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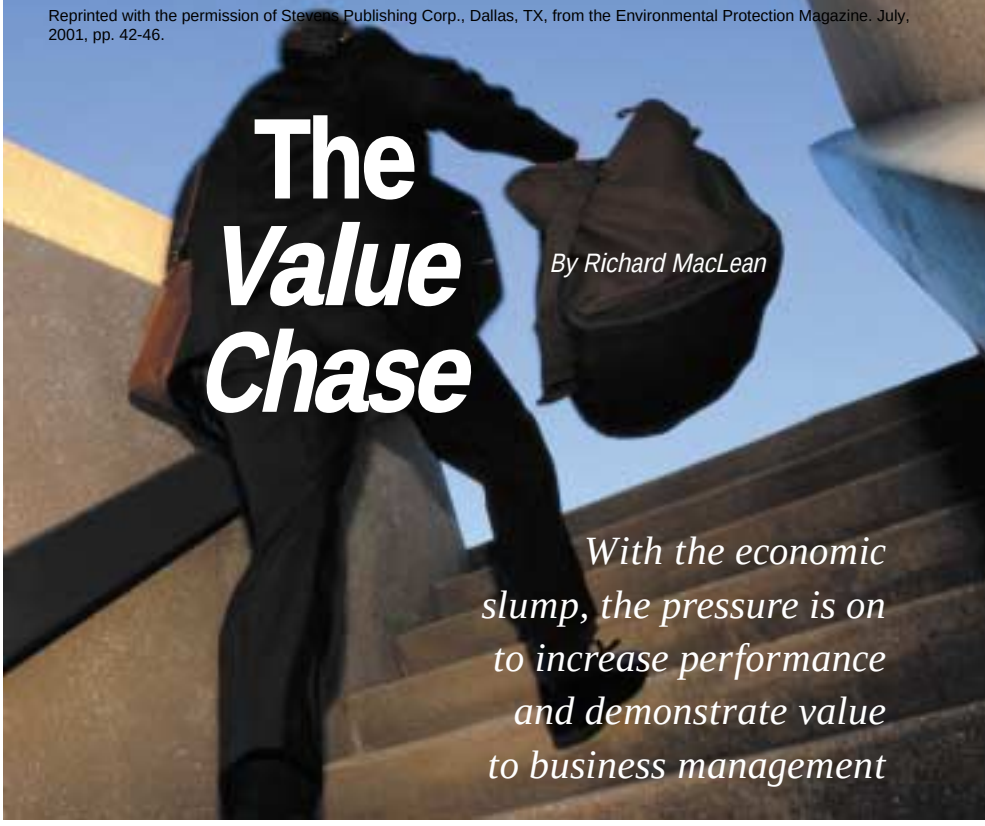

The Value Chase

By Richard MacLean

With the economic slump, the pressure is on to increase performance and demonstrate value to business management

Quality control in the 1970s was often viewed as a cost drain and a bothersome task that manufacturing "had to do." Sound all too familiar? A remarkable transformation over the past two decades has elevated this poor stepchild of industry to celestial proportions with programs, such as Six Sigma.

Selling the value of improving environmental performance in 2001 is like making the pitch to management for improving quality in 1971. Indeed, many of the key business incentives are remarkably parallel. This month we examine an emerging tool with which to set the conceptual framework for measuring, tracking and improving environmental, health and safety performance. Just as Six Sigma caught management's attention, an adaptation of the well-known Baldrige business quality model may provide the conceptual framework needed to gain management support.

In 1987, I was at GE's corporate headquarters working on a financial analysis tool to evaluate pollution prevention projects within the company. One of my early challenges was to convince a top finance executive of the corporation that net present value (NPV) was an appropriate index to compare alternative practices. The concept just did not compute with this individual — financial *value* for environmental projects? You have got to be kidding!

That was fourteen years ago. Considering that back then GE was (and still is) deemed to be the Mecca of financial wizards, I estimate that the challenge is no less demanding within the majority of companies today. Business managers still have a difficult time understanding how new Environmental Health and Safety (EHS) programs can add sufficient value to justify the additional costs. Similarly, existing programs can be seen solely as a resource drain. So why bother increasing performance unless costs are simultaneously cut?

