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The problem and the solution. Much of the human resource development (HRD) evaluation literature focuses on the Kirkpatrick four-level approach and emphasizes the importance of measuring the return on investment (ROI) of HRD initiatives or programs. This article argues that, in many cases, ROI does not provide the kind of information needed by decision makers. What is needed is a systems model that examines the effect of organizational and environmental factors on the intended outcomes of an HRD initiative or program. Such a model can help to frame any evaluation, including one that focuses on ROI.

Keywords: *evaluation; ROI; systems model*

Increasingly, organizations are asking for, and even demanding, that a wide variety of organizational interventions be evaluated (Bassi & Lewis, 1999; Brown & Seidner, 1998; Chelimsky, 2001; Phillips, 1998; Van Buren & Erskine, 2002). The focus of many of these evaluations is the effectiveness of organizational programs and processes, whether these are performance appraisal systems, feedback systems, training programs, or organization development interventions. After all, executives and employees want to know the extent to which and how these programs and processes are contributing to the organization's success. Customers, as well, want to be assured of high quality products and services.

This demand for evaluation presents a challenge to human resource development (HRD) professionals and evaluators who operate within HRD. Basically, evaluation in HRD seems stuck in an intellectual quagmire. That situation arises primarily because of an overreliance on a conceptually simple approach to evaluation, namely, the four-level taxonomy introduced and promoted by Kirkpatrick (1959a, 1959b, 1960a, 1960b, 1994). Certainly, focusing on four levels of effect—reaction, learning, behavior, and results—has a certain appeal, primarily because of its apparent straightfor-

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wardness. Furthermore, this taxonomy has withstood the test of time, in that few other models or approaches have been offered in the HRD literature (Russ-Eft & Preskill, 2001). The four-level taxonomy continues to be bolstered by others in the field, such as Phillips's (2003) work on return on investment (ROI), Swanson and Holton's (1999) work on results, and industrial-organizational psychologists who base their own research on that taxonomy model (e.g., Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997).

A major problem with the Kirkpatrick approach, whether it is called a model or a taxonomy (Holton, 1996; Kirkpatrick, 1996), is that it makes evaluation clients and stakeholders believe that the best evaluations are those that examine the ROI of some intervention, program, or process. The underlying assumption is that positive reactions to a program or process lead to positive effects on learning that lead to positive effects on behavior that lead to positive bottom-line results (Kirkpatrick, 1994). It is clear that bottom-line issues arise for both profit and not-for-profit organizations. Without attention to revenue and costs, an organization can flounder. That does not, however, mean that everything within an organization can and should be transformed into dollars. For example, linking employee satisfaction with the financial success of an organization is difficult if not impossible to establish, and so is the relationship between many training programs and the bottom line. Even more problematic are those organizations (e.g., nonprofits or government entities) whose objectives are not measured in terms of dollars. Translating employee or customer satisfaction into dollars, or measuring the financial effect of coaching, is very difficult to accomplish in any valid or credible way. In spite of the often requested and perceived desire to show the ROI of HRD efforts, we will make the case that (a) when conducting ROI within an HRD context, it is critical to consider what effect other organizational variables have on the outcome measure (or bottom line) and (b) most of the time, ROI is not necessarily what the client wants or needs, nor is it the best approach to answering the organization's evaluative questions. The following section addresses the first of these points by presenting a systems model of evaluation that suggests the complexity of evaluation within an organizational context.

A Systems Model for Evaluation

Three critical factors are often overlooked when evaluating HRD initiatives: (a) Evaluation occurs within a complex, dynamic, and fluid environment; (b) evaluation is inherently a political activity; and (c) evaluation needs to be implemented in a purposeful, planned, and systematic manner. When these factors are not considered carefully, it is more than likely that whatever data are collected in the name of evaluation will be either of little

