# The Impact Monitoring and Evaluation Process: A Systemic Approach to Continual Improvement

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### **ABSTRACT**

Continuous performance improvement requires accurate and timely performance data to support organizational decision-making. Monitoring is central to timely feedback, evidenced-based management, and continuous performance improvement. The authors use existing literature to propose four key levels of continuous improvement in organizations: (1) evidence gathering through summative evaluation, (2) evidence gathering through monitoring and formative evaluation, (3) using evidence for feedback and communication, and (4) using evidence for measurably adjusting performance. The authors then conclude by proposing the Impact Monitoring and Evaluation Process as a means of integrating the four levels of continuous improvement in organizations.

#### INTRODUCTION

Swanson & Holton (2009) define human resource development (HRD) as "a process for developing and unleashing human expertise through organization development and personnel training and development for the purpose of improving performance" p. 4. The HRD function is experiencing ever expanding responsibility for enterprise-wide performance, moving beyond training and development, and highlighting the "performance improvement" mission. This trend positions the HRD function as strategic partner with accountability over organizational

vital signs. Moreover, it provides greater potential for HRD to be well aligned with strategic goals and adding value to the organization (Swanson, 1995).

There are many potentially positive impacts of purposeful system alignment. Firstly, it positions HRD to keep track of the performance indicators that matter. That is, those that directly, or in some other important way, support the attainment of strategic aims. Secondly, with access to relevant and timely performance data, it also positions HRD to become a proactive detector of performance opportunities and deficiencies. Thirdly, it allows us to identify measurable and relevant performance gaps before picking performance improvement solutions. Fourthly, it increases HRD's ability to select the right performance solutions, based on performance gaps and their root causes. For example, training will add little value, if root causes of performance gaps are primarily related to lack of clear expectations and appropriate consequences. These are issues of the performance environment, rather than the individual performer. Fifthly, it provides us with the monitoring and evaluation framework we need to ensure that our performance solutions stay on track and meet their expected destination (Guerra-López, 2008). It is precisely this ongoing feedback that enables continuous improvement to occur (Guerra-López, 2012).

# MONITORING, EVALUATION, AND CONTINUOUS IMPROVEMENT

Monitoring and evaluation (M&E) can provide a systemic, and systematic, framework that aligns decisions, results, activities, and resources so that performance data is responsive and provides a clear recipe for improving performance (Guerra-López, 2008). Such alignment sets the stage for relevant and ongoing performance feedback that sheds light on the progress an organization is making toward (or away from) its vision and related measurable objectives. Thus, this ongoing performance feedback obtained through a well-designed (i.e., well aligned) monitoring and evaluation system is a fundamental element of continuous improvement in organizations.

In the last half century, HRD has turned to M&E as a means of supporting continuous improvement, although its progress has been slow (Wang & Spitzer, 2005). One explanation may be that current evaluation approaches measure the effects of a single intervention with results reported at the individual employee level, at one point in time. This approach does not account for the complexity of organizations, and the ability to detect, influence, and report impact at the organizational level is limited. A holistic perspective is required, one that integrates the M&E process into a broader organizational performance system and looks beyond the most immediate intervention effects exclusively (Guerra-López, 2010; Wang & Spitzer, 2005). This systemic view gives us the ability to detect patterns from the data to understand internal and external factors for change, and subsequently select appropriate courses of action (Grieves, 2003). If this type of integration is achieved, HRD can indeed become a proactive partner in supporting evidenced-based decision-making that results in continuous performance improvement.

### LITERATURE REVIEW

From a review of the literature, four key dimensions emerged: evidence gathering through summative evaluation approaches, gathering evidence through monitoring, using evidence for feedback and communication, and using evidence for adjusting performance.

### **Gathering Evidence**

While fundamental to responsible decision-making, the most neglected aspect of decision-making in the literature is intelligence gathering (Eisenhardt, 1998; Nutt, 2007). Decision-making begins when stakeholders see a triggering trend (e.g., declining revenues or sales) or event (e.g., a threat to unionize) as significant, prompting steps to obtain intelligence (Nutt, 2007). Decision-makers are often inundated with signals from customers, employees, shareholders, attorneys, competitors, regulators, and suppliers. Finding which trends or events are worthy of priority attention can be an overwhelmingly challenging proposition. Some researchers suggest that signals should be decoded as performance gaps (Pounds, 1969; Nutt, 1979; Cowan, 1986), and that the gap will be considered significant when an important performance indicator, such as market share or revenue, falls below preset criteria and conversely, the signal would be ignored if performance equals or exceeds the expected performance criteria. When a performance gap is detected, it also reveals the magnitude of the concern to be overcome (Cowan, 1990), this magnitude can be one major consideration in prioritizing performance problems for resolution. Decision-making is then undertaken to find ways to deal with closing the performance gap, and reduce or eliminate the concern. This process begins with the evidence gathering activities of monitoring and evaluating.

