Examining Its Effects on Safety Performance

Safety performance is divided into two aspects: safety program elements and safety process elements (Erickson, 2006). The program elements deal with basic safety functioning: regulations, legislation, training audits and related items. These elements are considered hard skills and are under control of the safety professional. The process elements are the underlying factors within an organization that either help or hinder the safety effort. These soft skills are indicators of the corporate culture, and they are not under the safety professional's control (Erickson, 1994).

To achieve optimal safety functioning, both cultural elements and compliance issues must be addressed. The scientific evidence is overwhelming that both hard and soft skills are needed to attain optimal safety and business performance (Erickson, 1994; 2001; Shannon, Mayr & Haines, 1997; DeJoy, Schaffer, Wilson, et al., 2003; Vredenburgh, 2002; Zohar & Luria, 2004; Parker, Axtell & Turner, 2001; Hofmann & Morgeson, 1999; Hoffman, Morgeson & Gerras, 2003; Turner & Parker, 2003; Maierhofer, Griffin & Sheehan, 2000; Maister, 2001; Drucker, 1954; O'Toole, 1996; Maister, 1997; Buckingham & Coffman, 1999).

However, some in the technical or engineering fields believe that soft skills are not measurable by any standard technique or protocol. Within academia, natural and physical research scientists often posit this view when discussing the social sciences. Yet, with rigorous research design and protocol, social scientists can conduct scientific research that is quantitatively and statistically equivalent to that of natural and physical scientists. Through such methods, the effects of these soft skills have been statistically correlated with safety performance and organizational functioning. These measurements are available to researchers to help organizations improve their safety and business performance.

When assessing organizational culture, SH&E professionals must be aware of the scientific bases of the cultural interventions they select. They must decide rationally and logically how they will assess their cultures and not be influenced by flavor-of-the-month jargon. This will enable them to make informed, intelligent decisions that will provide corporate-wide benefits.

How Corporate Culture Affects Safety Performance

Assessing corporate culture as a means of increasing safety performance is gaining in acceptance and popularity. This was underscored by the Baker Commission Report, which presented an exhaustive analysis of the causal factors in the BP Texas City, TX, refinery explosion (BP U.S. Refineries Independent Safety Review Panel, 2007). In its introduction, the report states:

Although we necessarily direct our report to BP, we intend it for a broader audience. We are under no illusion that deficiencies in process safety culture, management or corporate oversight are limited to BP. Other companies and their stakeholders can benefit from our work. We urge these companies to regularly and thoroughly evaluate their safety culture, the performance of their process safety management systems and their corporate safety oversight for possible improvements. We also urge the same companies to review carefully our findings and recommendations for application to their situations (p. 3).

The report also states, “The panel focused on deficiencies relating to corporate safety culture, process safety management systems, and performance evaluation, corrective action, and corporate oversight” (p. 13).

As this report emphasizes, corporate culture assessments are applicable to all types of industries. However, such assessments are not successful by solely learning concepts or examining cause-and-effect relationships. Rather, these assessments also must include an awareness of who people are, what they believe in, and how they act and interact in an organizational setting--elements that are basic to an organization’s culture.

The traditional means of increasing safety performance--compliance with legislation and regulations--are not sufficient to obtain optimal results. SH&E professionals and their organizations need something more.
In a general sense, safety performance encompasses two key components:
1) complying with legislative and regulatory requirements;
2) communication and influencing effective and safe work behavior among employees.

With compliance and regulatory issues, SH&E professionals’ knowledge and expertise of procedures, engineering controls, PPE and safety audits have been largely standardized. Safety professionals also provide necessary training, track injury severity and frequency, investigate and analyze incidents to identify contributing factors, and provide a multitude of metrics. Protocols have been established and deviances from their requisites are well established.

When it comes to influencing and communicating safe work behaviors, however, the role of SH&E professionals is more complex. SH&E professionals have had a limited degree of success in influencing employee behavior in the long term. This is primarily because SH&E professionals do not control the corporate culture and, therefore, have no control over the many aspects of employee behavior directly related to the corporate culture that influences that behavior (Erickson, 1994). For example, safety professionals generally have no control over production being stressed above safety considerations (Zohar & Luria, 2004).

Research indicates that the key ingredient to high safety performance is the company’s culture or management philosophy (Erickson, 1994; 2001). To understand what is meant by corporate culture, one must be aware of the pivotal roles played by assumptions, values and behavior (Shein, 1998; Erickson, 1994; 1997). Assumptions, taken for granted and unconscious, are related to the way people view human nature and human relationships, among other elements. These assumptions are translated into values, or how people believe they are supposed to behave or believe to be right or wrong. These values are then expressed in actions and behavior.

Both sides of the brain must be addressed to ensure the success of a culture assessment. The human brain has two hemispheres or sides (Buzan, 1974). For the sake of simplicity, the left side is associated with language, analysis, logic and linearity. It deals with the harder aspects of life such as mathematics and science. The right side processes images, imagination and daydreaming. It concerns itself with the softer aspects of life such as empathy, compassion and caring. The study and practice of safety and business management are primarily involved with left-brain functioning. This seems to make sense since logic and analysis are necessary for both safety programs and businesses to be successful.
Perception Surveys: A Step in the Right Direction

Organizational factors are statistically related groupings of subtopics, such as communication and employee involvement, that are directly and significantly statistically correlated with the level of safety performance (Erickson, 1997). To evaluate the effect of corporate culture on safety performance one must address both safety program and safety process elements. An effective way to achieve this is through a validated perception survey that effectively identifies and evaluates both elements.

A validated survey is not only descriptive, it is also predictive. With a validated survey, the responses related to optimal safety performance are already known. Therefore, the survey responses and their statistically related organizational factors that are helping or hindering the level of safety performance can be readily identified.

This step is critical because in order to derive successful solutions, one must first operationally define the situation targeted for improvement. With an operational definition such as that attained through a validated survey, everyone in the organization is defining safety in the same manner.

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References