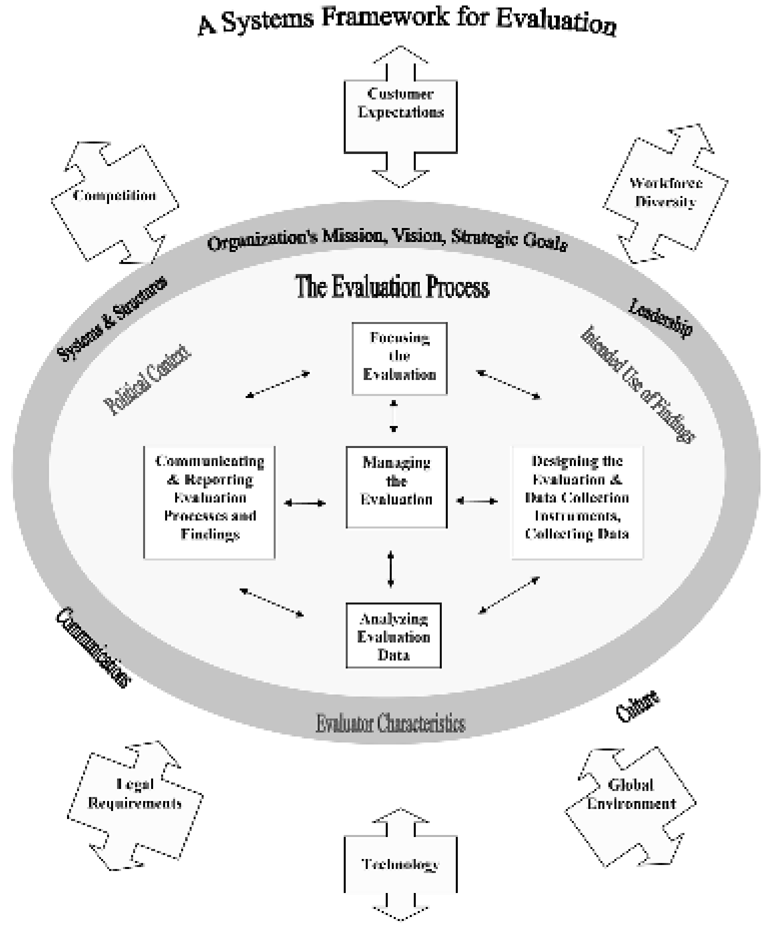

FIGURE 1: A Systems Framework for Evaluation

use or invalid. To ensure that any HRD evaluation meets the information needs of decision makers and other intended users of the results, it is important that evaluation be conducted within a systems framework (see Figure 1).

The framework we recommend considers a number of variables that may affect not only the design of the evaluation but its implementation and the extent to which, and the ways in which, the evaluation findings might be used. As can be seen in Figure 1, the systems approach first recognizes that there is an external environment that affects how an organization functions. This environment takes into account how the organization is dealing with competition, evolving customer expectations, issues of workforce diversity, ongoing and changing legal requirements, changes in technology, and the demands of working within a global context. Although not always readily apparent, these variables often influence the perceived information needs of stakeholders.

The systems framework also emphasizes the importance of aligning the evaluation process and resulting findings with the organization's mission, vision, and strategic plan. Far too often, HRD evaluation activities have been thought of as add-ons, as surveys to quickly assess participants' reactions, and have been conducted in isolation from other kinds of data collected in organizations. In contrast, an HRD evaluation system should be developed in a manner that augments, supports, or complements other process improvement efforts being used in the organization, such as Six Sigma, Baldridge, or the Balanced Scorecard. That is not to say that HRD evaluations should adopt these data collection practices; rather, HRD evaluations should relate to and perhaps inform the data that result from these other assessment practices. Ultimately, evaluation of HRD initiatives should help decision makers understand how, when, where, and why HRD contributes to achieving the organization's strategic goals and objectives.

The success of an evaluation's design and implementation, as well as whether evaluation findings are used, is often dependent on the organization's infrastructure (Preskill & Russ-Eft, 2003; Preskill & Torres, 2005). The extent to which the culture of the organization supports collaboration and problem solving, risk taking, and participatory decision making is an important indicator of whether people believe the evaluation will make a difference, or whether they will respond honestly (or at all) to the data collection instruments. The ways in which the organization's leadership supports evaluation will often mean the difference between people responding to data collection activities and the eventual use of the evaluation's findings, and an evaluation effort that results in a report no one reads or hears of again. The organization's systems and structures also influence the success of evaluation efforts. For example, the extent to which there is an open and accessible work environment, a rewards and recognition system that supports evaluation practice, and a clear relationship between employees' work and the organization's goals all contribute to whether individuals not only will participate in the evaluation but will believe that the evaluation's findings will make a difference. The fourth element of the organization's infrastructure that is critical to effective HRD evaluation practice is the communication system that operates within the organization. The extent to which the organization has the willingness and ability to make evaluation information available, as well as effective methods for disseminating evaluation findings, will strongly influence how evaluation findings are communicated, reported, and used for decision making and action. Communicating and reporting evaluation findings is also critical for supporting future evaluation efforts (Torres, Preskill, & Piontek, 1996).

