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## The monitoring and impact evaluation process: A Systemic approach to improving performance and impact

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### **ABSTRACT**

Evaluating impact is a systemic endeavor that requires not only the measurement of ultimate results and consequences, but also ongoing monitoring of relevant en-route variables. This is the essence of monitoring performance. Thus, it is critical to link all performance improvement initiatives to strategic objectives, en route results, as well as account for any interactions among the various initiatives. Without this clear linkage, it becomes particularly difficult to determine specifically what initiatives are contributing to observed impact and in what ways, and therefore, we lack the necessary feedback for timely modifications and improvement. This kind of data can be provided by the ongoing measurement and evaluation of a complete and relevant set of performance indicators through an integrated and useful system.

**Key words:** Evaluating impact, measurement, monitoring performance

### 1.0 INTRODUCTION

While some evaluation experts would rightly say that the fundamental purpose of evaluation is the determination of 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 monitoring and evaluation efforts should 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 findings. Fundamentally, these decisions are concerned with how to measurably improve performance, at all levels of the organization:

internal deliverables; organizational objectives, and external impact on its customers and global environment (Guerra-López, 2008).

A systemic evaluation effort, one that asks and answers the right questions, can be used not only to identify what went right or wrong, but also "why", and how to modify that of interest, so that it can meet the intended objectives within the required criteria. This is the essence of monitoring performance. Thus it is critical to link all performance improvement initiatives to strategic objectives, en route results, as well as account for any interactions among the various initiatives. Without this clear linkage, it becomes particularly difficult to determine specifically what initiatives are

contributing to observed outcomes and in what ways, and therefore, we lack the necessary feedback for timely modifications and improvement. This kind of data can be provided by the ongoing measurement and evaluation of a complete and relevant set of performance indicators through an integrated system (Guerra-López & Toker, 2012).

In this sense, evaluation can provide a systematic and systemic framework that aligns stakeholders, evaluation purposes, desired outcomes, and all evaluation activities, so that the evaluation product is a responsive and clear recipe for continuously improving performance. This allows the decision-making process to be more clear and straightforward. In other words, monitoring and evaluation are a set of interrelated mechanisms for providing decision-makers with feedback, whether formatively (ongoing monitoring and tracking of progress toward ultimate goals, and relevant revisions) or summatively (data about final results, conclusions, and future action).

### 2.0 METHODOLOGICAL APPROACH

Traditional science and research has been heavily based on studying independent variables, and in this sense, the focus of evaluation would be to study the impact of one variable over the system in order to understand what is going on with the system. However, as we look around in organizations and programs across sectors, it is obvious that there are no such things as purely independent variables. In fact, all variables are interdependent, and as "systems become more and more sophisticated, the reality of interdependency becomes more and more pronounced" (Gharajedaghi, 1999).

Understanding the interdependency of factors that human, program, and organizational performance requires a shift from a pure analysis (taking apart that which we week to understand in order to explain behavior of the separated parts and extrapolate an explanation of the (Gharajedaghi, 1999) to synthesis (looking at system components and their interdependencies in order to understand their impact on the whole). In other words, we must look at the entire performance system and understand that any impact observed is rarely ever attributable to one solution or one cause alone. It is only responsible, ethical, and pragmatic to look for, and communicate as complete of a picture as possible.

The Impact Monitoring and Evaluation Process (Guerra-López, 2007a; 2007b, 2008) is a monitoring and evaluation framework based on a system approach to improving performance. Dyehouse, Bennett, Harbor,

Childress, and Dark (2009) found that (1) system-based processes produced more effective solutions than logic or linear causal models; (2) prevented erroneous relations which might influence the results of an evaluation; and (3) helped users predict program factors and outcomes more effectively. Moreover, the term 'impact' is considered within a system perspective (Bertalanffy, 1968), and is used to refer to the ultimate results and benefits produced by an organization to its environment, with the aid of that which is being monitored and evaluated. Specifically, impact deals with societal value-add results, or what Kaufman (2006) calls Mega-level consequences produced as a result of organizational contributions.

Scriven's Consumer-oriented evaluation approach is consistent with this view, in that Scriven (1991) argues that rather than accepting an intervention developer's goals as given, the evaluation must judge whether the achievement of the goals would contribute to the welfare of clients and society. Regardless of the products and outputs, Scriven argues that the evaluators must also identity outcomes and determine their value as they relate to the consumer's needs.

If a sound needs assessment was conducted, then there would be a high probability that the intervention will in fact add positive and measurable value to not only to the organization, but also to its customers and external environment. In other words, the intervention should have been selected in light needs (i.e. gaps in results) prioritized (based on the cost and consequences associated with meeting the needs vs. ignoring them) at the operational, tactical, and/or strategic levels, and the pros and cons associated with each alternative considered for closing such gaps (incidentally, the solution alternatives come directly from a need/causal analysis, the process by which root causes of the identified needs are found) (Kaufman, 2000, 2006).