It is no wonder EHS programs and especially pollution prevention projects are justified solely on the basis of direct, measurable and obvious cost savings. It has always been a challenge to justify projects that go beyond compliance; however the economic downturn and the perceived "anti-environment" signals coming out of the new administration have EHS managers under the gun like never before. So where do you turn for help?

The Global Environmental Management Initiative (GEMI) in 1998 produced a booklet explaining the fundamentals of demonstrating value to business.[1] More recently they produced a report directed at procurement managers, which addresses supply chain management.[2] As good as these and other resources are — and they are excellent — the dominant theme is still cost savings, doing more with less or doing better with the same. The framework that ties strategic EHS issues to business value and does it in a manner that will capture management's attention has yet to be published.

The Quality Paradigm Shift

The current EHS situation reminds me of the reputation that quality control functions had back in the 1970s. Being assigned to this department was akin to the kiss of death — working for a group that got in the way, stopped production, cost money and preached a brand of religion that few really bought into. Unfortunately, EHS departments in some companies presently have this very reputation.

In view of today's emphasis on quality and the almost religious-like fever surrounding company-wide efforts such as Six Sigma, the bad old days of quality control as the "production gatekeeper" seem ancient indeed. What caused the shift? Probably the single biggest boost was the abysmal quality of U.S. automobiles in the face of mounting competition from Japan during the 1970s and 1980s. Consumers were tired of poor quality, and they were not going to put up with it anymore. When quality became synonymous with competitive advantage in a global market, CEOs took notice.

Quality made the breakthrough because it metamorphosed from being viewed as a cost sink in the pre-1990 era into the essential ingredient for making money, which it is today. Companies such as Motorola, Allied Signal and GE championed quality and subsequently became role models. Even more important, they demonstrated both the real time value of these programs in "delighting the customer" and through their leadership gave others the confidence to follow. Their programs established for business leaders a conceptual framework of what it meant to have zero defects at every stage of a manufacturing or service industry process. "Full business integration" is often talked about in relationship to EHS, but the results for the most part have been dismal.

Quality has been able to make the full business integration in many companies. In essence, EHS is still back in the pre-1980s quality era, as an outsider perceived as not adding value and not worthy of a place at

the table. Breaking out of this rut will require a fundamental shift in the way business management views EHS. While EHS managers may "in their hearts" know EHS adds value, their talk of "sustainable development" and "natural capitalism" have had about as much success recently as talk of Six Sigma would have had in 1970.

To be fair, business managers can easily make the connection between top performing products and services and competitive advantage. There is not a one-to-one translation to the EHS universe, but nevertheless, the elements are there. For example, business leaders understand at a gut level that their company can flounder if it develops a reputation for poor quality. They also understand that extraordinarily poor EHS performance has bankrupted other companies. An essential missing ingredient is the conceptual framework that allows business managers to see the entire picture from the myriad of individual pieces that place the EHS performance issue in relationship to their specific business objectives.

Value and Performance — The Basics

There are many techniques to assess and improve EHS value and performance. Which method or combination thereof is best for your company will depend on the definition of these terms. As surprising as it may seem, their meaning is often not clearly articulated and agreed upon within a company. Just like "beauty is in the eye of the beholder," so too can EHS performance and value mean different things to both internal and external stakeholders. Similarly, environmental excellence and sustainable development can be overused without any agreement as to what these terms really mean.

Viewed from the perspective of a CEO, a CFO or the Board of Directors, excellent environmental performance may mean consistent annual progress toward full compliance at absolute minimum cost. To an EHS manager, it may mean full implementation of state of the art programs and pollution prevention systems. To the marketing department or the public relations department it may mean unique activities or accomplishments that set the company apart from its competitors. To external stakeholders it may mean low waste generation and emission releases or significant annual progress towards zero discharges. In essence, each stakeholder may state they want "environmental performance improved," but have different priorities and thus, varying definitions in mind as to the desired end results.

