Evaluation results and consequences are only as strong as the plan and the partnerships that provide guidance for the evaluation process. This article, the first of a two-part series on evaluation, is a pragmatic guide for conducting useful evaluations that produce action-based recommendations for measurably improving performance. The next installment focuses on planning a responsive evaluation by establishing solid partnerships with stakeholders.

IT IS TRUE THAT EVALUATION consumes precious, and already limited, resources within organizations. Of course, sustaining programs, projects, processes, and other so-called solutions that add little to no value to an organization, and potentially even subtract it, is likely much more costly. Evaluation helps to determine what to do and invest in to achieve the desired, and required, return.

The purpose of conducting an evaluation is not for the sake of evaluating or to find someone or some group on which to place blame or to shame. Although some experts would rightly say that the fundamental purpose of evaluation is the determination of the worth or merit of a program or solution (Scriven, 1967), the ultimate purpose, and value, of determining this worth is to make data-driven decisions that lead to improved performance. It is from here that all evaluation efforts stem. All components of the evaluation must be aligned with those objectives and expectations that the organization values and the decisions that will have to be made as a result of the evaluation findings. These decisions are essentially concerned with how to measurably improve performance at all levels of the organization: internal deliverables, organizational objectives, and external impact on customers and the global environment (Kaufman, 2006).

An evaluation that asks and answers the right questions can be used not only to identify what went wrong but also explain why it went wrong and how to modify that which is being evaluated so that it can meet the intended objectives within the required criteria. We must think of it as a process that renders a recipe for improvement and success rather than ammunition for a firing squad.

Not least of all, it can help identify what is going right through appreciative inquiry (Cooperrider & Srivastva, 1987). Appreciative inquiry is a process that searches for the best in organizations to find opportunities for strengthening the drivers that lead to high performance. It is important to keep this side of the equation in mind, because the parameters of the evaluation questions will shape the information gained. If we ask what is wrong, the respondents will tell us. If we ask what went right, they will tell us. The point here is that evaluation should be unbiased (or as much as possible). We should ask and answer the right questions, so that the data we get back are representative of reality. Making data-driven decisions is not sufficient; decisions must be based on the right, and complete, data set.

THE EVALUATOR

The term evaluator describes not only a profession or occupation but also a given role at a particular time. Individuals conducting evaluation often wear many hats.
They may be performance improvement professionals, who with additional education, training, or experience have acquired interest and expertise in measurement and evaluation. They could be trainers who are charged with demonstrating the value of their training programs and departments. They may even be individuals who because of their status as a subject matter expert in some solution are also faced with demonstrating the value of this solution. The common function among them all is, or should be, their interim goal of documenting the results and impact achieved by a given solution, whether it is a program, a project, a tool, or the use of a resource. The final goal is to use this information to make sound decisions and then take appropriate action to improve performance at all levels of the organization.

BUILDING YOUR CASE

When evaluators set out to evaluate programs, initiatives, or any solution, the usual focus of the evaluation is the nature of the program and the results of the program in terms of the predetermined expectations. For example, did the participants like the new training program? Did they master the new training program content? Are they applying the content in their jobs? What is usually taken for granted or assumed is the desirability of mastering that particular content. Usually the following factors are used to determine if a program is effective:

• Resources consumed (for example, whether it was completed within time and on budget)
• Participation level (for example, the attendance and whether the participants completed the program being evaluated)
• Perceived satisfaction (for example, participant reactions, the reactions of those using the intervention, or the reactions of others, such as the recipient of any change caused)
• Usage (for example, self-reports about if and how they are using the intervention or actual statistics of use)
• Other indicators that tell little about the program contributions toward the organizational objectives

This evaluation focus centers around the means (such as the new leadership development program) rather than the ultimate end (organizational effectiveness and, in turn, positive external impact). This is not all that different from the way organizations are usually led. If planning and implementation are focused on means, evaluation questions will probably stop at this level. Evaluators who addressed each of the bulleted points above could certainly claim to have relevant data about effectiveness in reaching the predetermined objectives: people liked the program, they mastered the content, and the program was accomplished within the time and budget allotted. However, if evaluation is going to be worth the trouble, we must look further.