So far, we have described various factors that may affect the broader context in which evaluation occurs. Now we turn our attention to the inner circle of the systems framework that reflects what happens when designing and conducting an evaluation. A well-planned evaluation goes through a process that includes focusing the evaluation, determining the evaluation's design and data collection methods, collecting data, analyzing the data, and communicating and reporting evaluation processes and findings (Russ-Eft & Preskill, 2001). All of this requires careful planning, managing, and budgeting throughout the evaluation process. In addition to the contextual factors discussed earlier, there are three other variables that often influence the success of an evaluation during the design and implementation process. These include the political context in which the evaluation is being conducted, stakeholders' reasons for conducting the evaluation (their intended use of the findings), and the evaluator's characteristics (e.g., level of evaluation expertise, closeness to the program being evaluated, credibility relative to conducting the evaluation).

In this section, we articulated a perspective that argues for conducting HRD evaluation within a systems framework. As we will explain further in this article, without understanding this environment, it is difficult to know whether conducting an ROI-type evaluation is either appropriate or useful for addressing the information needs of stakeholders. In the next section, we describe how to focus an evaluation study in a way that ensures that it is clearly framed.

Focusing an Evaluation

We cannot overstate the importance of taking the time to focus an evaluation. Focusing an evaluation includes understanding the background of the HRD initiative and the organizational context, determining the purpose of the evaluation, identifying the evaluation's stakeholders, and developing a list of evaluation questions that will guide and bound the evaluation study. Without engaging in this focusing process, which is essential for developing an evaluation plan, the evaluation is destined to consider only data collection methods that may or may not be relevant, appropriate, timely, or useful.

An effective means for focusing an evaluation is to convene a group of stakeholders who have a vested interest in the program being evaluated, are intended users of the results, or are potential future recipients of the program or service being evaluated (often referred to as the *evaluand* within the evaluation profession). To understand the background, rationale, assumptions, resources, activities, and short- and long-term objectives of the evaluand, it is often useful to have this group develop a logic model (W. K. Kellogg Foundation, 2000; Wholey, 1994). A logic model "is the basis for a convincing story of the program's expected performance" (McLaughlin & Jordan, 1999, p. 66). Developing a logic model helps group members articulate the program's theory of action

(Argyris & Schon, 1978), which is critical for clarifying the evaluation's focus and purpose. By having stakeholders develop a logic model, they are able to surface (Russ-Eft & Preskill, 2001)

> facts, myths, and values people have about the evaluand. Group members may be able to detect differences or errors in their thinking, and it opens them up to new understandings about the evaluand; things they had not thought of before. The discussion of the evaluand's background and history also helps clarify how the evaluation results will be used. If there are competing agendas for the evaluation, these can be negotiated and resolved. The outcome of this dialogue ensures that the most critical issues about the evaluand will be addressed during the evaluation. (p. 130)

A logic model typically provides a visual graphic of the various components of a program. To develop a logic model, stakeholders are asked to respond to the following questions:

- What are the assumptions underlying this program?
- What resources (human, financial, organizational) will be used to accomplish this program or process?
- What activities will be undertaken with the resources to produce the products and outcomes?
- What direct products (or outputs) will provide evidence that the program or process was actually implemented?
- What immediate outcomes do you expect from this program or process?
- What long-term outcomes do you expect?

We have found that when stakeholders develop a logic model, it "creates an opportunity for negotiating which goals should be evaluated, as well as the origin and viability of certain unstated goals" (Russ-Eft & Preskill, 2001, p. 135). The outcome of developing a logic model is a common understanding of how and why the HRD initiative is supposed to work, what it actually does, and what expectations stakeholders have for its effect. It is then much easier for the group to develop a 2- to 3-sentence purpose statement. For example, the purpose(s) of an evaluation might be to (a) improve or revise the program, (b) determine whether to continue and/or expand a program, (c) monitor a program's implementation for compliance, or (d) examine the cost savings, cost benefit, or ROI of the program.