### **Gathering Evidence Through Monitoring**

Monitoring integrates measurement and tracking. We measure what matters and track its progress. Continual improvement depends on knowing where we are headed, and continually monitoring our course to get us from where we are to where we want to be (Guerra-López, 2007). We do this by asking the right questions, collecting useful data on an ongoing basis, and then using the information we draw from the data to make sound decisions about required changes and/or which current initiatives to sustain. This is essentially what we mean when

we talk about evidence-based decision-making and practices. With this continuous and proactive approach, organizations focus on their performance targets and align efforts toward these goals creating value for the organization.

The value of monitoring is not in using it as a means of control or to stifle creativity or innovation. Wells, Moorman, & Werner (2007) demonstrated employees have a positive response to monitoring activities when reasons for the activity are understood and trusted as means for development. Gruman and Saks (2011) argue that including employees in the development of goals support employee engagement that leads to desired performance with both the employee and the organization as benefactors. Such practices allow employees to situate their goals within the organizational context and welcome a collaborative monitoring design.

The process of monitoring does not imply we forego a summative confirmation and celebration of ultimate results. With direction to continuously monitoring progress, organizations are encouraged to identify milestone opportunities that acknowledge improvements and time to reflect on what worked well that should be repeated and what improvements should be made for the future. "Progress, milestones reached (or not reached), action plans for reaching desired goals, etc. should be consistently and accurately communicated throughout the organization" (Guerra-López, 2008). A discussion on where we've been, a description and acknowledgement of the efforts that have led to the progress, and how we will continue to move forward to achieve our goal is recommended at specified intervals.

Continuous improvement elements: measurement and tracking, check-in points, synthesis of variables.

### Gathering Evidence Through Summative Evaluation

Scriven (1967) argued that the purpose of evaluation is to prove the merit of some program or effort. Moreover, the purpose of proving the merit of any initiative is to *improve* its future performance (Guerra-López, 2007) and stakeholder

decision-making (Patton, 1994; Guerra-López, 2007; Nielsen & Ejler, 2008). A content analysis (Duan, 2011) showed data is collected most often in the analysis and evaluation phases of a project. This practice applies evaluation as an event, rather than a process and does not necessarily satisfy organizational needs of timely and incremental performance data. Retrospective, or summative-type, evaluations seek to prove, rather than improve. For example, the training program did (or did not) address the performance gap. Without interim data, we are disadvantaged as we face challenges with isolating the effects of training. Continuous performance improvement is a proactive perspective that seeks to improve, in addition to prove. It also allows us to document performance gaps, root causes, their interrelationships, and performance solution criteria; all necessary for purposefully driving the performance improvement journey (Gilbert, 1978).

Continuous improvement elements: improve, compare results with expectations, find drivers and barriers to expected performance (causal factors), produce action plans for continuous improvement.

### Using Evidence for Feedback and Communication

One of the critical contributions of monitoring and evaluation is the feedback that it provides. The feedback loop represents the reiterative nature of tracking and adjusting. Open communication of the evaluation process, findings, and recommendations directly impacts the change process. Lack of information promotes a sense of anxiety and resistance, particularly when individuals begin to make their own stories about what is going on, and what will happen in the future. The ongoing feedback provided by monitoring facilitates an ongoing dialogue with stakeholders where we can empower them to have performance data readily accessible to those impacted. In ASTD's 2011 State of the Industry Report, 79.5 percent of respondents stated their organization should have standardized talent review and feedback processes, although only 35.9 percent of respondents said their organizations did this. Performance data should not only be accessible by all, but should be clearly understood by all. Gilley, Maycunich, & Quatro (2002)

recommend making more "data about employee and customer satisfaction and organizational financial performance" available to staff as a leading positive approach toward transformational change in HRD. Respondents of 2011 ASTD State of the Industry voiced their agreement with 70.3 percent recognizing that sharing data as important to talent management, although only 13.9 percent of their organizations do this. Providing consistent feedback about performance is part of broader, and effective, communication systems. If developed appropriately, it will allow leaders and employees to track, manage, and sometimes forecast, performance at opportune times. In this sense, it is very much like monitoring the vital signs of the organization.

Continuous improvement elements: reiterative tracking of vital sign messages, performance forecasting, participatory discussion of trends.