The approach proposed here requires that the evaluation also focus on whether these indicators link to valued organizational ends and, in turn, the external needs of clients and consumers. In an organizational context, all programs, activities, and internal results are interrelated and inevitably have an influence, positive or negative, on organizational performance. If they are not purposely linked, this fact in itself could be having a negative impact on the organization by virtue of this activity’s consumption of resources, with no known or expected return to the bottom line.

For this reason, the evaluation process must be linked to a rigorous needs assessment (rigorous does not imply lengthy and unfocused). Needs assessment is essentially the process of identifying gaps in results and placing them in priority order based on the costs to meet the need versus the costs to ignore the needs (Kaufman, 2006). Data from this process should inform what programs, activities, and other solutions will help accomplish the organizational vision and mission.

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THE RELATIONSHIP BETWEEN EVALUATION AND NEEDS ASSESSMENT

The primary driver for deriving the useful questions of an organizational study are the results and consequences we want to accomplish. Another driver will be the types of decisions that have to be made, and these will, in great part, determine what data have to be gathered and for what purpose. For instance, if decisions have to be made about what programs, interventions, and solutions should be continued, revised, or discontinued, then the data collection approach may take more of an evaluative perspective. That is, the data collected will be used to compare predetermined objectives with what was actually achieved. If the goal is to make decisions about what the options are, that is, what results should be targeted and, in turn, what types of programs, interventions, and solutions will help
us get there, then the data collection approach will take on a needs assessment perspective. Notice that in both cases, results, and gaps in results, are the primary driver.

Both approaches to data collection should be systematic and designed to answer specific questions that can be used to improve performance. Although assessors and evaluators may share some data collection techniques, the questions they seek to answer with those data differ. In this sense, the roles of assessor and evaluator differ in purpose or function rather than importance and methods (Guerra, 2003).

Thus, needs assessors help create the future by supporting with hard and soft data the identification of performance-based vision, aligned missions, and building-block objectives, as well as the gaps between current and desired results. In addition, they help identify the best solutions for closing these gaps and thereby ultimately reaching the organizational vision. Evaluators help to determine whether the organization is heading toward reaching the future the leaders set out to create during the needs assessment process. One of the primary ways they do this is by determining the effectiveness and efficiency of the implemented solutions and the causal factors associated with any gaps between expected and accomplished results so that the proper modifications can be made. Measurably improving organizational and individual performance depends heavily on these two roles and processes.

This distinction is quite practical because it helps to derive a focused scope of work for either type of data collection project. Merging or not distinguishing between the two approaches will lead to an unfocused, long, and expensive endeavor that will do little to clarify unanswered questions and make sound decisions based on relevant, reliable, and valid data.

**AT WHAT POINT DOES EVALUATION TAKE PLACE?**

Having measurable performance objectives in the correct format does not guarantee the objectives address the right things. Decades ago, people realized that focusing only on objectives could cause the evaluator to miss important data on process and environment. In the 1960s, the realization that evaluation could play a role in the development of educational programs to adjust content and process along the way to the final results gave rise to a famous distinction, when Scriven (1967) introduced the terms **formative** and **summative** and **goal-free evaluations**. Since then, evaluators have had a term for the type of evaluation activity used to guide developmental activity in programs (formative) and another term for when evaluation is used to comment on overall final value (summative).

One important detail worth noting is that while evaluation as described here seems to deal with after-implementation questions, it should start much earlier. The approach suggested here takes on a summative evaluation perspective in the sense that the key focus is on the impact of that which is being evaluated. Still, formative evaluation is very important, as it inevitably has an impact on results in both the short and long terms. Moreover, formative evaluation can be designed in such a way that one of its purposes can be to continuously monitor the alignment of the intervention, and the larger evaluation framework, toward the achievement of its ultimate value.

Formative evaluation should start along with the identification, design, development, and implementation of the intervention or solution of interest. There are some general questions to ask:

**Evaluation Questions Targeted at Needs Assessment Products**
- Are we targeting the right objectives?
  - Are they based on identified needs (gaps in results)?
  - Are the criteria measurable and soundly based?
  - Are we using the right criteria to judge the effectiveness and efficiency of our solution?

**Evaluation Targeted at Performance Analysis Products**
- Did we identify the appropriate solution?
  - Did we base our selection on an analysis of alternatives?
  - Did we weigh the pros and cons, that is, the costs and consequences?

