How Your Safety Climate Affects Your Safety Outcomes
(RIC007)

Speakers:

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Learning Objectives

• At the end of this session, you will be able to
• Differentiate safety culture and safety climate
• Describe how safety climate can benefit your organization as a diagnostic for opportunities to improve safety management systems
• Decide whether a Safety Climate assessment is a good fit for your company’s process improvement
Enterprise Risk Quadrants

- **Hazard Risk**
  - Property risk
  - Legal risk
  - Personnel risk
  - Consequential loss

- **Operational Risk**
  - People risk
  - IT risk
  - Mgmt. oversight
  - Business processes

- **Market Risk**
  - Market risk
  - Credit risk
  - Price risk
  - Liquidity risk

- **Strategic Risk**
  - Economic environment
  - Political environment
  - Demographics
  - Competition

**Pure Risk**
Arises from property, liability, or personnel loss exposures
Arises from the effect of market forces on financial Assets or liabilities
Arises from trends in the economy and society
Arises from people, processes, systems or controls

**Speculative Risk**

Source: The Institutes - ARM 55 Risk Assessment and Treatment
Enterprise Risk Quadrants

Realm of Traditional Safety and Insurance Risk Control Services
- Hazard Risk
  - Property risk
  - Legal risk
  - Personnel risk
  - Consequential loss

Arises from property liability, or personnel loss exposures

Arises from the effect of market forces on financial Assets or liabilities
- Market Risk
  - Market risk
  - Credit risk
  - Price risk
  - Liquidity risk

Source: The Institutes - ARM 55 Risk Assessment and Treatment

Pure Risk
- Operational Risk
  - People risk
  - IT risk
  - Mgmt. oversight
  - Business processes

Arises from people, processes, systems or controls

Speculative Risk
- Strategic Risk
  - Economic environment
  - Political environment
  - Demographics
  - Competition

Arises from trends in the economy and society
Enterprise Risk Quadrants

Realm of Enterprise

Risk Management Focus to Advance Organizational Safety

Culture

Market risk
- Credit risk
- Price risk
- Liquidity risk

Economic environment
- Political environment
- Demographics
- Competition

Market Risk

Strategic Risk

Hazard Risk
- Property risk
- Legal risk
- Personal risk
- Consequential loss

Operational Risk
- People risk
- IT risk
- Mgmt. oversight
- Business processes

Arises from property, liability, or personnel loss exposures

Arises from people, processes, systems or controls

Arises from trends in the economy and society

Arises from the effect of market forces on financial Assets or liabilities

Pure Risk

Speculative Risk
Organizational Culture

“How things get done here.”
(Deal & Kennedy 1982)

“What can be distinguished by values that are reinforced within organizations”
(O’Reilly, et al. 1991)

“The most lasting and resistant-to-change organizational attribute”
(Schein 1992)

“The values and practices we share with others that define us as a group, especially in relation to others groups.”
(Merritt 1993)

Collective behavior of people within an organization and the meaning they ascribe to what is done
Definition – Safety Climate

Employees’ shared perceptions of the safety policies, procedures, and practices

Overall importance and true priority of safety at work

Safety Climate Dimensions

According to the scientific literature, the #1 Dimension is:

“Management commitment to safety”

- Management concern for employee well-being
- Management attitudes toward safety
- Workers' perception that safety is important to management

- All other “dimensions” of safety climate are secondary (Zohar, 2008).

Framework for Success

• Effective strategies focus on systemic risk factors but also integrate considerations of the organization’s readiness to examine work systems and management support to implement and sustain improvements.
A Good Fit?

- There is a functioning daily safety process.
- It has influenced an improvement in outcomes.
- The rate of improvement has slowed in recent periods from what it once was and/or what you believe it can be again.
- There is high interest in improving safety process influence on operating results but no clear strategy on how to do it.
- Company Leadership places high value on continuous improvement in how things are done.
- No process improvement are considered “off limits”.
- Management and Production Employee functions are more collaborative than adversarial.
- Data informs decision-making on what to improve.
- High value is placed on 100% involvement in improving things.
- Company Leadership wants to increase interdependence between Management and Production Employee functions.
Assessing Safety Climate

Primary vehicle is an "employee perception" survey

Minimum participation rate

• At least 30% of total employees
• > 50 completed surveys for most companies
• > 200 surveys for companies with more than 1000 employees

Administered electronically

• 10 to 15 minutes to complete the survey
• Approximate 4 week survey period
The “Zohar” Generic Safety Climate Scale

- Bi-level analysis of “Management Commitment to Safety”
  - Organization Level/Sr. Management
  - Group Level/Supervisor

- 16 questions per level
  - Cannot be modified

- 5 point Likert scale
  - 1 = Strongly Disagree to 5 = Strongly Agree

- Anonymity of respondents critical
  - Electronic transmission of survey & responses
  - Third party custody of responses
Survey Process

Customize Survey
- Establish Demographic Divisions
- Develop Communication Plan

Administer Survey
- Transmit Electronic link and Introduction
- Reminders

Summarize Findings
- Trends by Demographic Division
- Target Elements
## Scoring

* 1. Top management of this company...

