Introduction

The typical organization tries to improve their workplace safety record by focusing on management directives and education, written procedures, incident reporting, equipment and workplace design and maintenance. These are all extremely important and can never be overlooked. But, one of the most important components is often ignored—organizational culture.

Many authors have focused on the importance of human factors in safety practices such as accident prevention, risk management and emergency procedures implementation. However, organizational culture goes beyond the basic concentration on the human factors. Human factors are singular—how humans interface with a machine in an industrial setting, whereas organizational culture examines how and why people think and behave.

When safety managers concentrate on the human factors, they often provide legislated and industry-wide systems that are relatively standardized. Why then, do safety records vary so much among organizations? The answer lies in the fact that each organization’s culture is different.

Culture Definition

Organizational culture is the commonly held attitudes, values, beliefs, assumptions and behaviours of a group in a particular organizational unit. Or in other words; what it takes to “fit in” and meet expectations. There are two concepts of culture—strength and quality. Strength refers to the degree of commonality or intensity of the culture or, how widely accepted is the common set of values and behaviours. Tom Peters and Bob Waterman stated in their controversial book, *In Search of Excellence*, that effective organizations have strong cultures with a common set of shared values. However, strength of culture alone does not ensure an effective organization. Of greater importance is the quality of the culture. Quality refers to the degree to which the cultural norms approximate an ideal culture in terms of how people should be expected to behave to maximize the effectiveness of their organization.
Measuring Culture

While there are many ways to measure the quality of an organization’s culture, one of the most respected methods is done by using Human Synergistics’ *Organizational Culture Inventory®* (OCI) (Current and Ideal), developed by Rob Cooke and Clayton Lafferty. The inventory provides 120 statements to which participants respond on a five-point, “to what extent...” scale.

The OCI inventory, when completed and scored, provides normed results in twelve different cultural norms that can be further grouped into three cultural clusters. The twelve styles, by cluster are:

**The Constructive Cluster** (Consists of cultural norms that promote the higher-order satisfaction needs of members.):
- Achievement (Members are expected to set challenging but realistic goals, establish plans to reach those goals, and pursue them with enthusiasm.)
- Self-Actualizing (Members are expected to enjoy their work, develop themselves, and take on new and interesting activities.)
- Humanistic-Encouraging (Members are expected to be supportive, constructive and open to influence in their dealings with one another.)
- Affiliative (Members are expected to be friendly, cooperative and sensitive to the satisfaction of their work group.)

**The Passive / Defensive Cluster** (Consists of cultural norms that promote self-protective behaviour in interactions with people.):
- Approval (Members are expected to agree with, gain the approval of and be liked by others.)
- Conventional (Members are expected to conform, follow the rules and make a good impression.)
- Dependent (Members are expected to do what they’re told and clear all decisions with superiors.)
- Avoidance (Members are expected to shift responsibilities to others and avoid any possibility for being blamed for a mistake.)

**The Aggressive / Defensive Cluster** (Consists of cultural norms that promote self-protective behaviour with respect to the way that members approach tasks.):
- Oppositional (Members are expected to be critical, oppose the ideas of others and make safe (but ineffectual) decisions.)
- Power (Members are expected to take charge, control subordinates and yield to the demands of superiors.)
- Competitive (Members are expected to operate in a “win-lose” framework and work against (rather than with) their peers.)
- Perfectionistic (Members are expected to avoid mistakes, keep track of everything and work long hours to attain narrowly-defined objectives.)
The Need for a Safety Culture

A Safety Culture is the representation of a management philosophy which reflects the values and attitudes placed upon those processes within an organization which have significant consequences for safety. Because the term, “Safety Culture” is a relatively new concept, it is typically used in organizations where safety is the most critical. These organizations, such as nuclear power plants, military facilities, chemical plants, airlines, etc. are organizations where an accident could have catastrophic results. These are called “High Reliability Organizations”.

The concept of a Safety Culture has been discussed in many industries. One of the first in Canada was the Second Review Meeting at the Convention on Nuclear Safety (April 2002). In response to a question posed by the Romanian delegation, the Canadian delegation said; “To ensure that staff who monitor safety are not influenced by production needs, it is necessary for the Management System to establish and maintain a Safety Culture throughout the station which puts safety first, recognizing and taking seriously the unique safety requirements of the nuclear core. Having established such values, it is important to ensure that actions of the management team are seen by staff to re-enforce, not contradict, this value system”.

Certainly, in High Reliability Organizations, the need to “not leave any stone unturned” is extremely important. However, anyone can make a case that an accident in any organization, high reliability or not, can be catastrophic for the recipient and possibly, the organization. Therefore, all organizations who are concerned about safety should be working towards establishing a Safety Culture. And, as this paper will show, one of the most important steps to establishing a Safety Culture is to develop a Constructive Organizational Culture, which will also provide outcomes in other areas of organizational effectiveness.

