harassment complaint.

This step in the ROI process is critical and is absolutely necessary for determining the monetary benefits from an HR program or solution. The process is challenging, particularly with soft data, but can be methodically accomplished using one or more of the above strategies.

*Tabulating the cost of the HR program.* The denominator of the ROI formula is the cost of the HR program. The following cost components should be included:

- Initial analysis and assessment, possibly prorated over the expected life of the HR program.
- Purchase/acquisition cost, if applicable.
- Development/design cost for the HR program (prorated if necessary).
- Participant/stakeholder time for the HR program using fully loaded compensation costs.
- Materials and supplies for the HR program.
- Application and implementation costs of the HR program.
- Maintenance and monitoring costs.
- Administration and overhead costs for the HR program, allocated in a convenient way.
- Evaluating and reporting costs.

The conservative approach is to include all these costs so that the total is fully loaded. By taking into account all costs will ensure a stronger position from which to present your final findings.

#### *Calculating ROI*

The return on investment is calculated using benefits and costs. The benefit/cost ratio is the monetary benefits of the HR program or intervention divided by the costs. In formula form, it is:

$$\text{BCR} = \frac{\text{HR program monetary benefits}}{\text{HR program costs}}$$

Sometimes this ratio is stated as a cost/benefit ratio, although the formula is the same as BCR. The return on investment uses the net benefits divided by costs. The net benefits are the program benefits minus the costs. In formula form, the ROI becomes:

$$\text{ROI (\%)} = \frac{\text{Net HR program benefits}}{\text{HR program costs}} \times 100$$

This is the same basic formula used in evaluating other investments where the ROI is traditionally reported as earnings divided by investment.

*Identifying intangible benefits.* During data analysis, every attempt is made to convert all data to monetary values. For example, hard data – such as output, quality, and time – are always converted to monetary values while soft data conversion is attempted. However, if the conversion process is too subjective or inaccurate and the resulting values lose credibility in the process, the data are listed as intangible benefits with the appropriate explanation. For some programs, intangible, non-monetary benefits have extreme value, often commanding as much attention and influence as the hard data items. Intangible benefits may include items such as improved public image, increased job satisfaction, increased organizational

commitment, reduced stress, and improved teamwork.

### **Puzzle piece #3: case applications and reporting**

A final operational step of the ROI process is to generate an impact study to document the results achieved by the HR program and communicate them to various target audiences. The impact study presents the basic process used to generate the seven measures of data. The methodology, assumptions, key concepts, and guiding principles are all outlined before the actual results are presented. Next, the seven categories of data, beginning with reaction and satisfaction and moving through ROI and intangible measures, are presented in a rational, logical process, showing the building blocks to success for the study. Conclusions and recommendations are always a part of the study. This study becomes the historical document that presents the complete assessment of the HR program.

A variety of target audiences need information, different reports and formats usually need to be generated. All the stakeholders involved will need some communication about the success of the program, including executives who may not be interested in knowing the full details. A general interest report may be appropriate for stakeholders who are involved but not directly responsible for the project. A variety of different reports and formats are used to disseminate the information, ranging from the complete impact study described above to a one-page summary for clients who understand the process. The key issue in this step of the ROI process is to analyze the target audiences detailed during the evaluation planning and develop the appropriate report to meet their specific needs.

### **Puzzle piece #4: guiding operating principles**

To ensure that each study is developed in the same way, consistent processes and operating standards for the measurement and evaluation process should be implemented. The following guiding principles should be used as operating standards when implementing the ROI process:

1. When an evaluation is planned for a higher level, the previous level does not have to be comprehensive.
2. When a higher-level evaluation is conducted, data must be collected at lower levels.
3. When collecting and analyzing data, use the most credible sources.
4. When analyzing data, choose the most conservative approach among alternatives.
5. At least one method must be used to isolate the effects of the program.
6. If no improvement data are available for the performing group, it is assumed that little or no improvement has occurred.
7. Estimates of improvement should be adjusted for the potential error of the estimate.
8. Extreme data items and unsupported claims should not be used in ROI calculations.
9. The first year of benefits (annual) should be used in the ROI analysis of short-term programs.
10. Program costs should be fully loaded for ROI analysis.