A critical task of focusing the evaluation is to identify all of the potential stakeholders for the evaluation. This means naming the intended users of the evaluation results. Such stakeholders might include (Russ-Eft & Preskill, 2001)

> the program's designers, developers, deliverers, customers, future and former participants, community members, members of professional organizations, legislative committees, managers, administrators, and advisory boards. Each of these individuals or groups may have a "stake" in the outcomes of the evaluation. (p. 141)

It is important to understand that various stakeholders may use the evaluation findings in different ways. For example, those who have responsibility for the program might use the findings to make immediate changes to the program (instrumental use) or to better understand the program for future planning (conceptual use). In other cases, stakeholders, because of their relationship to the program, just want to know the results—to stay informed about how the program is faring (conceptual use). And there might be some stakeholders who wish to use the results to make a case for additional resources (symbolic use). In some cases, it may help decision makers to articulate what they will do with evaluation findings by presenting them with some hypothetical results. Will they eliminate the new employee orientation program if participants do not know more about their jobs? Or, would such results suggest that there be some modifications to the program? Discussing possible findings will help the evaluator and decision makers formulate more appropriate and actionable evaluation questions. Furthermore, such discussions will aid decision makers in thinking ahead about using the evaluation findings.

Once the program has been clearly defined (through the logic model), the evaluation's purpose is clearly stated, and the evaluation's stakeholders have been identified, it is time to determine the broad, overarching questions that the evaluation will address. Developing the evaluation questions is a crucial step in determining the scope of the evaluation. Specifically, these questions communicate what the evaluation will and will not attend to. If the group has developed a logic model, the evaluation questions can often be framed to reflect the program's objectives. If a logic model has not been developed, then it is important to ask the group to discuss what kinds of information they need to make what kinds of decisions about the evaluand. For example, if a group says it is important to know if and how trainees are transferring their learning back to their jobs, then an evaluation question might be, To what extent, and in what ways, are trainees using their knowledge and skills back on the job? A second question could be, What is supporting or inhibiting the use of their knowledge and skills on the job? It is important to recognize that these questions are not interview or survey questions but are larger, more global questions. Once the evaluation questions are developed, it is then time to determine the best and most suitable methods for answering these questions.

We want to note that the focusing phase can also be accomplished with one or two stakeholders in 1 to 2 hours. However, there are many benefits from including a wider range of stakeholders and for planning 3 to 6 hours for this phase. The result is often a greater understanding of what can and should be evaluated and a greater commitment to using the evaluation results.

We have provided the systems framework with a strong emphasis on the importance of focusing an evaluation. Our purpose is to highlight the fact that when organizations ask for ROI evaluations, they rarely have considered either the organizational context for ROI nor have they engaged in a process to focus the evaluation—to really question what they want to learn from the evaluation and how the results will be used. In our experiences, organizational leaders who quickly assume ROI is the best and sometimes only worthwhile evaluation approach often change their assumptions and expectations about their information needs when they have participated in the focusing phase of an evaluation.

When Clients Ask for ROI

As HRD practitioners, researchers, and evaluators, we must, however, recognize that we operate in the real world. In this world, our clients—both internal and external—come to us with requests for an ROI evaluation. To demonstrate our experience with such requests, we describe real situations where our clients thought that what was needed was an ROI evaluation, but in reality, what was needed was a focus on other issues.

Situation 1

A publishing company was providing a new leadership development program for all managers. The program was developed in conjunction with a local university, and upper managers from the various subsidiaries were invited to participate in one of the sessions presented every 6 months. The senior executives of the company decided that they wanted to determine the ROI of the program, primarily because that seemed to be a way to highlight the benefits of the program. One of the authors undertook one-on-one interviews with the senior executives. The executives believed that the program was fulfilling an important role by bringing together upper-level managers from the subsidiaries. Indeed, several executives mentioned cross-company initiatives that had resulted from the leadership workshop. A meeting with this stakeholder group revealed that the major questions from this group revolved around the design of the program—specifically, what elements might be added and which elements could be eliminated. In addition, the group wanted to know about the participants' views of the program. The issue of ROI of the program was viewed as presenting an interesting problem, but the stakeholders concluded that conducting an ROI evaluation would have no practical significance in making future decisions concerning the program. For that reason, the evaluator recommended undertaking a formative evaluation and left open the possibility of doing an ROI project in the future.