**Evaluation Targeted at the Design Phase**
- Is our design useful and relevant?
  - Is the design aligned with the analysis findings?
  - Is our design appropriate for the ends we want to reach?

**Evaluation Targeted at the Development Phase**
- Is the development of the solution aligned with its intended design?
  - Is our pilot designed to capture the right data required for improvements?
  - Does our prototype meet the requirements of our users?

**Evaluation Targeted at the Implementation Phase**
- Is the solution being implemented appropriately? (Implementation questions may also be appropriate during the summative evaluation approach, which looks not only at the results and consequences but also at the
factors that may have affected them, such as implementation issues. If the intent is to ensure the effectiveness of the solution, we want to know if we are implementing it effectively before and during implementation, not just after the fact.)

- Were those affected by the solution included in the problem identification, solution selection, and every other stage?
- Were fears and unfounded ideas about the implications of the solution confronted, clarified, or disproved as appropriate?
- Is the solution being implemented according to initial plans?
- Is the implementation of the solution responsive and flexible to the current situation (for example, challenges not previously foreseen)?

Evaluating each stage and using evaluation data to improve each will help stakeholders stay on track to reach the short- and long-term objectives of the solution. The evaluation itself can and should also be evaluated to ensure its validity and utility.

### PLANNING AND ALIGNMENT OF EVALUATION

At its core, evaluation is simple: it compares results with expectations. It is the situations in which we apply it that can be complex, and at times make evaluation daunting. For this reason, having a clear map is particularly important for a guide through the process and helping keep the right focus. Table 1 presents a seven-step process for evaluating impact.

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<th>TABLE 1</th>
<th>A SEVEN-STEP PROCESS FOR EVALUATING IMPACT</th>
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<td>EVALUATION STEPS</td>
<td>DESCRIPTION</td>
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<tr>
<td>Step 1 Identify stakeholders and expectations</td>
<td>The evaluator must identify the key stakeholders. The stakeholder groups include those who will be making decisions either throughout the evaluation process or directly as a result of the evaluation findings. Those with the authority to make critical decisions are often the ones who finance the evaluation project, but if it is someone else or a different group, they too should be included. Also important are those who will be affected by the evaluation—either in the process or potentially as a result of the findings. Including this group will make the implementation of the evaluation plan easier, particularly during the data collection stage. The driving question for identifying stakeholders is, Who is or could be affected by the evaluation or could potentially affect the evaluation in a meaningful way? Although not every stakeholder must be a direct member of the evaluation project team, it is wise to have each group represented. A diverse group of stakeholder representation will also have a diverse group of expectations. These expectations are the basis for the contract, verbal or written, and should explicitly articulate what is expected of you (as well as of the stakeholders). If you feel they are unreasonable, this is the time to discuss, educate, discuss again, educate again, and come to a consensus, not after you have completed what in your own mind you think is a successful evaluation. If you do not have the specific stakeholder expectations clearly defined from the start, it is nearly impossible to align your efforts to such expectations without sheer luck. If you do not align your efforts with stakeholder expectations from the start, it is unlikely that you will meet those expectations.</td>
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<td>Step 2 Determine key decisions and objectives</td>
<td>Asking the stakeholders to articulate what decisions will be made as a result of your findings is a primary step. The discussion about the decisions that must be made should also be about the objectives that must be reached. All organizations have objectives—both external and internal—and everything within the organization must contribute toward those objectives (Guerra, 2005). The relative worth of any intervention or solution is primarily contingent on whether it is helping or hindering the achievement of organizational objectives. While some stakeholders may not provide the specific objectives they expect, they will give clues about the relevant effects they are expecting, even if these are about means rather than results. The task here (and, actually, throughout the entire process) is to be the educator and facilitator and approach the conversation with this question (or similar wording): “If we were to accomplish that, what would the result be?” Continue that line of inquiry until key results have been identified. With these decisions and objectives clarified, the overarching questions that will drive the evaluation process and purpose of the evaluation should also become clear, articulated, and agreed on.</td>
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### Table 1: A Seven-Step Process for Evaluating Impact (continued)