<table>
<thead>
<tr>
<th></th>
<th>1- Strongly Disagree</th>
<th>2- Disagree</th>
<th>3- Neutral</th>
<th>4- Agree</th>
<th>5- Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reacts quickly to solve the problem when told about safety hazards.</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
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</tr>
<tr>
<td>2. Insists on thorough and regular safety audits and inspections.</td>
<td></td>
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<td>✔</td>
<td></td>
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</tr>
<tr>
<td>3. Tries to continually improve safety levels in each department.</td>
<td></td>
<td></td>
<td>✔</td>
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</tbody>
</table>

* 2. My direct supervisor...

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</tr>
</thead>
<tbody>
<tr>
<td>1. Makes sure we receive all the equipment needed to do the job safely.</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Frequently checks to see if we are all obeying the safety rules.</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
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</tr>
<tr>
<td>3. Discusses how to improve safety with us.</td>
<td></td>
<td></td>
<td>✔</td>
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</table>
Data Analysis

• **Response rate**
  • Representative sampling

• **Scores**
  • Consistency of scores
  • .5 for meaningful differences
  • Mean and percent agree

• **Demographics**
  • Company level, business units, group/department, tenure, etc.
  • Variances
Presenting Findings

• Organization and group level scores
  • Management commitment to safety
    – Values that management espouses
    – What it communicates as critical
  • Supervisor interactions
    – What management supports in the interactions with workers
  • Degree of engagement

• Opportunity for interventions to improve “percent agree” critical items
CONCLUSIONS – The Critical Few

- Top Management at Your Company can say with confidence that we...
- Try to continually improve safety levels in each department,
- Provide all the equipment needed to do the job safely and,
- Provide workers with a lot of information on safety issues.
- Supervisors can strengthen the safety program at Your Company by …
- Enforcing safety rules even when work falls behind schedule,
- Saying a “good word” to workers who pay special attention to safety and,
- Spending more time helping workers understand how to see problems before they arise.
Strategy for Improvement

• Tap into perceived strengths in what the company stands for and leverage these to improve the safety process

• Get the workforce engaged in examining survey results
  • Here is what you said …
  • Help us understand why …
  • Help us understand how we can improve …
  • Help us make the changes we need to do so …

• Sets the stage for management support and process for engagement of cross-functional teams to analyze tasks, develop improvement plans, & implement
MDU Resources Group, Inc.
Our Excellence Journey
MDU Resources Group

Company Framework & History

- 1997-Started Acquiring Construction, Specialty Trade Companies
- Currently 17 Subsidiary Companies
- Operating Companies Semi-Autonomous, Semi-Decentralized
- 80% Union, 20% Non

Industry Challenges

- Craft Come From Union Hall
- Project Durations Vary
- Core Group of Craft and Supervision
- Traveling Workforce
- Construction Environment Very Competitive
History

- 1997-2008; Too many serious injuries and fatalities
- Focus and incentives were based on earnings
- No centralized strategy
- Assumptions were;
  - Management was “committed to safety”
  - “Good safety culture”
  - “The field generals know our goals, strategy and tactics”
More History

• 2009-2012; Eliminated fatalities but still too many injuries
• Focus and incentives more on safety
• Centralized safety strategy
• But still made assumptions;
  • Management commitment was consistent
  • Safety culture was “improving”
  • We still perceived field generals marched to the leader’s tune
  • We perceived field craft were engaged in safety
Changed Business Philosophy

• Critical Success Factors
  • Safety first!
  • Employee satisfaction
  • Customer satisfaction
  • Financial success
Leadership Philosophy

• **Getting Involvement by Asking**
  • Sitting in the office, can’t see the trees, for the forest
  • The workers know best

• **Increasing Involvement by Listening**
  • They’re closest to the work and the solutions

• **Sustaining Involvement by Partnering**
  • Involving and engaging, discretionary effort goes up
  • Solutions to workplace challenges arise
Daily Safety Process

• **Key Initiatives**
  • Planning the work
  • Setting production speed and schedules

• **Essential Roles & Responsibilities**
  • Promoting individuals who exhibit poor safety behavior
  • Field leaders strictly adhering to safety at end of shift
  • Field leaders spending time with hazard awareness and solutions

• **Measures of Effectiveness**
  • Field leaders recognize and reinforce safe behavior
  • Field leaders holding safety awareness events
Achievements

• **Safety Outcome Milestones**
  • Job planning effectiveness improved
  • All participate
  • Safety Stand-Ups, increased management involvement
  • Supervisor leadership training increased
  • Increased recognition for safety performance

• **Value Added to Our Customers**
  • Production increased, less down-time
  • Safety challenges dealt with more quickly
  • Confidence in us brings repeat work
Our Vision for the Future

• **The Climate & Culture**
  - Plan to assess climate every 3 years
  - As the climate improves, the way it is really done improves
  - Improvements happen faster with employees engaged
  - “Happy campers make better s’mores”

• **How We are Adjusting Management Systems**
  - Management getting leadership training
  - Management involvement is an expectation
  - Daily decision making truly involving safety
  - Competing demands defer to safety
  - Safety communication is more clear and consistent
Summary

- People want to be engaged in the work they do and they will be to the extent that they believe it matters to the company they work for.
- Safety Climate is a measure of the workers perception that safety matters in the company.
- Safety Climate can be measured and enhanced.
- Organizations can leverage Safety Climate to enhance and sustain risk reduction.
Q&A