ABSTRACT

Likert, Covey, and a number of others studying and researching highly effective organizations have found that performing functions such as problem-solving, decision-making, safety analysis, planning, and continuous improvement as close to the working floor level as possible results in greater buy-in, feelings of ownership by the workers, and more effective use of resources.

Empowering the workforce does several things: 1) people put more effort and thought into work for which they feel ownership, 2) the information they use for planning, analysis, problem-solving, and decision-making is more accurate, 3) these functions are performed in a more timely manner, and 4) the results of these functions have more credibility with those who must implement them. This act of delegation and empowerment also allows management more time to perform functions they are uniquely trained and qualified to perform, such as strategic planning, staff development, succession planning, and organizational improvement.

To achieve this state in an organization, however, requires a very open, transparent culture in which accurate, timely, relevant, candid, and inoffensive communication flourishes, a situation that does not currently exist in a majority of organizations.

INTRODUCTION

The Transuranic Waste Processing Center (TWPC) in Lenoir City, TN, is a part of the Department of Energy (DOE) Oak Ridge Reservation (ORR). It was designed and built through a privatization contract held initially by the Foster-Wheeler Environmental Company (FWENC) with DOE to process Transuranic and low-level waste, mostly from the Oak Ridge National Laboratory (ORNL), but includes some waste from other facilities in the general area.

TWPC is a small footprint site on the southwest corner of the ORR adjacent to ORNL waste storage tanks. It consists of a main process building where waste repackaging takes place (inside glove boxes, a box break-down area contamination containment, supernate processing equipment, and a hot cell for remote handled waste), and about twenty temporary office buildings and storage buildings. TWPC has about 300 employees, approximately a third of which are waste processors (operators) and Radiological Controls personnel.
TWPC has conducted construction activities and waste processing activities since April, 2002, without a lost time accident. We are a Voluntary Protection Program (VPP) Star of Excellence site. We have had only three recordable injuries in that time. By conventional measures of such things, we are a very safe place to work, however, TWPC believes that unless an organization is improving, it is likely declining, at least with respect to performance in areas like safety, effectiveness, productivity, quality, and quality of work-life. We therefore seeks less conventional ways to improve performance, of which the following is one.

METHOD

At the TRU Waste Processing Center, we selected fourteen individuals as Champions and Co-Champions of Excellence, each management mentor. The seven Champion areas/categories are VPP, Integrated Safety Management (ISM), Reliability-Based Safety (RBS), High Reliability Organization (HRO), Safety Conscious Work Environment (SCWE), Human Performance Improvement (HPI), and Work Control. These seven improvement tool concepts were selected because:

- We had a significant effort underway for VPP, and had acquired VPP Star of Excellence; it was becoming difficult to sustain enthusiasm and energy for VPP without finding a new way to improve performance.
- ISM is a mandated DOE tool/process. DOE is increasing emphasis on safety culture and the role it plays in ISM, as well as concepts of continuous improvement, therefore including it in the Champions’ concept aids in integrating ISM with culture aspects.
- RBS is a concept acquired from attending a VPP conference that incorporates behavior-based safety and safety culture ideas in ways that fit our ideas of peer safety observations, continuous improvement, and culture change.
- HRO concepts and practices as understood from the DOE Energy Facility Contractors Group (EFCOG) in safety culture, and practiced at the DOE Pantex site are consistent with the other seven areas and with the overall ideas of continuous improvement and learning organizations.
- We have a SCWE program in place that is linked very solidly with culture, safety culture, HPI, and continuous improvement. A SCWE Guide has been written for TWPC that focuses on these concepts.
- HPI focuses heavily on error reduction, understanding and learning from events, and on the ideas centered on human error as addressed by James Reason in several books, fits well with the overall Champion concept, and we had a HPI program in development and being implemented.
- Work Control is an area in which TWPC has consistently been assessed as needing improvement; we thought that placing it as a Champion area would emphasize and enhance improvement in our work control processes. Work Control is very interdependent with the other Champion areas.
The individuals were selected based on their knowledge of and enthusiasm for the area or category, their leadership abilities, and their communications skills. Each was interviewed prior to being selected to ensure they were the correct person for the effort.

Organizationally, the Champions and alternates ranged from first-level manager/supervisor, to individual contributor, to floor-level worker. Alternates were used because some Champions are on shift work, and to provide continuity for vacations, training, and other instances of absence from work. The Champions are tasked to apply and promote the use of the seven concepts and the tools associated with them, at the working level. They are respected members of the work force, and have the skills and knowledge to best understand how the concepts can be applied to improve performance.