For example, an environmental manager may proudly report that the EHS department has implemented an award winning environmental management system (EMS), only to be angrily asked by business executives, "What's the value in this?" If management is strictly focused on compliance at lowest cost and if they had also heard about the well-publicized spills and non-compliances by ISO 14000 certified companies (e.g., Eternal Chemical Company, Taiwan; Petrobras, Brazil; Ebara Corporation, Japan), this manager may be in for some rocky times.

To a business executive, an award winning EMS may appear to be a waste of resources or at best, a necessary bureaucratic hurdle if ISO 14000 certification is needed for market penetration. It is no wonder that management's acceptance of ISO 14000 can revolve around gaining certification and not be concerned with improving "performance," whatever that is. Indeed, ISO 14000 is a conformance model, not a performance model. A conformance model focuses on whether the

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organization is conforming to the requirements of a particular standard such as ISO. It tells you what to do, not how to do it. In contrast, a performance model focuses on how the organization is actually performing.

Before a company can improve environmental performance, value, sustainable development or excellence, it needs to first define the Key Performance Indicators (KPIs) that define business performance objectives in very precise, measurable terms. In reality, it is a lot more involved than the commonly used tabulation of notices of violation, emissions and wastes. These few, relatively simple measurements of end results do not fully express the nature of the environmental performance needed to achieve specific business goals. Indeed, results are outcomes of the performance and not a measure of the performance itself.

Moving Beyond End Results

Most EHS managers (and therefore most business executives) focus only on environmental end results (e.g., lower emissions or fewer non-compliances). These end results may not even come close to defining the performance requirements for competitive issues such as product branding and reputation enhancement. In other words, the most important strategic goals may be to improve performance in certain areas and not to simply achieve the traditional end results such as reduced TRI emissions (Toxic Release Inventory). The results will come if you do the right things.

These subtle but important distinctions are essential to understand if one is to be successful in explaining how EHS programs add value to business management. For example, business managers today widely recognize that behavior-based safety programs (i.e., programs based on safe behavior observations as a performance indicator) yield superior end results (e.g., fewer injuries yielding higher productivity and lower worker compensation claims). Unless business executives understand how to "connect the environmental dots," it is unlikely they will see the value of your programs or how these will achieve the end results that they desire.

The growing popularity of the Global Reporting Initiative (GRI) has increased management's attention on the need to improve end results (i.e., those reported externally). This is both a blessing and a curse. On the one hand, the heightened attention is welcome to champions of public disclosure. On the negative side, it can myopically focus management on the EHS bottom line. Results by themselves offer little diagnostic value. If you are doing well, will it be repeatable? Are you sure what caused the trend to be favorable? Returning to the safety analogy, have you ever seen safe behavior observations metrics reported? Yet this is a well-recognized performance driving mechanism.

The need to examine a more comprehensive set of performance indicators was driven home to business executives and financial analysts by Robert Kaplan and David Norton through articles in the *Harvard Business Review* and in their book, *The Balanced Scorecard: Translating Strategy into Action.* They believe that organizations can manage end results more effectively with a balance of measures in four categories: financial, customer, internal processes and learning/growth. Once developed, a balanced scorecard becomes an instrument for aligning organizational performance with strategy.

More recently, Richard Chang and Mark Morgan published a book entitled *Performance Scorecards.* These authors do not

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restrict their scorecard to four categories, but instead allow an organization's management team to define their optimum number of categories and label them to fit the organization's current and future strategies.

All of these authors recognize that to obtain the end results ultimately desired (e.g., profits) one can not exclusively focus on a few financial indicators. In effect, there are precursors to successful results and an overall model can be useful to structure a framework for tying together the most relevant performance indicators. It is performance that drives results and not vice versa. The scorecard helps measure the pulse of performance items and not the end results per se.

Baldrige Model

There have been some attempts to develop various EHS models using the scorecard approach (e.g., by Scott Johnson in an article appearing in the Spring 1998 issue of *Corporate Environmental Strategy*). ISO 14000 might be considered a good framework, but again, it is a conformance-based model. The GRI focuses on a set of metrics to measure desired outcomes so it is of limited value in defining performance metrics.