These guiding principles will ensure that the proper conservative approach is taken and the impact study can be replicated and compared with others. More importantly, the principles build credibility with, and support from, clients and senior managers who review and scrutinize results.

### Puzzle piece #5: implementation

The best tool, technique, or model will not be successful unless it is properly utilized and becomes a routine part of the HR

plans and goals around the process. It also involves preparing the environment, individuals, and support teams for this type

| BARRIERS TO THE ROI PROCESS   | BENEFITS OF THE ROI PROCESS   |
|---|---|
| <ul style="list-style-type: none"><li>▪ Costs and time. The ROI process will add additional costs and time to the HR program, but not a great deal. A comprehensive ROI process will probably add no more than 4-5 percent to the total direct HR budget. The additional investment in ROI should be offset by the results achieved from implementation. However, this barrier often stops many ROI implementations early in the process.</li><li>▪ Change of focus for HR staff. Many HR staff members may not have the basic skills necessary to apply the ROI process within their scope of responsibilities. Also, the typical HR program does not focus on results, but on qualitative feedback data.</li><li>▪ Faulty initial analysis. Some HR programs have been implemented for the wrong reasons and are based on management requests or efforts to chase a popular industry fad.<sup>2</sup> An ROI calculation for an unnecessary HR program will likely yield a negative ROI value. This is a realistic barrier for many interventions.</li><li>▪ Fear. Some HR staff members do not pursue ROI because they perceive the ROI process as an individual performance evaluation process instead of a process improvement tool.</li></ul> | <ul style="list-style-type: none"><li>▪ Show the Contribution of Selected HR Programs. With the ROI process, the HR staff and the client will know the specific contribution of an HR program with data not previously developed nor in a language understood by the client.</li><li>▪ Earn the respect of senior management. Measuring the ROI of an HR program is one of the most convincing ways to earn the respect and support of the senior management team—not only for a particular HR program, but also for other HR projects as well.</li><li>▪ Gain the confidence of clients. The client, who requests and authorizes an HR program, will have a complete set of data to show the overall success of the process.</li><li>▪ Improve the HR processes. Because a variety of feedback data are collected during the HR program, the comprehensive analysis provides data to drive changes in HR processes and make adjustments during program implementation.</li><li>▪ Develop a results-based approach. Throughout the cycle of HR program design, development, and implementation, the entire team of stakeholders focuses on results.</li><li>▪ Alter or eliminate inefficient HR programs. This benefit is twofold.</li><li>▪ First, if a program is not effective, and the results are not materializing, the ROI process will prompt changes or modifications. On rare occasions, the program may have to be halted if it is not adding the appropriate value.</li></ul> |

function. As with any change, it will be resisted by the HR staff and other stakeholders. Some of the resistance will be based on realistic barriers, while part of it will be based on misunderstandings and perceived problems that may be mythical. In both cases, specific steps must be taken to overcome the resistance by carefully and methodically implementing the ROI process. Implementation involves many issues, including assigning responsibilities, building the necessary skills, and developing the

of comprehensive analysis. The organizations experiencing the most success with the ROI process have devoted adequate resources for implementation and deliberately planned for transition from their current state to where they desire the organization to be in terms of accountability.

### Final thoughts

This article provides an overview of the ROI process, underscoring the urgency and the challenge to develop a comprehensive

measurement and evaluation process. Various forces are creating a critical need for increased accountability. An evaluation framework, the ROI process model, operating standards and philosophy, implementation, and case application are all necessary to develop a reliable, credible process that can be replicated from one HR project to another. This process is not without its concerns and barriers, but many of them can be overcome with simplified, economical methods and a disciplined approach.

References and further reading:

1. Phillips, Jack J., Ron D. Stone, and Patricia P. Phillips *The Human Resources Scorecard: Measuring the Return on Investment*. Woburn, MA: Butterworth-Heinemann, 2000.
2. Wetlaufer, Suzy *The Business Case Against Revolution: An Interview with Nestlé's Peter Brabeck*, Harvard Business Review, February 2001.

The authors would also like to note their other published work on this topic.

Patti Phillips, *The Bottomline on ROI: basics, benefits & barriers to measuring training and performance*, The Center for Effective Performance, January 2002.