The Case for a Safety Culture

There have been several organizations that have researched the effect of culture on safety. For example, in a study done on the Accident Response Process in the nuclear industry, it was found that a traditional Aggressive/Defensive Culture seemed to work in anticipated situations where an established anticipatory strategy was used. In situations that were not anticipated or foreseen, which required an ad hoc strategy, a Constructive Culture was required.

In another study of two nuclear power plants, the plant with the highest Constructive scores also scored higher in overall commitment to the organization’s perceived hazardous nature of work, and attention to safety. In another study, conducted halfway around the world, a direct correlation was found between safety and a Constructive Culture. In a survey conducted by Human Synergistics, New Zealand with a major Australian Airline, it was proved categorically that the more Constructive the organizational culture, the more attention is paid to safety, while the Defensive Cultural Styles show non-compliance with safety operative values.

Moving towards a Constructive Culture also has many positive performance side effects. When an American Nuclear Power Plant that received poor scores in their Institute of Nuclear Power Organizations (INPO) assessment, it realized that changing the culture was the first step in a long journey toward making it performance-competitive with peer plants. Their first step was to conduct a cultural assessment that identified behavioural gaps between the current and the ideal cultures.
Next, they identified four strategic objectives – safety, operational excellence, financial and teamwork. Then, they conducted plant wide training, beginning with senior management. The overall results were startling. In three years, they achieved a near perfect INPO score, leading them to conclude that organizational culture may be the best benchmark of the quality of senior leadership over the long haul.\(^9\)

**Establishing a Safety Culture**

It is evident that the establishment of a Constructive Culture is an important factor for organizations that want to establish a Safety Culture. The normative attitudes and behaviours of a Constructive Culture must be in place if an organization is to implement the values and attitudes of a Safety Culture. The twelve styles and three clusters from Human Synergistics’ *Organizational Culture Inventory*\(^\text{®} \) (discussed earlier) either add to or detract from the development of a safe workplace.

**The Passive/Defensive Cluster and Safety Cultures**

Organizations that score high in the Passive/Defensive Cluster have norms that emphasize security by interacting with others in less than healthy ways. People are encouraged to “get along” superficially, blindly follow rules, let others make decisions and avoid change. Passive/Defensive Cultures result in poor customer service, inferior product/service quality, employee dissatisfaction and low motivation. Overall, this cluster does not lend itself to a Safety Culture because of the passive approach to people and the organization. This “keep your head down” and “not rock the boat” attitude will lead to incompetence, missed opportunities and ineffective safety procedures.

**The Aggressive/Defensive Cluster and Safety Cultures**

Organizations that score high in the Aggressive / Defensive Cluster encourage members to be tough, argumentative and superior. Managers especially, are encouraged to be autocratic perfectionists who do not tolerate mistakes and incompetence, and rely on punishment to correct problems. Aggressive / Defensive Cultures cause poor motivation, stress, and dissatisfaction among employees. These organizations experience high turnover, high sick pay, increased grievances, and inconsistent service and product quality. This cluster does not encourage a Safety Culture because it creates high levels of stress (which leads to mistakes) and discourages ownership of safe practices. Moreover, this type of culture results in high employee turnover and absenteeism, both of which will increase the number of new and inexperienced workers to be on the work site.

**The Constructive Cluster and Safety Cultures**

Organizations with Constructive Cultures encourage members work to their full potential, by setting and achieving challenging goals; creatively solving problems; embracing and/or initiating change; cooperating within work groups and with other departments; and, helping themselves and others to grow and develop. Organizations with a high Constructive Cluster report high employee satisfaction, superior customer service, and superior service and product quality – all leading to long-term organizational effectiveness.
All aspects of a Safety Culture are enhanced, if the overall organizational culture is a constructive one. Conversely, an organization that does not have a Constructive Culture cannot hope to achieve a Safety Culture—especially long term. A Constructive Culture will have a positive impact on education, written procedures, workplace design, incident reporting, equipment design, maintenance and testing, and management directives. And most important, a Constructive Culture will be more effective at following rules than a Conventional one. It will be more effective at catching and pointing out mistakes than an Oppositional one. And, it will be more effective at reducing mistakes and operating safely than a Perfectionistic one.

Steps to Producing a Cultural Transformation

There are four steps to a cultural transformation: Test, Action, Re-test and Review. Each step involves the use of assessment instruments, designed to show strengths and development needs and strategies for improvement.

Step One – Test

As a start, it is very important for organizations to measure not only the prevailing organizational culture, but other goals or outcomes that are important to the organization. Members first need to know where the organization “scores” on important outcomes such as safety, quality, productivity, customer service and employee satisfaction—all of which will be effected by the culture of the organization.