The Champions (and alternates) were announced by the General Manager, along with a brief description of their function and the time thought to be required for them to perform the functions. A charter, drafted earlier, is being reviewed and modified by the group of Champions. The Champions meet every other week and discuss progress towards improving our use of the tools available in the seven categories. Each Champion has developed a plan for improving specific aspects of the seven tools, and report on issues and successes in these meetings. Progress varies with individuals and their ability to influence the organization, but is being made.

**RESULTS**

At first, the Champions had a tendency to ask permission from management before proceeding, and management had a tendency to respond critically. Both groups have had to change their mind-set and style of interacting; the Champions have had to act more autonomously, and the managers have had to become coaches and mentors, rather than controllers and directors.

These changes have required some mentoring and coaching from the Performance Assurance organization, which is sponsoring this new process. The management sponsors for each of the Champion areas are also coaching and mentoring line management and the Champions in new behaviors required for the Champions to succeed.

In effect, the sharing of organizational power is shifting from management toward the Champions, and this is a sensitive process for both sets of individuals. This approach is
getting traction as the Champions take on more and more responsibility for improving and implementing the concepts they are Championing. The approach is to start small with the Champions and let success build on success as they accomplish tasks and gain confidence, both for themselves and for management.

For managers, the behaviors that must change are:

- Move from directing, controlling, and telling to influencing, suggesting, and questioning. While management and senior management certainly have significant input to the activities the Champions engage in, they must be willing to hear, understand, and give weight to the ideas and actions the Champions see as necessary.
- When management believes (usually by virtue of experience) that the course or courses of action the Champions are engaged in won’t lead to success, they must be careful to not destroy the sense of ownership the Champions have, and may have to let the Champions fail so they can learn, in instances where failure is not catastrophic.
- Listening for understanding is a key skill for management. Engage in problem-solving, not convincing and rhetoric.

For the Champions, the behaviors that must change are:

- Be willing to disagree with managers and senior managers about the way to proceed (respect and dignity is called for on both sides of any disagreement). Some people have a tendency to give up earlier than they should just because the person they are disagreeing with is a manager.
- If someone (anyone) is telling you that what you want to do will not work, listen to them, understand what they’re telling you, then assess whether or not they have a valid point. Engage in problem-solving, not arguing.
- Remember that you probably know more about the work than anyone else who is not doing it. Also remember that a perspective not so close to the work may see things that you can’t.

One aspect of establishing the Champions that has not yet come to fruition is creating a reasonable budget for each of them to perform their function. This will create more autonomy for each of the Champions, and encourage more independent activity. Clearly, a balance between acting independently and coordinating with management must be reached.

Conclusions and Implications

Several new aspects to the seven Champions areas are close to being implemented. The workforce is clearly waiting to see how these things go, and the Champions are clearly anxious that they go well. Management seems willing to let the experiment play out, and seems to be hoping that the Champions will succeed. All in all, TWPC appears
to be on the verge of a significant improvement in our safety culture and organizational culture; if this goes forth “as advertised”, then change will likely occur.

Issues that must be addressed in the near future consist of:

- When and how to evolve new people into the roles of Champions?
- When and how to expand the function of the champions to more floor level personnel?
- How can the desired effects be measured (e.g., greater buy-in, feelings of ownership, more effective use of resource, etc.) and how frequently should they be measured?
- If a Champion proves to be ineffective, or becomes ineffective, how does management go about coping with improving performance or replacing the Champion?
- What new skills does management need to develop to embark on the next step of this process, moving more control functions lower in the organization?

These questions will be addressed during this poster presentation. While TWPC has not completely determined what the answers are, we have thought things through and will share our thoughts with participants.