### Using Evidence for Adjusting Performance

The benefit of continual improvement can have great payoffs in any endeavor. The ideal process is one that can be controlled to define and then maintain quality, and to adjust at the earliest sign that something is out of what is acceptable. While quality control measures keep things on track, all parts of the organization are encouraged to look, in a coordinated fashion, for ways to improve the enterprise by adjusting design specifications and altering the various processes to include any new improved features and/or changing that which will not deliver

measurable success. Smith (2002) found necessary adjustment tactics were successful when there is an alignment between the change tactics and business strategies to address organizational issue. Sleezer, Hough, & Gradous (1998) note stakeholders look to HRD to identify specific corrective actions that can be made for improvement in complex organizations.

Decisions regarding adjustments, or change tactics, are made daily in organizations. Pound (1995) warns these subtle day-to-day decisions are where we are most susceptible to organizational failure. Daily decisions may include: Is the rate of progress obtained consistent with the rate of progress planned? How has the intervention impacted individual areas and, the system? Is the intervention and its results sustainable? Why or why not? Ongoing performance data is required to inform these adjustment decisions, among many others. HRD functions seeking the ultimate level of continuous improvement identify means of developing systematic processes grounded in systemic views and gain opportunity to effectively and efficiently monitor progress, and therefore, alignment to the organization.

Continuous improvement elements: en-route data usage for improvement, systemic change creation and management, systematic application.

Table 1 synthesizes the literature reviewed here, and organizes it through levels of continuous improvement.

TABLE 1. HIERARCHY OF CONTINUOUS IMPROVEMENT ELEMENTS

Levels¹	Continuous Improvement Dimensions	Key Elements
Basic Level	Gathering evidence through summative evaluation	<ul> <li>Gain knowledge to improve</li> <li>Compare results with expectations</li> <li>Find drivers and barriers to expected performance (causal factors)</li> <li>Produce action plans for continuous improvement</li> </ul>
Intermediate Level	Gathering evidence through monitoring	<ul> <li>Ongoing measurement and tracking</li> <li>Ongoing action triggered by data</li> <li>Check points</li> <li>Holistic view of variables</li> </ul>
Advanced Level	Using evidence for feed- back and communication	<ul> <li>Reiterative tracking of vital sign messages</li> <li>Participatory interpretations of trends</li> <li>Performance forecasting</li> </ul>
Ultimate Level	Using evidence for adjusting performance	<ul> <li>En-route data usage for improvement</li> <li>Systemic change creation and management</li> <li>Systemic application</li> </ul>

<sup>&</sup>lt;sup>1</sup>Each subsequent level includes the properties of the previous levels.

# THE IMPACT EVALUATION PROCESS: A PROPOSED MODEL FOR CONTINUOUS IMPROVEMENT IN HRD

The Monitoring and Impact Monitoring and Evaluation Process (Guerra-López, 2007a; 2007b, 2008; 2012) is a monitoring and evaluation framework based on a system approach to improving performance. The process consists of seven reiterative elements with stakeholders and external impact on society as the basis for everything done in evaluation. The following section describes this methodology in greater detail and is offered as a process that meets the requirements of the highest level in the continuous improvement hierarchy described above. Figure 1 provides a visual representation and overview of the model, with a detailed description that follows. It is important to note that alignment of all elements is fundamental to the utility of this methodology (Guerra-López, 2012).

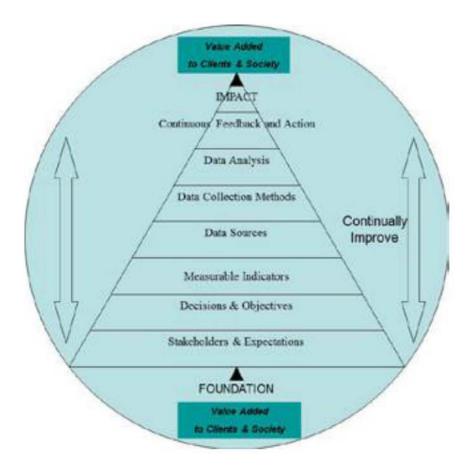


FIGURE 1. THE IMPACT MONITORING AND EVALUATION PROCESS

# STEP 1: IDENTIFY STAKEHOLDERS AND EXPECTATIONS

The process begins with the evaluator's identification of stakeholders and the expectations of the stakeholders. The monitoring and evaluation team must identify key stakeholders that will be intricately involved in the effort. Evaluators must capture who is, or could be, affected by the evaluation or could potentially affect the evaluation in a meaningful way. 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, as well as those that can be affected by the data in some way. A diverse group of stakeholder representation will also have a diverse group of expectations. These expectations are the basis for planning, design, and execution of

the continuous improvement process, and should explicitly articulate what is expected of you (as well as of the stakeholders). 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.