Situation 2

A government agency was undergoing a reorganization and downsizing effort. A large number of staff had decided or were asked to retire. However, the senior managers recognized that these retirees would be taking much of their knowledge about organizational processes with them. To overcome this knowledge loss, senior management decided to immediately implement some aspects of self-directed and cross-functional teamwork. In addition to launching these various teams, some training and development sessions were conducted for the team leaders and team members. Although this government agency did not measure its work in terms of dollar gains, the senior managers felt that it was important to examine the ROI of the team training. Through a series of individual and group meetings with these senior managers, the evaluator determined that the evaluation questions focused on the extent to which knowledge transfer was taking place. Specifically, these managers wanted to know whether employees who would be remaining with the agency understood and could complete the various processes important to the agency's work. The evaluator recommended that the evaluation measure the extent of employees' knowledge of the various processes, as well as determine the ability of some of the teams to complete certain specified processes. Senior managers felt that this information was all that was needed and that ROI would not answer the questions that were of greatest relevance to their current problem.

Situation 3

A Web-based service organization decided to examine different approaches to delivering leadership training. The executive team wanted to offer this leadership training to first-line supervisors or those about to become first-line supervisors. Many of these people worked in one location. There were, however, others who worked remotely and were eligible for the program. Because of the schedule and workload demands, the program was to be offered for a few hours once a month for 9 months. That plan worked well for staff in the central location but proved impossible in terms of projected travel costs for the remote staff. To overcome the location problem, the executives decided to offer the course using two different modes—in a classroom setting for those in the central location and via the Web for those working remotely. Not knowing much about different approaches to evaluation, the executives thought that determining the ROI of the two approaches would be most appropriate. Meetings with the stakeholder groups revealed, however, that the main concerns and questions revolved around the efficacy of the Web-based approach for improving leadership behaviors and skills, particularly as compared with the classroom method. Essentially, the executives had already determined that the travel costs were prohibitive for the remote group. Now the concern turned to issues of effectiveness. Thus, the evaluation focused on determining the extent to which the two different methods led to behavior changes in the participants.

Situation 4

A business-services organization initiated a new approach to sales. The executives believed that this new approach would result in more satisfied customers and greater revenues. A specified group of salespeople was provided training and support in the new approach, whereas the remaining salespeople continued to use the older approach. Although the executives were interested in customer satisfaction, they were even more interested in determining the revenues and profits generated using the two different approaches. In this case, the evaluation did undertake a comparison of the two approaches, examining not only the revenues and profits but also issues as to the length of time to the close of the sale and the level of add-on business generated.

Of these four situations, only one organization eventually conducted an ROI evaluation, whereas the remaining organizations recognized that their evaluation efforts needed to focus on different questions. In all of these cases, if the evaluator had simply followed the initial request for an ROI evaluation, the stakeholders would not have been able to use the information. Situations 1, 2, and 3 demonstrate that many times, decision makers state that they are interested in ROI. By engaging them in the focusing phase of an evaluation, they learn that their information needs are different and that ROI would not only fail to provide the needed information but that conducting such an ROI evaluation would be essentially inappropriate. In Situation 1, decision makers realized that they wanted evaluative information to improve on their chosen path, that of a cross-company leadership development program. At some future time, these decision makers may want to invest in an ROI analysis. In Situations 2 and 3, decision makers realized that they were interested in determining the effectiveness rather than the cost-effectiveness of their earlier decision. The initiative in Situation 2, involving the government agency, would have provided information as to the costs of the training initiative—one component needed for determining cost-effectiveness or ROI. However, given the impending loss of system and process knowledge, the senior managers quickly realized that their major concerns revolved around the remaining workforce's ability to continue the needed operations. Issues related to costs of the initiatives were of much less concern. Situation 3, that of Web-based as compared with classroom-based training, may have yielded ROI results, but such an evaluation would have been an expensive undertaking and possibly unnecessary. By working with the stakeholders, however, the evaluator was able to focus the evaluation on the issues of greatest concern for the organization. Thus, the evaluator began a process that had the potential for leading to greater use of the evaluation findings in decision making (Patton, 1997). In each case, the stakeholders were able to identify what decisions and actions would result from the evaluation findings.