Robert Pojasek, president of Pojasek & Associates (*www.Pojasek-Associates.com*) and I have recently collaborated on a modification of the well-known business tool for measuring business excellence, the Baldrige model, to define, assess, track and improve EHS performance. Pojasek was originally involved with the State of New Mexico Environmental Department to adapt the Malcolm Baldrige National Quality Award for their annual excellence award, the Green Zia Environmental Excellence Program.

We have taken the learning from this experience and modified the model to more fully recognize the differences among stakeholders in precisely defining the EHS performance goals required to obtain the desired business results. Called Environmental Value Indexing™, the system is currently being used to assess facility EHS programs and provide performance models for business management to better understand what they are getting for their EHS dollar. Value Indexing provides a unifying theme for all the EHS initiatives and aligns EHS with the business thrust of the organization.

Interestingly, we have found that the quality people are among the biggest supporters of value indexing and will work closely with EHS to help move this approach forward. Typically, these departments have never worked well together in the past. Having a familiar business-based model as the underpinnings of an EHS tool also helps secure business management buy-in.

When it comes to measuring business excellence, everyone turns to the Baldrige model.[3] This model, which grew out of the Malcolm Baldrige National Quality Award program supervised by the U.S. Commerce Department's National Institute of Standards and Technology (NIST) has been called, "the single most influential document in the modern history of American business."[4]

The Baldrige model measures performance with a unitless number (i.e., no normalization required) on a 1000-point scale. For the past seven years, a hypothetical stock index made up of publicly traded U.S. companies that have received the Malcolm Baldrige National Quality Award has outperformed the Standard & Poor's 500 Index by almost three to one.

With its popularity increasing, the Baldrige program has proved that it is not

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simply the latest management fad or "flavor of the month." Its performance excellence criteria are recognized worldwide as a powerful way to help any organization improve performance across the board. Whether they intend to apply for the award or not, thousands of organizations assess their performance against the Baldrige criteria. By doing so, these organizations improve their competitive advantage, productivity and customer and employee satisfaction while achieving stronger financial performance and overall business results.

Seven broad categories make up the Baldrige criteria: leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management and business results. The first six categories of the model are performance-related items that drive the results (i.e., the last category). These criteria provide a clearly marked path toward excellence that any organization can follow to improve performance and enhance competitiveness.

In Value Indexing, the first 15 sub categories are measures of the performance itself and permit diagnosis of the company's most important environmental processes — the ones that enable fast-paced performance improvement and contribute to the key environmental results. This model also shows the company how to leverage the performance items. The program is not prescriptive and can be adapted to fit any culture without losing any of the rigor of the system. There are three result sub categories: (1) EHS results — the ones supporting key business requirements; (2) Stakeholder results — those reported to other interested parties (e.g., the GRI indicators); and (3) Environmental Value Results — the core of our value indexing system.

The value indexing is performed using the Chang balanced scorecard system, which utilizes the information from the Baldrige model. The Baldrige model is the perfect means for diagnosing problems at any facility and for affecting performance that will help improve the value index. The facility can choose any improvements it wishes within the model and then measure and see if they accomplished them. Lessons learned help improve the intervention using the model. The environmental value index keeps score so that management, workers and all other interested parties will know exactly how EHS is performing. EP

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For more information, circle 80 on card.

References

[1] GEMI, *Environment: Value to Business*, Washington, DC, November 1998.

[2] GEMI, Strategic Sourcing — Environment, Health And Safety, New Paths to Business Value, Washington, DC March 2001.

[3] See for example the brochure Getting Started, available at *www.quality.nist.gov/get_start.pdf.htm.*

[4] Gordon Black, chairman and chief executive officer of Harris/Black International Ltd., 1998, as quoted in *Ten Years of Business Excellence For America*, National Institute of Standards, Technology Administration, U.S. Department Of Commerce, November 1998, Page 6.

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