Using Leading Indicators to Drive Sustainability Performance

Companies tend to report their sustainability results (both internally and externally) with the idea that these measurements provide a strong indication of their sustainability performance. In fact, the outcomes reported are often referred to as performance results, sustainability indicators, or key performance indicators (KPIs).

However, these results just reflect the outcome of performance. They do not actually measure performance in a direct way. When this is pointed out, sustainability professionals usually nod their heads, roll their eyes—and go right back to touting their results.

Results Versus Leading Indicators

This focus on results is a common feature of sustainability reporting. The Global Reporting Initiative (GRI) has 79 results that companies often use in their sustainability reports. There are a number of other organizations that focus on environmental and social governance (ESG) criteria from an investor’s perspective. Together with the International Federation of Accountants (IFAC), these groups focus entirely on select KPIs in sustainability reports.

None of these groups are considering the use of leading indicators to drive sustainability performance. By contrast, leading indicators are an inherent part of business excellence frameworks, such as the Baldrige National Quality Program in the United States.

With some 75 business excellence frameworks currently in use around the world, it is amazing that there is almost no recognition of their work in the sustainability field.

Most of these business excellence frameworks make changes annually to take advantage of lessons learned in the past year. Companies that use business excellence frameworks have been shown to financially outperform those who do not by a margin of more than two to one.

In my last column, I discussed how to incorporate leading indicators into sustainability reporting.¹ This column provides more background about such indicators. Sustainability programs generally should seek to use and report on a mix of leading and lagging indicators.

Before explaining how to use leading indicators, it is useful to review some background on lagging indicators.

Robert B. Pojasek
But this represents a strictly reactive approach to sustainability since corrective action cannot be initiated until after the “bad” results have occurred. By contrast, leading indicators can help foster a more proactive and preventive approach to sustainability.

Understanding Leading Indicators

Leading indicators provide information that helps the user respond to changing circumstances and take action to either achieve desired outcomes or avoid unwanted outcomes. Their role is to promote action that corrects potential weaknesses without waiting for demonstrated failures. This ability to influence and improve future performance by guiding current actions is an important characteristic of leading performance indicators.

Leading indicators can be used to monitor the effectiveness of control systems and give advance warning of any developing weaknesses before problems appear. By measuring the degree to which best practices are being followed, leading performance indicators can complement the use of lagging indicators and compensate for some of their shortcomings.

A key purpose of leading performance indicators is to show the condition of healthy operating systems before accidents, incidents, harm, damage, or failures occur. In this way, they can help control operational risks and prevent accidents.

Leading indicators can also be used to measure the inputs that people are making to processes. Used in this way, leading indicators can help promote a positive culture that seeks to improve performance.

Using Leading Indicators Properly

Leading indicators should not be used simply as metrics for current conditions. Instead, they should form part of an organizational initiative toward continual improvement of operating processes.
There is good evidence that when leading indicators are used correctly, they are effective at improving performance. However, there is also good evidence that they can be misused.

For leading performance indicators to play an effective role in the improvement process, there must be a clear association between the inputs that the leading indicators are measuring and the lagging outputs that are desired. There also must be a reasonable basis for believing that the actions taken to improve the leading indicators will be followed by improvement in the associated lagging output indicators.

**Ensuring That Leading Indicators Are Effective**

Ensuring the effectiveness of leading indicators is an integral part of business excellence frameworks. In these frameworks, results are carefully coordinated and aligned with the best practice descriptions used for leading indicators.

**Basic Requirements**

For any leading performance indicator to be effective, it must have certain characteristics. It should be:

- objective and easy to measure (information associated with the indicator should not be hard to collect),
- relevant to the organization whose performance is being measured,
- able to provide immediate and reliable indications of the level of performance,
- cost-efficient in terms of information collection, and
- understood and “owned” by the group whose performance is being monitored.

**Additional Characteristics**

In addition to these general requirements, there are some additional characteristics that leading performance indicators must have if they are to be useful:

- There must be a connection between the leading indicators and the outcomes that are of interest.
- The reasons for using the indicators and the benefits they offer must be understood by line management and by the employees affected.
- The indicators must provide information that can guide future actions. They must either allow for actions that can improve desired outcomes or else provide warning of potential weaknesses and allow for actions that can avoid undesired outcomes.