ROI Within the Systems Model

In the previous sections, we explained the difficulty of conducting ROI evaluations in an HRD context, especially when using a narrow focus on outcomes. There are, however, times when an ROI evaluation is not only called for but also critical to a program's future. In this section, we will discuss how ROI can be conducted successfully when using the systems model of evaluation by focusing on how one organization examined the ROI of a leadership development program coupled with a project planning and development initiative.

The organization, a restaurant chain, implemented leadership training for its general managers. The training focused on interpersonal and planning skills needed to encourage and lead innovative projects. It included 10 3- to 4-hour sessions covering topics such as winning support from others and coaching for optimal performance. The format for the training used lectures, discussion, behavior modeling, practice, feedback, and planning. Special materials were introduced to assist participants in planning and executing their projects. Included in these materials were worksheets for recording project status, as well as costs and benefits related to the projects.

Stakeholder meetings with the HRD staff and the executives revealed a concern about the ROI of the training. The questions revolved around whether the special materials introduced for project planning purposes provided sufficient benefits relative to the costs. By working with these stakeholders, the evaluator was able to construct a logic model of the program. Furthermore, this work suggested that the training took place within a larger organizational context that needed to be examined.

The measurement of ROI took place within the 10-week period of the training and used a discounted cash-flow technique (Brigham & Houston, 2003). Such an approach takes into account not only the training costs but also the time-value of money and is a widely used method within financial management. The present value of the investment for training was obtained as the discounted value of the costs and benefits of the training. Note that the actual benefits were obtained from the records provided by trainees or supervisors. Also, because this was a publicly traded company, the discount rate that was used was the risk-adjusted rate of return on its securities.

Rather than simply determining ROI, the evaluation used the systems model to examine other factors related to the ROI (e.g., organizational systems and context). Such variables as leadership and management support, communications, culture, and customer expectations were examined, as well as project specifics including the types of projects undertaken, level of detail in project definition, and the number of employees involved. By doing so, the evaluation found that issues such as the number of employees involved in the project and changes in personnel (within the project team as well as at the management level) had a significant effect on both project completion and ROI.

The results of this evaluation proved useful to the executives and the organization. The ROI results showed the value of the training and project planning approach, which led to increased organizational attention and support of the initiative. Furthermore, it identified certain organizational factors that led to greater project success and improved ROI, such as the development of smaller, action-oriented teams and an emphasis on maintaining stable team membership throughout the duration of special project work. Those findings helped the HRD staff to develop guidelines for future project work within the context of the training.

Conclusions and Recommendations

It is clear that decision makers will continue to ask for bottom-line results or the ROI of HRD initiatives. What we have shown, however, is that determining ROI is a multifaceted and complicated task within a complex system. Furthermore, we have shown that many of these requests for ROI tend to be "knee-jerk" reactions, based on a lack of understanding and misconceptions about evaluation. Decision makers think that what is needed is some determination of ROI, because it sounds results-oriented and financially driven. By engaging stakeholders in focusing the evaluation, the evaluator can help decision makers to focus the evaluation questions on the critical issues—those that lead to appropriate decision making and action.

HRD practitioners want to evaluate programs in ways that serve a variety of stakeholders. Although ROI is certainly one method, it is only one of many approaches to determining a program's success. The Holy Grail of HRD evaluation is not ROI evaluation; rather, HRD evaluators should be searching for the most effective means for determining the critical issues and questions of stakeholders, understanding the most appropriate methods for answering these questions, and ultimately using the information for decision making and action. When HRD evaluation is conducted within a systems framework and has attended to understanding the context and purposes of the evaluation, HRD evaluators will be much better positioned to provide valid and useful information to decision makers at all levels within the organization.

Researchers can support HRD practitioners by examining the processes used in undertaking such evaluations. For example, research questions might focus on some of the following questions. In what ways did the use of the logic model and systems model approaches aid stakeholders in understanding the program and the evaluation? To what extent were stakeholders satisfied with the evaluation process? In what ways did stakeholders use the evaluation findings? To what extent did implementation of an ROI evaluation affect stakeholders' satisfaction with the evaluation and the use of its findings? What decisions and/or actions resulted from such ROI evaluations? The answers to these questions may help to improve the conduct of HRD evaluations, as well as assist in determining the utility ROI-focused evaluations.

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