If the intervention was the best alternative for closing the gap, then one evaluation hypothesis is that the intervention should have helped eliminate or reduce such gaps in performance results. The basic evaluation question would then be "(a) did solution x contribute to the reduction or elimination of performance gap x, and (b) what were the contributing factors both driving and deterring progress?" The first part of this question, (a), reflects a summative approach to evaluation, and the latter part, (b) reflects a formative, or monitoring This latter purpose reflects a heavy approach. influence decision-oriented theory, from specifically Patton's (1984; 2003) utilization-focused evaluation, an approach to evaluation concerned with designing evaluation efforts in a way such that they inform decision-making.

# Value added to Clients & Society IMPACT Continuous Feedback and Action Data Analysis Data Collection Methods Data Sources Improve Measurable Indicators Decisions & Objectives Stakeholders & Expectations FOUNDATION Value added to Clients & Society

### THE IMPACT MONITORING AND EVALUATION PROCESS

Figure 1: The Impact Monitoring & Evaluation Process

## 3.0 FINDINGS: THE IMPACT MONITORING & EVALUATION PROCESS

Below is an overview of each step of the Impact Monitoring and Evaluation Process, based on Guerra-López, 2008. It is important to note that alignment of all elements is fundamental to the utility of this methodology.

### 3.1 Identify stakeholders

The monitoring and evaluation team must identify key stakeholders that will be intricately involved in the effort. The stakeholder groups include those who will be making decisions either throughout the monitoring and evaluation process, or directly as a result of the findings. Those with the authority to make critical decisions include not only individuals who finance the effort, but also those that are carrying out relevant functions, or are impacted by those functions—either in the process, or potentially as a result of the findings. Including this group will make the planning not only more participatory, but also more effective, as they

have a personal stake in the "what" and "how" of the efforts. The driving question for identifying stakeholders is who is/could be either impacted by the monitoring and evaluation process and findings, or could potentially impact the process in a meaningful way? While not every single stakeholder must be a direct member of the project team, it is wise to have each group represented.

Now with a diverse group of stakeholder representation, you will also have a diverse group of expectations. These expectations are the basis explicitly articulating system requirements, including the user perspective This is the time to discuss, educate, discuss again, educate again, and come to a consensus...not after you have completed a monitoring and evaluation plan, or are in the process of executing the plan, or what you alone think will work best. 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... and if you do not align your efforts with stakeholder expectations from the start, it

is very unlikely that you will ever meet those expectations.

### 3.2 Determine key decisions and objectives

Asking the stakeholders to articulate the types of decisions the monitoring and evaluation system will provide feedback for is a primary step. The discussion about the decisions that must be made should be relevant to a broader performance management system that is clearly linked to organizational objectives. At its core, measurement, monitoring, and evaluation systems are performance management systems. Effective management is based on these types of evidence-generating tools.

All organizations have objectives—both external and internal—and everything within the organization must be purposely and proactively linked to those objectives. The relative worth of any intervention or solution is primarily contingent on whether it is helping or hindering the achievement of organizational objectives and desired external impact.

While some stakeholders may not provide you with the specific objectives they expect, they will give you 'clues' about the relevant effects they are expecting, even if these are preliminary expressed in terms of means (activities, processes, and inputs) rather than results (products, outputs, outcomes/impact). The task here (and actually, throughout the entire process) is to facilitate and approach the conversation from the standpoint of ...and if we were to accomplish that, what would the result be? And continue that line of inquiry until key results have been identified and appropriately linked.

With these decisions and objectives clarified, the overarching questions that will drive monitoring and evaluation should also become clear, articulated, and agreed upon.

### 3.3 Deriving measurable indicators

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 core of the monitoring and evaluation effort is totrack 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 it happens to be available—andthe decisions that must be made (Kaufman, Guerra, & Platt, 2006). However, in order for data to be useful, it must meet basic criteria of

relevancy, reliability, validity and completeness (for a comprehensive process for doing this, see Guerra-López & Norris-Thomas, 2011).

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 monitoring and evaluation questions. Results are not always neatly and directly observed. When measuring results, there are a number of indicators that could be relevant. For instance, profit is a result that has various metrics, which collectively, indicate its level (e.g. moneys collected; moneys paid out; assets, and others). Indicators for customer service include referrals, repeat business, level of activity within account, customer retention, length of accounts, and satisfaction survey scores. If we observe any of these on an isolated basis, we may get one picture of reality. However, if we observe the trends and tradeoffs of the various indicators simultaneously, we might have a very different perspective of reality. This is the case when we judge the success of our efforts through indicators of productivity (e.g. automobiles assembled; new vaccine to prevent a disease) and outputs (automobiles sold; number of vaccines administered to the public), rather than external consequences and impact (accident and fatalities attributed to quality of automobiles we produced and sold; debilitating or fatal side-effects caused by new vaccines).