**For leading performance indicators to play an effective role in the improvement process, there must be a clear association between the inputs that the leading indicators are measuring and the lagging outputs that are desired.**

**Requirements for Full Effectiveness**

In addition, in order to be fully effective, leading indicators must:

- relate to activities that are considered to be important for future performance,
- be amenable to intervention and influence by the group whose performance is being measured,
- relate to areas where there is scope to improve, and
- provide a clear indication of a means to improve performance.

**Leading Indicators and Business Excellence Frameworks**

Because leading performance measures are used to influence future actions, it is important to make them part of an overall process improve-
ment effort. One of the best mechanisms for promoting process improvement is to adopt the business excellence approach.

While some organizations try to create their own leading performance indicators, others turn to one of the many available business excellence frameworks to find useful leading indicators. It is best not to “reinvent the wheel” here. By relying on a business excellence framework, the organization can tap into the wisdom of business leaders from around the world.

Using this approach, the organization can assess its current situation to identify the areas of activity that present the greatest threat to performance or the most opportunities for improvement. They can then identify the sections of the business excellence framework that best address those areas, and choose leading indicators accordingly. The leading performance indicators selected can be designed to focus on manageable portions of the organization’s problem areas.

Selecting Leading Indicators

Last issue’s column identified 15 candidates for leading performance indicators. These indicators can be described in terms of actions that the organization should be carrying out, allowing the best practice they represent to be conveyed in a proactive manner.

These leading indicators, which are derived from business excellence frameworks, have been reviewed on an annual basis by people who have used them in their organizations. Their collective “lessons learned” help keep the best practices up to date and ensure that they are clearly stated. For this reason, it is much better to use existing indicators (such as the ones discussed in last issue’s column) rather than create novel leading indicators.

Sample Leading Indicator: Creating a Positive Work Environment

Let’s look at an example of a leading indicator from the “people” category of the Australian Business Excellence Framework. The organization should create a work environment that is engaging, positive, and open to foster creativity and unify the efforts of its employees. It can do so by encouraging people to learn, test what they see, improve their skills, and provide a good deal of challenge in their work.” The best practice includes:

Creating the right culture—The organization creates a work environment with a strong performance ethic and leader-encouraged elements, including: transparency, inclusiveness, diversity, fairness, innovative thinking, and freedom from fear.

Building trust and respect—The organization builds strong relationships through communication, trust, and respect. Policies are created that support consistent behavior in the way tasks and responsibilities are delegated.

Effective communication—The organization encourages effective communication that is open, top-down, bottom-up, and lateral. It has mechanisms for obtaining input from employees throughout the organization, including their perspective and needs. Feedback processes are well developed and monitored.

Establishing the physical work environment—The organization establishes a
workplace that is safe and in which people are provided with appropriate facilities and tools to do their work well.

It is interesting to note how many ISO 9001 (quality management standard) and ISO 14001 (environmental management standard) requirements are included in this best-practice description.

You might think that stating these requirements clearly is just good practice. It is! However, the “action” phrasing also allows the best practice to be used as a leading indicator.

But how are you going to measure any of this? That is where the ADRI scoring method comes in.

**ADRI Scoring of Leading Indicators**

Many organizations shy away from leading indicators because they worry that they cannot be quantified easily. One answer to this concern is the Australian Business Excellence Framework’s ADRI (approach, deployment, results, and improvement) scoring method. ADRI helps quantify leading indicators so they can be compared, tracked, and trended over time.

With ADRI, an organization typically uses a loaded matrix that has the following headings in the top row: Score; Approach; Deployment of the Approach; Results of the Approach and Its Deployment; and Improvement of the Approach and Its Deployment.

**Scoring Range**

The scoring range generally goes from zero to ten. Listed below are the two end points (i.e., those associated with the worst and best scores) for each of the four ADRI elements.

- **Approach:**
  - There is no evidence that a planned approach has been considered, and there is a reactive attitude to problems associated with the area that is the subject of the best practice.
  - There is an effective, systematic approach that is fully responsive to the elements covered in the best practice description.

- **Deployment:**
  - There is little to no deployment of any systematic approach to the items that are described in the best practice.
  - The approach is fully deployed without significant weakness or gaps in all areas and activities within the organization. The approach is totally integrated into normal operations and planning.

- **Results:**
  - There are only anecdotal results.
  - There are positive trends in the results from all areas of the organization. There is active benchmarking of the results with external organizations. The results are clearly caused by the approach in all areas.