## STEP 2: DETERMINING KEY DECISIONS AND OBJECTIVES

The evaluator then identifies the decisions that will have to be made using the evaluation findings. A primary step is to ask the stakeholders to articulate the types of decisions for which the monitoring

and evaluation system will provide feedback. Evaluators guide this discussion about the decisions and help stakeholders to align these decisions to broader, organizational performance management systems. At its core, measurement, monitoring, and evaluation systems are performance management systems. Effective management is based on these types of evidence-generating tools. Sound decisions should be primarily driven by relevant (related to results of interest), reliable (trustworthy), and valid (a true measure of what you want to measure) data, and these data should come from measurable indicators of the results we want to accomplish, which in turn are related to the questions we want to answer (Guerra-López, 2008; Guerra-López & Thomas, 2011).

#### STEP 3: DERIVING MEASURABLE INDICATORS

Indicators are observable and measureable occurrences that reveal something about the programs being evaluated and thus form a critical part of data collection. Monitoring and evaluation efforts are at the core of tracking the performance data required to answer the questions that guide the inquiry. Together these indicators should provide a systemic view of the progress and impact of various performance improvement interventions. Looking at the collection of indicators as a whole can give us a significantly different view of reality than looking at one data point in isolation.

### STEP 4: IDENTIFY DATA SOURCES

Direction is given to evaluators to identify where the data will come from early in the evaluation process. These sources vary and are dependent upon the type of data being sought. Identifying, and planning for, the sources to be used for collecting data will improve access to the data, and the quality of the data collection tools to be used, and help prevent data gaps. Innovations in technology have significantly increased access to data from across the organization, and indeed across the globe, by linking documents, reports, databases, experts, and

other sources. Triangulated data sources is just as important as triangulating performance indicators to ensure reliability.

# STEP 5: SELECTING DATA COLLECTION METHODS

A fundamental consideration for evaluators is the selection of appropriate data collection tools. The data you collect is in great part a function of the data collection methods you select. Therefore, monitoring and evaluation efforts should use the right tool for the data they seek. Evaluators should make every effort to ensure the usefulness of their data through reliable and valid tools that incorporate the alignment of the data type and scale of measurement, the data source, data collection tools, and the forthcoming, data analysis procedures. One fatal mistake often made in this area is picking the data collection methods before clearly articulating the data that is required (in the context and order described above), which limits our range of vision. For example, collecting surveys, simply because we have always used surveys in the past will not guarantee the usefulness of the data we get back.

# STEP 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 also seek to understand how to improve the performance of our interventions and organizations, and the impact they have on our clients and society (Guerra-López, 2012). Selecting the appropriate technique depends on not only the scale used to measure the data but also the specific purpose of our analysis. The analysis approach we take can significantly alter what we find, how we communicate it, and what conclusions can be drawn. Therefore, it is critical to select the right approach.

#### STEP 7: CONTINUOUS FEEDBACK AND ACTION

Stakeholders must continuously use data to track and communicate about patterns, trends, logical interpretations at given points in time, and alternative courses of action given relevant objectives, and criteria. Further, continuous feedback gives stakeholders the opportunity to provide valuable feedback and allows for involvement, and buy-in, from those affected. This ongoing approach to feedback supplies real time and en-route data throughout the life cycle of strategically coordinated interventions, rather than at or after implementation, reducing the perception of HRD as an optional activity. Providing this valuable feedback and guidance for strategic orientation and execution can position HRD practitioners as true strategic partners.

#### SUMMARY

It is more imperative than ever for HRD to realize its expanding responsibility for enterprise-wide performance improvement, beyond traditional training and development. This trend positions the HRD function as strategic partner with accountability over organizational vital signs. An understanding of continuous improvement and its various levels then becomes imperative for HRD's mission.

A review of relevant literature has revealed four key dimensions and specific elements of continuous improvement: (1) evidence-gathering through summative evaluation, (2) evidence gathering through monitoring or formative evaluation, (3) using evidence for feedback and communication, and (4) using evidence for adjusting performance. A hierarchy of continuous improvement levels for evaluative approaches was then derived in order to clarify the purpose and value of various evaluation approaches, where summative evaluation is a basic step, rather than an ultimate step in the continuous improvement process. Finally, the Impact Monitoring and Evaluation Process was then proposed as an approach to ensure an organization continuously improves through the use of evidence.

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