This measurement can be accomplished using Human Synergistics OCI. The OCI measures the organization’s current culture, its ideal culture and the gaps between the two. It also shows the strength (or intensity) of the culture and correlations between the culture and outcomes such as commitment to customer service. It can also provide a sub-group analysis. This analysis will enable members to identify the steps needed to begin the organization’s cultural transformation, as well as provide a benchmark against which to measure any and all improvements.

Another organizational assessment from Human Synergistics that can assist organizations at this step is the Organizational Effectiveness Inventory® (OEI). The OEI measures the cause and outcomes of the organization’s culture. As such, it can identify some of the likely results for the company, plus indicate the levers for change (used in Step Two).

Step Two – Action

Once the need for change has been identified, the next step is to initiate action. There are four categories of causal factors that can affect the culture of an organization. They are:

- Philosophy and Values – Organizational mission, employee involvement, and customer service orientation.
- Supervisory / Leadership Skills – Quality of communications, distribution of influence, sources of power, goal setting and facilitation.
- Human Resources Management – Selection & placement, training & development, respect, empowerment and appraisals & reinforcement.
- Job Design – Autonomy, variety, feedback, task identity, significance and interdependence.
The first action to take is to establish the philosophy and values of the organization. By using focus groups, organizations can establish what is important to them. Often, management assumes that everyone knows what the organization’s values are—but this is seldom the case. For High Reliability Organizations, developing the values of a Safety Culture is extremely important.

There are obvious overlaps in the above set of causal factors. One common thread throughout all of them is the skills of the supervisory / leadership team. That is why the most common intervention involves leadership training. And this is usually where most organizations fail in their cultural transformation. Failure usually occurs because of a lack of commitment to the training or because the training does not address management’s responsibility to leading a Constructive Culture. A key focus of the management training has to be the development of the proper attitudes, values and beliefs in leaders and the leadership skills to develop them in others. This is a two-step process. The first step is to help the leader develop constructive thinking and behaviour styles that correspond with the constructive culture styles. This can be accomplished using the Leadership WorkStyles™. The second step is to help leaders develop the leadership strategies and management approaches necessary to impact the constructive thinking and behaviour styles of others. This can be accomplished using either the Leadership/Impact™ or Management/Impact™.

An integral part of the training should involve the use of individual assessments. These greatly improve the learning experience for adults. Adults learn best, if there is participation, repetition, relevance, transference and feedback. Individual assessments contribute to all of these principles.

When implementing change strategies in human resources, it is important to not only examine the systems and standards that are in place, but to also investigate the actual human resources practices. While most Human Resources Departments have updated, sophisticated human resources systems, often the actual implementation and usage of those systems is not what was intended. For example, a company’s performance review program is usually set up to accurately and fairly rate an individual’s performance and then provide commensurate rewards based on that performance. In actual practice, however, the performance review process is often superficial, at best. Human resources management practices must reflect a Constructive Culture.

Probably the most difficult set of causal factors to change are the ones dealing with job and/or equipment design. Job and equipment design changes usually require substantial capital investment. However, small changes can often be made at the departmental level inexpensively. Jobs can be expanded (horizontally and vertically) to provide more variety, less repetition and more significance.

**Step Three – Re-test**

This step involved using the same assessment tools as in Step One. The primary reason is to re-measure the culture of the organization, as well as outcomes to determine what gains have been made and to analyze what further interventions are required.

The timing of the re-test is usually 12 months after the test, providing that action steps were implemented in a timely fashion. If they were not, then more time needs to be allowed because the re-test is really a measurement of the effectiveness of the action plans.
Hopefully, the re-test will show gains in many areas. However, it is important to remember that the organization’s culture probably evolved over a long period of time and the re-test will still indicate many gaps between the new “current” and ideal culture. Organizational change is always slower in larger, older and more public organizations. New action steps initiated after the re-test often suggest more training initiatives and more emphasis on some of the other causal factors. Usually the second phase of training involves the general employee population, teaching such skills as communications, teambuilding, and personal leadership.

**Step Four – Review**

The Review stage signifies the end of the project. Here the organization should analyze the gains in culture and outcomes. It should also include an analysis of the change agents. There might even a cost-benefit analysis conducted.

**Summary**

Despite the best intentions of internal and external consultants in developing and implementing a Safety Culture, they will not be successful unless there exists a strong, Constructive Organizational Culture. The need for a strong Safety Culture, especially in *High Reliability Organizations* cannot be understated. But many organizations that try to implement safety programs, rely on either Passive/Defensive practices such as coercion and rule adherence; or Aggressive/Defensive ones such as the autocratic use of authority or an overreliance on competitions. When the senior management of an organization realizes the implications of organizational culture as well as how culture impacts behaviour, they then can understand the correlations between a Safety Culture and a Constructive Organizational Culture. Further, they will realize the other gains in organizational effectiveness that a such a culture provides.
Bibliography