- **Improvement:**
  - There are no specific improvement methods used (e.g., lean, Six Sigma, or quality management). Improvements cited by management are anecdotal in nature.
  - There is a proactive system for regular review and improvement of the approach and its deployment. There is widespread evidence that the organization is continuously learning.

**Scoring Process**

The ADRI system works most effectively when the elements are scored by trained assessors who are not evaluating their own organizations. Scoring is best accomplished using a team. The inherent subjectivity of the scoring process means that...
The team typically starts with the assumption that the organization is performing at the midpoint of the scoring range in the “approach” category. If the organization appears to be doing better (or worse) than a score of 5, the assessors seek objective evidence of this—that is, they seek information showing that the organization is meeting the requirements of the matrix description language that is applicable to the higher (or lower) score. Then they seek consensus on a score, using objective evidence to support their claim.

Next, the assessors move on to the “deploy” column. For this category, they typically start with the assumption that the organization is performing at one level below the score assigned to the approach category. This makes sense because there is often a delay between having a good approach and being able to deploy it effectively throughout the organization.

Once again, the assessors use objective evidence to support their decision on a final score. In order to reach a scoring decision in this category, it generally is necessary for the assessors to walk through the organization’s facility and interview employees; this helps them determine the extent to which deployment has been successful.

For the “results” category, it is important that the organization have a systematic monitoring and measurement system in place. This is a requirement of virtually all management system standards. It is not sufficient to simply tally up some lagging indicators. The assessors need to see how the relevant data are collected and determine the extent to which this information can be directly related to the approach and deployment activities associated with the particular leading indicator. They generally start with a score that is one level below the consensus deployment score, and then adjust up or down from that point.

Finally, the assessors score the “improvement” category. The company should be able to demonstrate that it has an organized process improvement program in place that works with the company’s overall business management system and with the business excellence framework. A previous “Quality Toolbox” column discusses how these systems can create the demand for lean and other process improvement methods.

The Final Score

At the end, the separate scores for approach, deployment, results, and improvement are added up and divided by four. The quotient is the final score for the leading indicator. Because the scores for the various indicators do not have units attributed to them, it is possible at the end to add all 15 leading indicator scores and divide by 15 to get one final score for all the leading indicators.

It should be noted that sustainability results are not scored using the ADRI method. A previous installment of this column addresses the scoring of these results.

Increasing Value With Leading Indicators

Leading performance indicators can be found in all the national business excellence frameworks, some of which have been in existence since 1987. Most of these frameworks are main-
tained by national quality associations. These groups have worked over the years to identify the factors that are important for improving an organization’s overall operational performance and increasing employee engagement in improvement activities. All the frameworks recognize the importance of the three areas of concern that form the “triple bottom line” of sustainability: environment, social, and economic.

It has been demonstrated that providing positive reinforcement for improvement activities is critical to ensuring the success of such activities. Leading indicators help improve the visibility of improvement activities. They also can increase the organization’s confidence that monitoring the indicators and their lagging results is actually making a difference.

The metrics associated with business excellence frameworks can be used to monitor industry performance regardless of the sector or size of the operation. They also provide a unique opportunity for benchmarking against the practices of other companies worldwide that have used and benefited from the frameworks. A number of large companies have taken advantage of this opportunity, using business excellence framework metrics for benchmarking at hundreds of their own facilities. The framework metrics can also be used on logistical corporate functions (such as environmental, health and safety, purchasing, and human resources) and in the supply chain.

Leading indicators offer an excellent method for summarizing sustainability efforts in an organization’s annual report. They are especially attractive for this purpose since the score for each indicator can be assured by an independent assessor, which tends to enhance the credibility of the report.

Moreover, leading indicators can be linked to lagging indicators. Both can be scored, and the scores can be added together to create an overall score representing the level of sustainability attained by the company.

Currently, organizations report on a very large number of lagging indicators, such as the dozens of results reported with GRI. Most people who prepare or use corporate reports will be happy to eliminate these. Leading indicators can now be used in cascading performance scorecards using the criteria in the business excellence frameworks. Sustainability dashboards will become a thing of the past.

With leading indicators, everyone in the organization can see their scores and understand how their individual performance contributes to the overall performance of the organization. As more organizational leaders become familiar with leading indicators, there will be a growing trend toward using them to enhance transparency and accountability in sustainability programs.

Notes