**DISCUSSION**

Stephen Covey, in the discussion of “The Eighth Habit of Highly Effective People”, talks about knowledge workers, by which he means workers having the knowledge and empowerment to gather information, plan, problem-solve and make decisions about the work they perform. In the book “New Ways of Managing Conflict”, Rensis Likert fully develops a profile of effective organizational cultures. In the profile survey he uses to determine the level of sophistication organizations have with respect to culture, it is clear that more effective, more sophisticated cultures tend to move problem-solving, planning, and decision-making closer to the point in the organization where the work is performed. This is demonstrated in Table 1 by looking at my interpretation of Likert’s four different cultural levels (Coercive, Rules and Roles, Consultive, and Principled) in which it can be seen that more effective cultures (Consultive and Principled) engage the workforce great deal more thoroughly. The behaviors described in these different levels reflect the behaviors discussed above for managers and Champions.
<table>
<thead>
<tr>
<th>Organizational variables</th>
<th>Coercive</th>
<th>Rules &amp; Roles</th>
<th>Consultive</th>
<th>Principled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes toward other members of the organization</td>
<td>Subservient attitudes toward supervisors coupled with hostility; hostility toward peers and contempt for subordinates; distrust is widespread</td>
<td>Subservient attitudes toward supervisors; competition for status resulting in hostility toward peers; condescension toward subordinates</td>
<td>Cooperative, reasonably favorable attitudes toward others in organization; may be some competition between peers with resulting hostility and some condescension toward subordinates</td>
<td>Favorable, cooperative attitude throughout the organization with mutual trust and confidence.</td>
</tr>
<tr>
<td>To what extent are decisions made by supervisors or by group participation and consensus?</td>
<td>By supervisors (or higher levels) with practically no opportunity for discussion</td>
<td>By supervisors, but with some opportunity for discussion</td>
<td>By supervisors, but following discussion of problems</td>
<td>By group participation and usually with consensus</td>
</tr>
<tr>
<td>How accurate and adequate is the information available for decision making at the place where the decisions are made?</td>
<td>Information is generally inadequate and inaccurate</td>
<td>Information is often somewhat inadequate and inaccurate</td>
<td>Moderately adequate and accurate information is available</td>
<td>Relatively complete and accurate information available based both on measurements and efficient flow of information in organizations.</td>
</tr>
<tr>
<td>To what extent are decision-makers aware of problems, particularly those at lower levels in the organization?</td>
<td>Often unaware or only partially aware</td>
<td>Aware of some, unaware of others</td>
<td>Moderately aware of problems</td>
<td>Generally quite well aware of problems</td>
</tr>
<tr>
<td>To what extent are technical and professional knowledge used in decision making?</td>
<td>Used only if possessed at higher levels</td>
<td>Much of the knowledge available in higher and middle levels is used</td>
<td>Much of the knowledge available in higher, middle, and lower levels is used</td>
<td>Most of the knowledge available in the organization is used</td>
</tr>
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<tr>
<td>Are decisions made at the best level in the organization as far as availability of the most adequate information bearing on the decision?</td>
<td>Decisions usually made at levels appreciably higher than levels where most adequate and accurate information exists</td>
<td>Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists</td>
<td>Some tendency for decisions to be made at levels higher than where most adequate and accurate information exists</td>
<td>Overlapping groups and group decision processes tend to push decisions to point where information is most adequate or to pass the relevant information to the decision-making point</td>
</tr>
<tr>
<td>Are decisions made at the best level in the organization as far as the motivational consequences (i.e., does the decision-making process help create the necessary motivations in those persons who have to carry out the decisions)?</td>
<td>Decision-making contributes little or nothing to the motivation to implement the decision; usually yields adverse motivation</td>
<td>Decision-making contributes relatively little to motivation</td>
<td>Some contribution by decision-making to motivation to implement</td>
<td>Substantial contribution by decision-making processes to motivation to implement</td>
</tr>
<tr>
<td>To what extent are subordinates involved in decisions related to their work?</td>
<td>Virtually none</td>
<td>Rarely involved in decisions; occasionally consulted</td>
<td>Usually are consulted, but ordinarily not involved in decision making</td>
<td>Are almost always involved in all decisions related to their work</td>
</tr>
<tr>
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<td>How accurate are the measurements and information used to guide and perform the control function, and to what extent do forces exist in the organization to distort and falsify this information?</td>
<td>Very strong forces exist to distort and falsify; as a consequence, measurements and information are usually incomplete and often inaccurate.</td>
<td>Fairly strong forces exist to distort and falsify; hence measurements and information are often incomplete and inaccurate.</td>
<td>Some pressure to protect self and colleagues and hence some pressures to distort; information only moderately complete and contains some inaccuracies.</td>
<td>Strong pressures to obtain complete and accurate information to guide own behavior and behavior of own and related work groups; hence information and measurements tend to be complete and accurate.</td>
</tr>
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<td>To what extent are the review and control functions concentrated?</td>
<td>Highly concentrated in top management.</td>
<td>Relatively highly concentrated, with some delegated control to middle and lower levels.</td>
<td>Moderate downward delegation of review and control processes; lower as well as higher levels perform these tasks.</td>
<td>Review and control done at all levels with lower units at times imposing more vigorous reviews and tighter controls than top management.</td>
</tr>
</tbody>
</table>

From *New Ways of Managing Conflict*, R. Likert, with permission
REFERENCES

2. Covey, Stephen R., *The 8th Habit: From Effectiveness to Greatness*