### 3.4 Identify appropriate data sources

With a list of specific indicators for which to collect data, you must first determine where you can find those data. The data drives the appropriate source. You can likely find the data that you are looking for right in your own organization. Existing records about past and current performance may already be available, but collected by different parties in your organization and for different reasons. Some excellent sources include past studies, strategic and operational plans, annual reports, project plans, consulting studies, performance reports, to name a few.

We can also use telecommunications and other technologies to link to reports, documents, databases, experts, and other sources like never before possible. A number of companies, government agencies and research institutions, nationally and internationally publish a series of official studies and reports that could prove to be valuable sources of data. Incidentally, conflicting data from various sources, or lack of data for a given phenomenon, is important data in and of itself which could significantly impact decision-making, and future work in a given area.

### 3.5 Selecting data collection instruments

As researchers know, the right data collection methods and tools are a function of the data you are seeking. Likewise, the data you collect is a function of the methods you select. When monitoring and evaluation efforts limit their data by employing an overly narrow set of observation methods because that is what they know best or prefer, their data set may not be complete, and in turn, their findings and conclusions may not be valid. As in research efforts, monitoring and evaluation efforts should use the right tool for the relevant data they seek. For example, if independently verifiable figures of those exposed to an intervention are sought, survey instrument soliciting people's opinion of these numbers is likely not a good choice. Rather, review relevant evidence of exposure, other objective reports, etc.

Conversely, if it is people's attitudes about an intervention that you want, there are a number of ways to obtain them, depending on the level of detail you seek (interviews, focus groups, nominal group technique, critical incident technique, and surveys include appropriate possibilities). There is extensive literature about these and other data collection methods. Be sure to make your selection based on their pros and cons, specifically with regards to important criteria such as appropriateness of the instrument for the required data, time, characteristics of comprehensiveness of tool, sample, experience with tools that are being considered, and feasibility among others (Guerra, 2003). alignment of decisions, monitoring and evaluation questions, data type, data source, data collection tool, and data analysis procedures is key.

### 3.6 Selecting data analysis approaches

The analysis of data as part of a monitoring and evaluation effort is *more than* the organization of information to discover patterns and fortify arguments used to support conclusions or evaluative claims that result from your evaluation study. We are also seeking to understand how to improve the performance of our interventions and organizations, and the impact they have on our clients and society.

In fact, one might say that the analysis of the data begins even before its collection by virtue of asking and categorizing useful questions in terms out external impact, organizational objectives, internal buildingblock results, and relevant (causal and non-causal) factors. Understanding the performance system and its interdependencies is critical to improving human, intervention, and organizational performance, and its external impact on society.

### 3.7 Continuous feedback and action

The importance of effective communication and feedback in performance improvement cannot be overstated. Findings, out of context, do not speak for themselves. Stakeholders must continuously use data to track and communicate about patterns, trends, logical interpretations at given point in time, and alternative courses of action given relevant objectives, and criteria. With this type of active engagement, buyin, and feedback, resistance to change is minimized, and support for selected courses of action is strengthened. It is important to keep in mind that the main purpose of any monitoring and evaluation endeavor is to improve decision-making that support actions that result in measurable improvement of performance and positive impact on society.

### 4.0 CONCLUSIONS

As with every tool, there are certain conditions that are conductive to its successful implementation. In this case, establishing buy-in from key stakeholders is critical as the work team will require authority, access and resources to design the performance monitoring and evaluation framework. Additionally, this group should provide criteria for success, as well as timely feedback and guidance. In the absence of this, it is possible that the design process and product will not meet the needs and expectations of stakeholders.

Also important is careful consideration of goals, objectives, performance indicators and targets in the context of strategic, tactical, and operational levels of results. This allows stakeholders to understand the hierarchy and relationships among the various results they are accomplishing, and what factors are impacting such results. In turn, this understanding better positions decision makers to use relevant information for efficiently and effectively improving performance on a timely basis.

Availability of resources and expertise is another important consideration. In selecting the data collection and maintenance procedures and schedules, the organization will want to consider not only the ideal approach, but also current and future availability of financial support, time, expertise, and other organizational realities.

The effort and resource spent on thoughtfully planning and implementing a monitoring and evaluation system will be significantly outweighed by the value added to the organization, and its external and internal clients.

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