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<td><strong>Step 3</strong> Derive measurable indicators</td>
<td>Sound decisions are made on the basis of relevant, reliable, and valid data related to desired results and the related questions we want to answer (Guerra, 2003). Therefore, the heart of any evaluation plan will be to gather the data required to answer the questions that guide the inquiry. People often end up making judgments based on wrong or incomplete data, particularly when they try to force connections between inappropriate data (just because they happen to be available) and the decisions that must be made (Kaufman, Guerra, &amp; Platt, 2006). The data you will seek to collect are essentially about key performance indicators. Indicators are observable phenomena that are linked to something that is not directly observed and can provide information that will answer an evaluation question. Results are not always neatly and directly observed. When measuring results, there are a number of indicators, or—to borrow Gilbert’s (1978) term—performance requirements, that could be relevant. For instance, profit is a result that has various metrics that collectively indicate its level (for example, money collected, money paid out, and assets). Indicators for customer service include referrals, repeat business customer retention, length of accounts, and satisfaction survey scores.</td>
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<td><strong>Step 4</strong> Identify data sources</td>
<td>With a list of specific indicators for which to collect data, you must determine where you can find those data. The data drive the appropriate source. You can likely find the data you are looking for in your own organization. Records about past and current performance may be available but collected by different parties in the organization and for different reasons. Some excellent sources are strategic plans, annual reports, project plans, consulting studies, and performance reports. You can also use telecommunications and other technologies to link to reports, documents, databases, experts, and other sources (the Internet is a prime vehicle for efficiently linking up to these). A number of companies, government agencies, and research institutions, national and international, publish official studies and reports that could prove to be valuable sources of data.</td>
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<td><strong>Step 5</strong> Select data collection</td>
<td>The right data collection methods and tools are a function of the data you are seeking. Also, the data you collect are a function of the methods you select. When evaluators limit the data they collect by employing an overly narrow set of observation methods because they do not know how to use others, their data set will not be complete and their findings will not be valid. If you are after hard data such as sales figures, do not use a survey to get people’s opinions of what these sales figures are. Rather, review relevant sales reports. Conversely, if it is people’s attitudes you want, there are a number of ways to ask them (interviews, focus groups, and surveys are possibilities). Extensive literature exists about these and other data collection methods. Be sure to make your selection based on their pros and cons, specifically with regard to important criteria such as appropriateness of the instrument for the required data, time, characteristics of sample, comprehensiveness of the tool, previous experience with tools that are being considered, and feasibility, among others (Guerra, 2003). The way to collecting valid and reliable data is alignment of data type, data source, data collection tool, and data analysis procedures.</td>
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<td><strong>Step 6</strong> Select data analysis tools</td>
<td>While the data analysis is often thought to be mere number crunching, it is more than that. The analysis of data as part of an evaluation effort is the organization of information to discover patterns and fortify arguments used to support conclusions or evaluative claims that result from the evaluation study. You are merely summarizing large volumes of data into a manageable and meaningful format that can quickly communicate its meaning. In fact, the analysis of the data begins even before their collection by virtue of analyzing the characteristics of the required data, as we do before we select the methods for data collection. If you have quantitative data, various statistical operations can help organize this information while sorting through the findings. Qualitative data are also subject to analytical routines. Qualitative observations can be ordered by source and by impact or sorted according to general themes and specific findings. Checking the frequency of qualitative observations will begin to merge qualitative into quantitative data.</td>
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<td><strong>Step 7</strong> Communicate results and recommendations</td>
<td>The importance of effective communication cannot be overstated. A rigorous evaluation does not speak for itself. Communicating with key stakeholders throughout the evaluation process keeps them aware of what you are doing and why, which increases the amount of trust they place in you and your efforts. In addition, it allows them the opportunity to participate and provide valuable feedback. The time the final report and debriefing come along, these products will not be seen as something imposed on them but rather as something that they helped create. With this type of buy-in, resistance to the findings will likely be lower. Elements to consider in the communication are medium, format, language, and timing.</td>
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CONCLUSION
The information presented here is about getting the right information to find out what worked and what did not. The evaluation purpose drives the evaluation questions asked, and these in turn set the stage for deciding what data to collect, how to collect them, and then how make sense of them to come up with justifiable recommendations for action.

For an evaluator, what happens after the evaluation is just as critical as the evaluation itself—and perhaps more so. The ultimate goal of a serious evaluator is to create positive change in the client organization. This is demonstrated by the implementation of the recommendations made in the final report. Everything that is done along the way is a means to that end. Remember that evaluation is not an end in and of itself; it is only something we do on the way to measurable performance improvement. 

References


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